Passage of the

Climate Change (Scotland) Bill 2009

SPPB 137
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Climate Change
(Scotland) Bill 2009

SP Bill 17 (Session 3), subsequently 2009 asp

SPPB 137

EDINBURGH: APS GROUP SCOTLAND
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Foreword

Purpose of the series

The aim of this series is to bring together in a single place all the official Parliamentary documents relating to the passage of the Bill that becomes an Act of the Scottish Parliament (ASP). The list of documents included in any particular volume will depend on the nature of the Bill and the circumstances of its passage, but a typical volume will include:

- every print of the Bill (usually three – “As Introduced”, “As Amended at Stage 2” and “As Passed”);
- the accompanying documents published with the “As Introduced” print of the Bill (and any revised versions published at later Stages);
- every Marshalled List of amendments from Stages 2 and 3;
- every Groupings list from Stages 2 and 3;
- the lead Committee’s “Stage 1 report” (which itself includes reports of other committees involved in the Stage 1 process, relevant committee Minutes and extracts from the Official Report of Stage 1 proceedings);
- the Official Report of the Stage 1 and Stage 3 debates in the Parliament;
- the Official Report of Stage 2 committee consideration;
- the Minutes (or relevant extracts) of relevant Committee meetings and of the Parliament for Stages 1 and 3.

All documents included are re-printed in the original layout and format, but with minor typographical and layout errors corrected. An exception is the groupings of amendments for Stage 2 and Stage 3 (a list of amendments in debating order was included in the original documents to assist members during actual proceedings but is omitted here as the text of amendments is already contained in the relevant marshalled list).

Where documents in the volume include web-links to external sources or to documents not incorporated in this volume, these links have been checked and are correct at the time of publishing this volume. The Scottish Parliament is not responsible for the content of external Internet sites. The links in this volume will not be monitored after publication, and no guarantee can be given that all links will continue to be effective.

Documents in each volume are arranged in the order in which they relate to the passage of the Bill through its various stages, from introduction to passing. The Act itself is not included on the grounds that it is already generally available and is, in any case, not a Parliamentary publication.

Outline of the legislative process

Bills in the Scottish Parliament follow a three-stage process. The fundamentals of the process are laid down by section 36(1) of the Scotland Act 1998, and amplified by Chapter 9 of the Parliament’s Standing Orders. In outline, the process is as follows:
• Introduction, followed by publication of the Bill and its accompanying documents;
• Stage 1: the Bill is first referred to a relevant committee, which produces a report informed by evidence from interested parties, then the Parliament debates the Bill and decides whether to agree to its general principles;
• Stage 2: the Bill returns to a committee for detailed consideration of amendments;
• Stage 3: the Bill is considered by the Parliament, with consideration of further amendments followed by a debate and a decision on whether to pass the Bill.

After a Bill is passed, three law officers and the Secretary of State have a period of four weeks within which they may challenge the Bill under sections 33 and 35 of the Scotland Act respectively. The Bill may then be submitted for Royal Assent, at which point it becomes an Act.

Standing Orders allow for some variations from the above pattern in some cases. For example, Bills may be referred back to a committee during Stage 3 for further Stage 2 consideration. In addition, the procedures vary for certain categories of Bills, such as Committee Bills or Emergency Bills. For some volumes in the series, relevant proceedings prior to introduction (such as pre-legislative scrutiny of a draft Bill) may be included.

The reader who is unfamiliar with Bill procedures, or with the terminology of legislation more generally, is advised to consult in the first instance the Guidance on Public Bills published by the Parliament. That Guidance, and the Standing Orders, are available for sale from Stationery Office bookshops or free of charge on the Parliament’s website (www.scottish.parliament.uk).

The series is produced by the Legislation Team within the Parliament’s Chamber Office. Comments on this volume or on the series as a whole may be sent to the Legislation Team at the Scottish Parliament, Edinburgh EH99 1SP.

Notes on this volume

The Bill to which this volume relates followed the standard 3 stage process described above.

At Stage 1, the Bill was considered by a number of other committees in addition to the lead committee (the Transport, Infrastructure and Climate Change Committee). The reports of those other committees are included in the Stage 1 Report at Annexe B. Where those reports did not include the oral evidence taken by those committees, or the relevant extracts from their minutes, these are included in this volume after the committee report in Annexe B.

A number of items of further correspondence and additional submissions that were not included in the reports of the lead committee or the other committees are included in this volume at the appropriate point.

The Subordinate Legislation Committee considered the Scottish Government’s response to the Stage 1 Report at its meeting on 19 May 2009. The Committee
noted the response without comment or debate, and so no material relating to that meeting is included in this volume.
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Climate Change (Scotland) Bill

[AS INTRODUCED]

An Act of the Scottish Parliament to set a target for the year 2050, an interim target for the year 2030, and to provide for annual targets, for the reduction of greenhouse gas emissions; to provide about the giving of advice to the Scottish Ministers relating to climate change; to confer power on Ministers to impose climate change duties on public bodies; to make further provision about mitigation of and adaptation to climate change; to make provision about energy efficiency; to make provision about the reduction and recycling of waste; and for connected purposes.

PART 1

EMISSIONS REDUCTION TARGETS

The 2050 target

1 The 2050 target

(1) The Scottish Ministers must ensure that the net Scottish emissions account for the year 2050 is at least 80% lower than the baseline.

(2) In this Act, the target set out in subsection (1) is known as the “2050 target”.

The interim target

2 The interim target

(1) The Scottish Ministers must ensure that the net Scottish emissions account for the year 2030 is at least 50% lower than the baseline.

(2) In this Act, the target set out in subsection (1) is known as the “interim target”.

Annual targets

3 Annual targets

(1) The Scottish Ministers must—

(a) for each year in the period 2010-2050, set a target for the maximum amount of the net Scottish emissions account;

(b) ensure that the net Scottish emissions account for each year in that period does not exceed the target set for that year.

(2) The target—
(a) for 2010, must be set at an amount that is less than the estimated net Scottish emissions account for 2009;
(b) for each year in the period 2011-2019, must be set at an amount that is less than the target for the preceding year;
(c) for each year in the period 2020-2050, must be set at an amount that is at least 3% less than the target for the preceding year.

In this Act—

(a) an “annual target” for any year means the target for the maximum amount of the net Scottish emissions account set for that year in accordance with this section and section 4;
(b) references to an annual target being met are references to the net Scottish emissions account for a year not exceeding the annual target for that year (and cognate expressions are to be construed accordingly).

4 Setting annual targets

(1) The Scottish Ministers must, by order, set the annual targets for each year in the periods mentioned in paragraphs (a) to (g) of subsection (2).

(2) The Scottish Ministers must set the annual targets for each year—

(a) in the period 2010-2022, no later than 1 June 2010;
(b) in the period 2023-2027, no later than 31 October 2011;
(c) in the period 2028-2032, no later than 31 October 2016;
(d) in the period 2033-2037, no later than 31 October 2021;
(e) in the period 2038-2042, no later than 31 October 2026;
(f) in the period 2043-2047, no later than 31 October 2031;
(g) in the period 2048-2050, no later than 31 October 2036.

(3) The Scottish Ministers must, when setting annual targets, have regard—

(a) in relation to each year in the period 2010-2030, to the achievement of the interim target and the 2050 target;
(b) in relation to each year in the period 2031-2050, to the achievement of the 2050 target.

(4) The Scottish Ministers must, when setting annual targets, also have regard to the following matters (the “target-setting criteria”—

(a) scientific knowledge about climate change;
(b) technology relevant to climate change;
(c) economic circumstances, in particular the likely impact of the target on—

(i) the Scottish economy;
(ii) the competitiveness of particular sectors of the Scottish economy;
(iii) small and medium-sized enterprises;
(d) fiscal circumstances, in particular the likely impact of the target on taxation, public spending and public borrowing;
(e) social circumstances, in particular the likely impact of the target on those living in poverty;
(f) the likely impact of the target on those living in remote and rural communities;
(g) energy policy, in particular the likely impact of the target on energy supplies, the renewable energy sector and the carbon and energy intensity of the Scottish economy;
(h) European and international law and policy relating to climate change.

5 Advice before setting annual targets

(1) The Scottish Ministers must, before laying a draft of a statutory instrument containing an order under section 4(1) before the Scottish Parliament, request advice from the relevant body.

(2) As soon as reasonably practicable after laying such a draft, the Scottish Ministers must publish a statement setting out in respect of the annual targets set by the order—

   (a) the reasons for setting those annual targets at those levels;

   (b) the extent to which those targets take account of the target-setting criteria.

(3) If the order under section 4(1) makes provision different from that recommended by the relevant body, the Scottish Ministers must publish a statement setting out the reasons why.

(4) A statement under subsection (2) or (3) may be published in such manner as the Scottish Ministers consider appropriate.

(5) In this Part, the “relevant body” means—

   (a) where no order has been made under section 19(1) designating a person or body as the advisory body, the UK Committee on Climate Change; or

   (b) where such an order has been made, the advisory body.

(6) In subsection (5)(a), the “UK Committee on Climate Change” means the Committee on Climate Change established under section 32 of the Climate Change Act 2008 (c.27) (the “2008 Act”).

6 Modifying annual targets etc.

(1) The Scottish Ministers may, by order, modify—

   (a) the percentage figure mentioned in section 3(2)(c);

   (b) an annual target set by virtue of section 4(1);

   (c) any date mentioned in paragraphs (a) to (g) of section 4(2);

   (d) the target-setting criteria in section 4(4).

(2) The Scottish Ministers may make an order under subsection (1)(a) only if they consider that it is no longer necessary for annual targets to be set by reference to that percentage figure.

(3) The Scottish Ministers may make an order under subsection (1)(b) only if they consider that it is appropriate to do so as a result of significant changes to the basis on which the annual target was set.
(4) The Scottish Ministers may make an order under subsection (1)(c) or (d) only if they consider it appropriate to do so.

(5) The power in subsection (1)(a) may not be exercised so as to substitute a percentage of less than zero.

(6) The power in subsection (1)(b)—
   (a) may be exercised only before the beginning of the year to which the target relates;
   (b) may not be exercised if the effect of doing so would be that the target for the year would be greater than the target for the preceding year.

7 Advice before modifying annual targets etc.

(1) The Scottish Ministers must, before laying a draft of a statutory instrument containing an order under section 6(1) before the Scottish Parliament, request advice from the relevant body.

(2) If the order under section 6(1) makes provision different from that recommended by the relevant body, the Scottish Ministers must publish a statement setting out the reasons why.

(3) A statement under subsection (2) may be published in such manner as the Scottish Ministers consider appropriate.

Advice on progress

8 Progress towards targets

(1) The Scottish Ministers must in each year, beginning with the year 2011, request the relevant body to prepare a report setting out that body’s views on—
   (a) progress towards achievement of—
      (i) annual targets;
      (ii) the interim target;
      (iii) the 2050 target;
   (b) whether the annual targets, the interim target or the 2050 target are likely to be achieved;
   (c) any further effort which may be necessary to achieve annual targets, the interim target or the 2050 target.

(2) In the second year following a year for which an annual target has been set (a “target year”), the Scottish Ministers must request the relevant body to prepare a report setting out that body’s views on—
   (a) whether the annual target for the target year was met;
   (b) the way in which that target was or was not met;
   (c) the action taken by the Scottish Ministers to reduce net Scottish emissions during that year.

(3) The Scottish Ministers must lay a response to the relevant body’s report under this section before the Scottish Parliament as soon as reasonably practicable after they receive that body’s report.
9 **Greenhouse gases**

(1) In this Act, a “greenhouse gas” means—

(a) carbon dioxide;
(b) methane;
(c) nitrous oxide;
(d) hydrofluorocarbons;
(e) perfluorocarbons;
(f) sulphur hexafluoride.

(2) The Scottish Ministers may, if they consider it appropriate to do so, by order, modify subsection (1) so as to—

(a) add a gas;
(b) modify the description of a gas.

(3) The power in subsection (2)(a) may be exercised only if it appears to the Scottish Ministers that an agreement or arrangement at European or international level recognises that the gas to be added contributes to climate change.

(4) The Scottish Ministers must, before laying a draft of a statutory instrument containing an order under subsection (2) before the Scottish Parliament, request advice from the relevant body.

(5) If the order makes provision different from that recommended by the relevant body, the Scottish Ministers must publish a statement setting out the reasons why.

(6) A statement under subsection (5) may be published in such manner as the Scottish Ministers consider appropriate.

10 **Baseline**

(1) In this Act, the “baseline” means the aggregate amount of—

(a) net Scottish emissions of carbon dioxide for 1990; and
(b) net Scottish emissions of each of the greenhouse gases other than carbon dioxide for the year that is the baseline year for that gas.

(2) The baseline years for greenhouse gases other than carbon dioxide are—

(a) for methane, 1990;
(b) for nitrous oxide, 1990;
(c) for hydrofluorocarbons, 1995;
(d) for perfluorocarbons, 1995;
(e) for sulphur hexafluoride, 1995.
11 Baselines for additional greenhouses gases

(1) This section applies where the Scottish Ministers have made an order under section 9(2)(a) adding a greenhouse gas.

(2) In this section, such a gas is referred to as an “additional greenhouse gas”.

(3) The Scottish Ministers may, by order, make provision as to the manner of determining, in the case of an additional greenhouse gas, the amount of net Scottish emissions for the baseline year.

(4) An order under subsection (3) may in particular—

(a) designate a year as the baseline year for the additional greenhouse gas;

(b) provide for the amount of net Scottish emissions of the gas for that year to be treated for the purposes of this Act as the amount of net Scottish emissions of that gas for that baseline year.

Supplementary

12 The net Scottish emissions account

(1) The net Scottish emissions account means the aggregate amount of net Scottish emissions of greenhouse gases—

(a) reduced by the amount of carbon units credited to the net Scottish emissions account for the period in accordance with regulations under subsection (2);

(b) increased by the amount of carbon units that, in accordance with such regulations, are to be debited from the net Scottish emissions account for the period.

(2) The Scottish Ministers may, by regulations, make provision about—

(a) the circumstances in which carbon units may be credited to the net Scottish emissions account for a period;

(b) the circumstances in which such units may be debited from that account for a period;

(c) the manner in which this is to be done.

(3) The regulations must contain provision for ensuring that carbon units that are credited to the net Scottish emissions account for a period cease to be available to offset other greenhouse gas emissions.

13 Attribution of emissions to Scotland

For the purposes of section 15(1), emissions of a greenhouse gas are attributable to Scotland if—

(a) they are emitted from sources in Scotland;

(b) they are attributed to Scotland by virtue of an order under section 14(1).

14 Scottish share of emissions from international aviation and international shipping

(1) The Scottish Ministers may, by order, make provision regarding the emissions of greenhouse gases from international aviation and international shipping that are attributable to Scotland.
(2) An order under subsection (1) may make provision—

(a) as to the period or periods (whether past or future) in which emissions of a greenhouse gas are to be taken into account as Scottish emissions of that gas;

(b) as to the manner in which such emissions are to be taken into account in determining Scottish emissions of that gas for the year that is the baseline year for that gas.

(3) The Scottish Ministers must, before laying a draft of a statutory instrument containing an order under subsection (1) before the Scottish Parliament, request advice from the relevant body.

(4) If the order makes provision different from that recommended by the relevant body, the Scottish Ministers must publish a statement setting out the reasons why.

(5) A statement under subsection (4) may be published in such manner as the Scottish Ministers consider appropriate.

15 Scottish emissions and removals

(1) In this Act—

“emissions”, in relation to a greenhouse gas, means emissions of that gas into the atmosphere that are attributable to human activity;

“Scottish emissions”, in relation to a greenhouse gas, means emissions of that gas which are attributable to Scotland;

“Scottish removals”, in relation to a greenhouse gas, means removals of that gas from the atmosphere due to land use, land-use change or forestry activities in Scotland;

“the net Scottish emissions” for a period, in relation to a greenhouse gas, means the amount of Scottish emissions of that gas for the period reduced by the amount of Scottish removals of that gas for the period.

(2) The Scottish Ministers may, if they consider it appropriate to do so, by order, modify the definition of Scottish removals in subsection (1).

(3) The amount of Scottish emissions and Scottish removals of a greenhouse gas for a period must, in so far as reasonably practicable, be determined consistently with international carbon reporting practice.

16 Measurement of emissions etc.

(1) For the purposes of this Act, greenhouse gas emissions, reductions of such emissions and removals of greenhouse gases from the atmosphere are measured or calculated in tonnes of carbon dioxide equivalent.

(2) A “tonne of carbon dioxide equivalent” means one metric tonne of carbon dioxide or an amount of any other greenhouse gas with an equivalent global warming potential (calculated consistently with international carbon reporting practice).

17 International carbon reporting practice

In this Act, “international carbon reporting practice” means accepted practice in relation to reporting for the purposes of—
(a) the protocols to the United Nations Framework Convention on Climate Change;
(b) such other agreements or arrangements at European or international level as the Scottish Ministers may, by order, specify.

18 Carbon units and carbon accounting

(1) The Scottish Ministers may, by regulations, make provision for a scheme—
(a) for registering or otherwise keeping track of carbon units;
(b) for establishing and maintaining accounts in which carbon units may be held, and between which they may be transferred, by the Scottish Ministers.

(2) Regulations under subsection (1) may, in particular, provide for an existing scheme to be adapted for these purposes.

(3) The regulations may also include provision—
(a) designating a person or body to administer the scheme;
(b) establishing a person or body for that purpose and making such provision in relation to the appointment of members, staffing, expenditure, procedure and otherwise of the person or body as the Scottish Ministers consider appropriate;
(c) conferring power on the Scottish Ministers to give guidance or directions to the person or body administering the scheme;
(d) conferring power on the Scottish Ministers to delegate the performance of any of the functions conferred on them by the regulations;
(e) requiring the payment by persons using the scheme of such charges as are reasonably required to cover the reasonable costs incurred in operating the scheme.

(4) In this Act, a “carbon unit” means a unit of a kind specified in regulations made under subsection (1) and which represents—
(a) a reduction in an amount of greenhouse gas emissions;
(b) the removal of an amount of greenhouse gas from the atmosphere;
(c) an amount of greenhouse gas emissions allowed under a scheme or arrangement imposing a limit on such emissions.

PART 2

ADVISORY FUNCTIONS

Advisory body

19 Meaning of advisory body

(1) The Scottish Ministers may, by order, designate—
(a) a body established under section 20(1); or
(b) such other public body as they consider appropriate,
to exercise the functions mentioned in subsection (3) (the “advisory functions”).

(2) In this Act, the body designated by virtue of subsection (1) is the “advisory body”.

12
Climate Change (Scotland) Bill
Part 2—Advisory functions

(3) The advisory functions are—

(a) the function of providing advice, analysis, information and other assistance to the Scottish Ministers in respect of Ministers’ functions under sections 5, 7, 8 and 9(4);

(b) the functions conferred on the advisory body by sections 22 to 27; and

(c) such other functions relating to advice on climate change as the Scottish Ministers may confer by an order under subsection (1).

(4) An order under subsection (1) may in particular provide—

(a) for the conferral of functions on the advisory body relating to advice on climate change;

(b) for the information that advice must contain;

(c) for the factors to which the body is to have regard in giving that advice;

(d) for the period within which the body must give that advice;

(e) as to whom that advice is to be given;

(f) for the form and manner in which that advice is to be published and laid before the Scottish Parliament.

(5) In subsection (1)(b), a “public body” means a person or body with functions of a public nature.

Scottish Committee on Climate Change

(1) The Scottish Ministers may, by order, establish a body for the purpose of exercising the advisory functions.

(2) The body established by virtue of subsection (1) is to be known as the Scottish Committee on Climate Change (the “Committee”).

(3) Schedule 1 makes further provision about the Committee.

(4) An order under subsection (1) may in particular provide—

(a) for the conferral of functions on the Committee relating to advice on climate change;

(b) in relation to the status, constitution and proceedings of the Committee as the Scottish Ministers consider appropriate;

(c) for the information that the Committee’s advice must contain;

(d) for the factors to which the Committee is to have regard in giving that advice;

(e) for the period within which the Committee must give that advice;

(f) as to whom that advice is to be given;

(g) for the form and manner in which that advice is to be published and laid before the Scottish Parliament.

Application of sections 22 to 27

(1) Sections 22 to 27 have effect only from—
(a) the date when an order made by the Scottish Ministers under section 19(1) comes into force; or
(b) such later date or dates as the Scottish Ministers may specify in an order under that section.

(2) When an order under section 19(1) bringing section 24 into effect comes into force, subsection (3) of section 8 ceases to have effect.

22 Advice on annual targets etc.

(1) When requested to do so by the Scottish Ministers, the advisory body must provide the Scottish Ministers with advice as regards—
(a) annual targets Ministers propose to set under section 4;
(b) a modification Ministers propose to make under section 6.

(2) When providing advice under subsection (1)(a), the advisory body must—
(a) express a view as to whether the annual targets are appropriate; and
(b) explain that view by reference to the target-setting criteria.

(3) When providing advice under subsection (1)(a), the advisory body must also express a view as to—
(a) the extent to which the annual targets should be met—
(i) by taking action to reduce net Scottish emissions;
(ii) by the use of carbon units that in accordance with regulations under section 12(2) may be credited to the net Scottish emissions account;
(b) the respective contributions towards meeting the annual targets that should be made—
(i) by the traded sector of the Scottish economy;
(ii) by the other sectors of the Scottish economy;
(c) the sectors of the Scottish economy in which there are particular opportunities for contributions to be made towards meeting the targets through reductions in emissions of greenhouse gases.

(4) The advisory body must provide advice under this section within such period as the Scottish Ministers may reasonably request.

(5) In subsection (3)(b)(i), “traded sector” means the sectors of the Scottish economy which are covered by trading schemes within the meaning of section 44 of the 2008 Act.

23 Reporting on progress towards targets

(1) The advisory body must, in each year beginning with the specified year, prepare a report setting out that body’s views on—
(a) progress towards achievement of—
(i) annual targets;
(ii) the interim target;
(iii) the 2050 target;
(b) whether the annual targets, the interim target or the 2050 target are likely to be achieved;

(c) any further effort which may be necessary to achieve annual targets, the interim target or the 2050 target.

5 (2) In subsection (1), the “specified year” means such year as the Scottish Ministers may, by order, specify.

(3) A report prepared in the second year following a year for which an annual target has been set (a “target year”), must also set out the advisory body’s views on—

(a) whether the annual target for the target year was met;

(b) the way in which that target was or was not met;

(c) the action taken by the Scottish Ministers to reduce net Scottish emissions during that year.

(4) The advisory body must lay a report under this section before the Scottish Parliament no later than—

(a) 31 January in the third year following the target year; or

(b) such other later date as the Scottish Ministers may, by order, appoint.

24 Scottish Ministers’ response to reports on progress

(1) The Scottish Ministers must lay before the Scottish Parliament a response to a report laid by the advisory body before the Parliament under section 23.

(2) The response to the advisory body’s report must be laid before the Parliament no later than—

(a) 31 March in the third year following the year for which an annual target has been set; or

(b) such later date as the Scottish Ministers may, by order, appoint.

25 Duty of advisory body to provide advice or other assistance

When requested to do so by the Scottish Ministers, the advisory body must provide advice, analysis, information or assistance as regards—

(a) the exercise of the Scottish Ministers’ functions under this Act;

(b) the exercise of Ministers’ functions in relation to climate change other than under this Act;

(c) other matters relating to climate change.

26 Guidance to advisory body

(1) The advisory body must have regard to any guidance given by the Scottish Ministers to it in relation to the exercise of its functions under this Act.

(2) The Scottish Ministers may not give the advisory body guidance as to the content of any advice or report.

(3) The power to give guidance under subsection (1) includes power to vary or revoke the guidance.
Part 3—Reporting duties

27 Power to give directions to advisory body

(1) The Scottish Ministers may, if they consider it appropriate to do so, give the advisory body directions as to the exercise of its functions under this Act.

(2) The Scottish Ministers may not direct the advisory body as to the content of any advice or report.

(3) The power to give directions under subsection (1) includes power to vary or revoke the directions.

(4) The advisory body must comply with any directions given under subsection (1).

PART 3
REPORTING DUTIES

28 Reports on annual targets

(1) The Scottish Ministers must lay before the Scottish Parliament a report in respect of each year in the period 2010-2050 for which an annual target has been set (a “target year”).

(2) The report must state whether the annual target for the target year has been met.

(3) If the annual target has not been met, the report must explain why.

(4) The report must also contain the information mentioned in section 29.

(5) The report under this section must be laid before the Parliament no later than 31 October in the second year after the target year.

29 Reports on annual targets: content

(1) In respect of each greenhouse gas, the report must—

(a) state the amount of net Scottish emissions for the baseline year;

(b) state the amount of net Scottish emissions for the target year;

(c) state whether the amount of net Scottish emissions represents an increase or decrease compared to the equivalent amount for the previous target year;

(d) identify the methods used to measure or calculate the amount of net Scottish emissions (including in particular any change to those methods).

(2) The report must also set out the aggregate amount for the target year of net Scottish emissions.

(3) The report must also—

(a) state the amount of the net Scottish emissions account for the target year;

(b) state the total amount of carbon units—

(i) that have been credited to or debited from the net Scottish emissions account for the target year;

(ii) that have been purchased in the target year;

(iii) that have been held and not surrendered in the target year;
(c) give details of the number and type of those carbon units.

(4) The report must also—
(a) state the amount of Scottish gross electricity consumption for the target year;
(b) state the amount of Scottish electricity generation for the target year.

(5) If the method of measuring or calculating net Scottish emissions changes and that change is such as to require adjustment of an amount for an earlier target year, the report must specify the adjustment required and state the adjusted amount.

(6) An adjustment under subsection (5) must, in so far as reasonably practicable, be made in accordance with international carbon reporting practice.

(7) The report may contain such other information as the Scottish Ministers consider appropriate and, in particular, may state the amount of Scottish electricity generation from each source for the target year.

#### 30 Reports on proposals and policies for meeting annual targets

(1) As soon as reasonably practicable after making an order under section 4(1) setting annual targets, the Scottish Ministers must lay before the Scottish Parliament a report containing the following information.

(2) The report must, in particular, set out—
(a) the Scottish Ministers’ proposals and policies for meeting the annual targets;
(b) how those proposals and policies are expected to contribute towards the achievement of the interim target and the 2050 target;
(c) the timescales over which those proposals and policies are expected to take effect.

(3) The report must also explain how the proposals and policies set out in the report are expected to affect different sectors of the Scottish economy.

(4) The second and each subsequent report under this section—
(a) must contain an assessment of the progress towards implementing proposals and policies set out in earlier reports;
(b) may make such adjustments to those proposals and policies as the Scottish Ministers consider appropriate.

#### 31 Reports on proposals and policies where annual targets not met

(1) This section—
(a) applies if the Scottish Ministers lay a report under section 28 which states that an annual target has not been met;
(b) does not apply if that report relates to the annual target for 2050.

(2) As soon as reasonably practicable after the report referred to in subsection (1)(a) has been laid, the Scottish Ministers must lay a report before the Scottish Parliament setting out proposals and policies to compensate in future years for the excess emissions.

#### 32 Report on the interim target

(1) The Scottish Ministers must lay before the Scottish Parliament a report containing the following information in respect of the year 2030.
(2) The report must state whether the interim target has been met.
(3) If the interim target has not been met, the report must explain why.
(4) In respect of each greenhouse gas, the report must state the amount of net Scottish emissions for 2030.

(5) The report must also—
   (a) state the amount of the net Scottish emissions account for 2030;
   (b) state the total amount of carbon units—
      (i) that have been credited to or debited from the net Scottish emissions account for 2030;
      (ii) that have been purchased in 2030;
      (iii) that have been held and not surrendered in 2030;
   (c) give details of the number and type of those carbon units.

(6) In subsections (4) and (5), the amount means the amount set out in the report for 2030 made under section 28.
(7) The report may contain such other information as the Scottish Ministers consider appropriate.
(8) The report under this section must be laid before the Parliament no later than 31 October 2032.

### Report on the 2050 target

(1) The Scottish Ministers must lay before the Scottish Parliament a report containing the following information in respect of the year 2050.
(2) The report must state whether the 2050 target has been met.
(3) If the 2050 target has not been met, the report must explain why.
(4) In respect of each greenhouse gas, the report must state the amount of net Scottish emissions for 2050.

(5) The report must also—
   (a) state the amount of the net Scottish emissions account for 2050;
   (b) state the total amount of carbon units—
      (i) that have been credited to or debited from the net Scottish emissions account for 2050;
      (ii) that have been purchased in 2050;
      (iii) that have been held and not surrendered in 2050;
   (c) give details of the number and type of those carbon units.

(6) In subsections (4) and (5), the amount means the amount set out in the report for 2050 made under section 28.
(7) The report may contain such other information as the Scottish Ministers consider appropriate.
(8) The report under this section must be laid before the Parliament no later than 31 October 2052.
34 Reports: provision of further information to the Scottish Parliament

(1) Where the Scottish Ministers lay a report mentioned in subsection (2) before the Scottish Parliament, they must, as soon as reasonably practicable after doing so, and in so far as reasonably practicable, make a statement to the Parliament relating to the report.

(2) Those reports are reports under—
   (a) section 28(1) (report on annual target);
   (b) section 30(1) (report on proposals and policies for meeting annual targets);
   (c) section 31(2) (report on proposals and policies to compensate for excess emissions);
   (d) section 32(1) (report on interim target);
   (e) section 33(1) (report on 2050 target).

(3) Where the Scottish Ministers lay a report referred to in subsection (2)(a), they must also, as soon as reasonably practicable after doing so, and in so far as reasonably practicable, meet with the persons who convene and chair such committees of the Scottish Parliament as are for the time being appointed by virtue of standing orders.

35 Further provision about reporting duties

(1) The Scottish Ministers may, if they consider it appropriate to do so, by order, make further provision imposing duties on themselves to report to the Scottish Parliament.

(2) An order under subsection (1) may in particular—
   (a) provide for the information to be provided under the duties;
   (b) provide for the period in relation to which that information is to be provided;
   (c) provide for the period within which that information is to be provided.

PART 4

DUTIES OF PUBLIC BODIES RELATING TO CLIMATE CHANGE

Duties of public bodies

36 Duties of public bodies relating to climate change

(1) The Scottish Ministers may, if they consider it appropriate to do so, by order, make provision relating to the imposition on public bodies of duties relating to climate change (“climate change duties”).

(2) In this Part, a public body which has climate change duties by virtue of subsection (1) is a “relevant public body”.

(3) An order under subsection (1) may in particular—
   (a) impose climate change duties on—
      (i) all public bodies;
      (ii) public bodies of a particular description;
      (iii) individual public bodies;
(b) impose different climate change duties on different public bodies or descriptions of public body;
(c) remove climate change duties.

(4) Before laying a draft of a statutory instrument containing an order under subsection (1) before the Scottish Parliament, the Scottish Ministers must consult, in so far as reasonably practicable, the persons mentioned in subsection (5).

(5) Those persons are—
(a) such associations of local authorities; and
(b) such other persons,
as the Scottish Ministers consider appropriate.

(6) The Scottish Ministers must co-operate with a relevant public body to help that body comply with its climate change duties.

37 Guidance to relevant public bodies

(1) Relevant public bodies must have regard to any guidance given by the Scottish Ministers to them in relation to climate change duties.

(2) Before giving guidance under subsection (1), the Scottish Ministers must consult, in so far as reasonably practicable, the persons mentioned in subsection (3).

(3) Those persons are—
(a) such associations of local authorities; and
(b) such other persons,
as the Scottish Ministers consider appropriate.

(4) The Scottish Ministers may vary or revoke guidance given under this section and where guidance is varied to a substantial extent, subsections (2) and (3) apply.

(5) The Scottish Ministers must publish any guidance given under this section.

38 Reporting on climate change duties

(1) The Scottish Ministers may, by order, make provision—
(a) requiring relevant public bodies to prepare reports on compliance with climate change duties;
(b) setting out what information reports must contain;
(c) setting out the form and manner of reports;
(d) setting out the period within which reports must be sent to the Scottish Ministers.

(2) An order under subsection (1) may in particular—
(a) require two or more relevant public bodies to prepare a joint report in relation to compliance with one or more climate change duties; and
(b) require those bodies to co-operate with each other for the purpose of preparing that report.
39 **Appointment of monitoring body**

(1) The Scottish Ministers may, by order, designate one or more persons or bodies to monitor whether relevant public bodies are—

(a) complying with climate change duties;

(b) having regard to any guidance given under section 37.

(2) In this Part, a person or body designated under subsection (1) is the “monitoring body”.

40 **Investigations**

(1) The monitoring body may carry out an investigation into—

(a) a relevant public body’s compliance with climate change duties;

(b) whether a relevant public body is having regard to guidance given under section 37.

(2) The monitoring body must carry out an investigation if the Scottish Ministers direct it to do so.

41 **Investigations: investigators’ powers**

(1) In this section an “investigator” means—

(a) the monitoring body;

(b) a person authorised by the monitoring body for the purpose of carrying out investigations.

(2) An investigator may use the powers set out in subsections (3) to (5) if the investigator considers that it is necessary to do so for the purposes of or in connection with an investigation.

(3) An investigator may, by notice in writing, require any relevant public body to provide any relevant document or relevant information in the possession, or under the control, of the relevant public body.

(4) An investigator may require any person who possesses or controls any document or information referred to in subsection (3) to provide an explanation of the document or information.

(5) An investigator may take copies of, or extracts from, any document or information produced in accordance with subsection (3).

(6) Nothing in this section authorises an investigator to require the disclosure of anything which a person would be entitled to refuse to disclose on grounds of confidentiality in proceedings in the Court of Session.

42 **Reporting by monitoring body**

(1) The Scottish Ministers may direct the monitoring body to prepare a report relating to—

(a) the monitoring body’s activities under this Act;

(b) investigations carried out by the monitoring body;
(c) its use of resources in carrying out its functions under this Act;
(d) any other matters the Scottish Ministers may direct.

(2) The report may include information relating to a continuing investigation only if the Scottish Ministers direct that information to be included.

(3) The monitoring body must send the report to the Scottish Ministers.

### Guidance to monitoring body

(1) The monitoring body must have regard to any guidance given by the Scottish Ministers to it in relation to the exercise of its functions under this Part.

(2) Before giving guidance under subsection (1), the Scottish Ministers must consult, in so far as reasonably practicable, the persons mentioned in subsection (3).

(3) Those persons are—
   (a) the monitoring body; and
   (b) such other persons,

   as the Scottish Ministers consider appropriate.

(4) The Scottish Ministers may vary or revoke guidance given under this section and where guidance is varied to a substantial extent, subsections (2) and (3) apply.

(5) The Scottish Ministers must publish any guidance given under this section.

### Power to direct monitoring body

(1) The Scottish Ministers may give directions to the monitoring body relating to the exercise of its functions under this Part.

(2) The Scottish Ministers may vary or revoke a direction given under this section.

(3) The monitoring body must comply with a direction given under this section.

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**PART 5**

**OTHER CLIMATE CHANGE PROVISIONS**

**CHAPTER 1**

**Adaptation**

**Adaptation programmes**

**Programmes for adaptation to climate change**

(1) This section applies where the Secretary of State lays a report under section 56 of the 2008 Act (report on impact of climate change) before Parliament.

(2) The Scottish Ministers must lay a programme before the Scottish Parliament—
   (a) addressing the risks identified in the report under section 56 of the 2008 Act; and
   (b) in particular, setting out—
(i) the Scottish Ministers’ objectives in relation to adaptation to climate change;

(ii) their proposals and policies for meeting those objectives;

(iii) the period within which those proposals and policies will be introduced.

Where the report laid under section 56 of the 2008 Act is a subsequent report (within the meaning of subsection (3) of that section), the programme under this section must contain an assessment of the progress made towards implementing the objectives, proposals and policies set out in the previous programme laid under subsection (2).

(4) The Scottish Ministers must lay each programme under this section as soon as reasonably practicable after the Scottish Ministers receive the Secretary of State’s report.

Muirburn

46 Variation of permitted times for making muirburn

After section 23 of the Hill Farming Act 1946 (c.73) (prohibition of muirburn at certain times), insert—

“23A Power to vary permitted times for making muirburn

(1) The Scottish Ministers may, by order, specify such dates as they consider appropriate as the dates before which or after which it is lawful to make muirburn in any year.

(2) Where such an order has effect, section 23 applies as if the dates specified in the order were substituted for the dates mentioned in subsection (1), (2) or, as the case may be, (3) of that section.

(3) The Scottish Ministers may make an order under subsection (1) only if they consider it necessary or expedient to do so in relation to climate change.

(4) The power conferred by subsection (1) is exercisable by statutory instrument.

(5) A statutory instrument containing an order under subsection (1) is subject to annulment in pursuance of a resolution of the Scottish Parliament.”.

CHAPTER 2

FORESTRY

47 Power to modify functions of Forestry Commissioners

(1) The Scottish Ministers may, by order, modify the functions of the Forestry Commissioners in or as regards Scotland.

(2) The Scottish Ministers may make an order under subsection (1) only where they consider it necessary or expedient to do so—

(a) in order to comply with their duty under section 1, 2 or 3(1)(b); or

(b) otherwise in relation to climate change.

(3) An order under subsection (1) may in particular include provision enabling the Forestry Commissioners to—

(a) form, or participate in the forming of, a body corporate;
20 Climate Change (Scotland) Bill
Part 5—Other climate change provisions
Chapter 3—Energy efficiency

(b) invest in a body corporate;
(c) provide loans;
(d) establish a trust;
(e) act, or appoint a person to act, as—

5

(i) an officer of a body corporate; or
(ii) a trustee of a trust.

4 The order may also make provision about the delegation by the Forestry Commissioners
of their functions, including—

(a) the circumstances in and purposes for which those functions may be delegated;
(b) the functions which may be delegated;
(c) the persons to whom such functions may be delegated.

CHAPTER 3
ENERGY EFFICIENCY

Promotion of energy efficiency

48 Duty of Scottish Ministers to promote energy efficiency

15 (1) The Scottish Ministers must prepare and publish a plan for the promotion of energy

efficiency in Scotland.

(2) That plan must include provision about the promotion of the energy efficiency of living

accommodation.

20 (3) The plan prepared under subsection (1) must be published no later than 12 months after

the day on which this section comes into force.

(4) The Scottish Ministers—

(a) may, from time to time; and
(b) must, before the end of the period mentioned in subsection (5),

review the plan prepared and published under this section.

25 (5) The period referred to in subsection (4)(b) is the period of 3 years beginning with the
date on which—

(a) the plan is first published; or
(b) the plan was last reviewed under subsection (4).

30 (6) Where, following a review under subsection (4), the Scottish Ministers vary the plan,
they must, as soon as reasonably practicable after so doing, publish the plan as so varied.

(7) In preparing or varying the plan, the Scottish Ministers must have regard to the
contributions which improvements to buildings and changes in building standards can
make to the delivery of energy efficiency and to the reduction of greenhouse gas

emissions.

35 (8) In this section—

“energy efficiency” includes the use of—
(a) technologies reliant on renewable sources of energy; and
(b) materials the manufacture or use of which produces or involves lower emissions of greenhouse gases than other materials;

“fossil fuel” means—

(a) coal;
(b) lignite;
(c) peat;
(d) natural gas (within the meaning of the Energy Act 1976 (c.76));
(e) crude liquid petroleum;
(f) petroleum products (within the meaning of that Act);
(g) any substance produced directly or indirectly from a substance mentioned in paragraphs (a) to (f);

“renewable sources” means sources other than fossil fuel and nuclear fuel.

49 Laying of plans and reports

(1) The Scottish Ministers must, as soon as reasonably practicable after publishing a plan under section 48(1) or (6), lay it before the Scottish Parliament.

(2) The Scottish Ministers must, before the end of the period mentioned in subsection (3), lay before the Parliament a report on what steps have been taken in implement of the plan.

(3) The period referred to in subsection (2) is the period of 12 months beginning with the date on which—

(a) the plan is first published; or
(b) a report was last laid under subsection (2).

Energy performance of non-domestic buildings

50 Non-domestic buildings: assessment of energy performance and emissions

(1) The Scottish Ministers may, by regulations, make provision relating to the assessment of—

(a) the energy performance of non-domestic buildings;
(b) the emission of greenhouse gases produced by or otherwise associated with such buildings or with activities carried out in such buildings.

(2) The regulations may in particular include provision about—

(a) the circumstances in which the regulations apply;
(b) the non-domestic buildings to which the regulations apply;
(c) the persons who may be required to have assessments carried out;
(d) the periods within which such assessments must be carried out;
(e) the procedure and methodology for assessing the energy performance of buildings;
(f) the procedure and methodology for assessing the greenhouse gas emissions produced by or otherwise associated with buildings or activities;

(g) the persons who may carry out such assessments;

(h) the issuing of certificates following such assessments, including the form, manner and content of such certificates;

(i) subject to subsection (3), the enforcement authority in relation to the regulations;

(j) subject to subsection (4), the functions of that authority;

(k) the keeping of information and its production to the enforcement authority;

(l) the enforcement of the duties imposed by the regulations;

(m) offences in relation to failures to comply with requirements of the regulations.

(3) The enforcement authority provided for in the regulations is to be—

(a) a local authority; or

(b) such other person or body as the Scottish Ministers consider appropriate.

(4) The functions of the enforcement authority may include power to levy charges to recover the reasonable costs incurred by it in exercising its functions under the regulations.

(5) In this section, “non-domestic building”—

(a) means a building other than a dwelling;

(b) does not include—

(i) any yard, garden, outbuilding or other land or buildings;

(ii) any common areas, associated with such a dwelling.

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**Renewable heat**

(1) The Scottish Ministers must take such steps as they consider appropriate to promote the use of heat produced from renewable sources.

(2) The steps which the Scottish Ministers may take for the purposes of subsection (1) include, in particular, steps to promote—

(a) the installation of plant which is or may be fuelled by renewable sources;

(b) the adaptation of plant so as to enable it to be fuelled by renewable sources;

(c) the production of heat by plant which is fuelled partly by renewable sources and partly by other sources.

(3) For the purposes of subsection (1), heat produced by any plant is produced from renewable sources to the extent that the plant is fuelled by renewable sources.

(4) In this section—

“plant” includes any equipment, apparatus or appliance;

“renewable sources” has the same meaning as in section 48.
CHAPTER 4

WASTE REDUCTION AND RECYCLING

Waste prevention and management plans

52 Waste prevention and management plans

(1) The Scottish Ministers may, by regulations, require persons of the kinds specified—
   (a) to prepare plans for the prevention, reduction, management, recycling, use and
disposal of waste produced by or otherwise associated with their activities;
   (b) to comply with those plans.

(2) The regulations may in particular include provision about—
   (a) the circumstances in which plans must be prepared, including when more than one
plan must be prepared;
   (b) the kinds of waste in relation to which plans must be prepared;
   (c) the periods—
      (i) to which plans relate;
      (ii) within which plans must be prepared;
   (d) the content of plans;
   (e) subject to section 60—
      (i) the enforcement authority in relation to the regulations; and
      (ii) the functions of that authority, including the approval by it of plans
prepared under the regulations;
   (f) the keeping of plans and other information and their production to the
enforcement authority;
   (g) the enforcement of the duties imposed by the regulations;
   (h) offences in relation to failures to comply with requirements of the regulations.

(3) The enforcement authority must have regard to any guidance given by the Scottish
Ministers to it in relation to the functions conferred on it by the regulations.

(4) In this Chapter—
   “recycling”, in relation to any waste, includes recovery and re-use (whether or not
the waste is subjected to any process) (and cognate expressions are to be
construed accordingly);
   “specified” means specified in regulations (and cognate expressions are to be
construed accordingly);
   “waste” has the meaning given by section 75(2) of the Environmental Protection
Act 1990 (c.43) (the “1990 Act”).
53 **Information on waste**

(1) The Scottish Ministers may, by regulations, require persons of the kinds specified to provide SEPA with information on the waste produced by or otherwise associated with such persons’ activities.

(2) The regulations may in particular include provision about—

(a) the circumstances in which information must be provided;

(b) the information required to be provided, including the periods to which the information relates;

(c) the form and manner in which information must be provided;

(d) the periods within which information must be provided;

(e) the functions of SEPA in relation to the regulations;

(f) the keeping of information and its production to SEPA;

(g) the enforcement of the duties imposed by the regulations;

(h) offences in relation to failures to comply with requirements of the regulations.

(3) The power to make regulations under this section is without prejudice to section 34(5) of the 1990 Act and any other enactment to the same effect as that section; and any duty imposed on any person by regulations under this section is without prejudice to any duty to provide information on waste imposed by regulations under that section or by virtue of any other such enactment.

(4) SEPA may give guidance to persons to whom the regulations apply on how to comply with the requirements of the regulations.

(5) In this section and in section 60, “SEPA” means the Scottish Environment Protection Agency.

54 **Recyclable waste: facilities for deposit etc.**

(1) The Scottish Ministers may, by regulations, require—

(a) persons of the kinds specified to provide facilities for the deposit of waste;

(b) authorised persons—

     (i) to collect waste deposited by virtue of paragraph (a);

     (ii) to ensure, in so far as reasonably practicable, that such waste collected by or transferred to them (whether in accordance with section 34 of the 1990 Act or otherwise) is recycled.

(2) The regulations may in particular include provision about—

(a) the circumstances in which facilities must be provided, including the places at which they must be provided;

(b) the persons for whom facilities must be provided;

(c) the kinds of waste for which facilities must be provided;
(d) the circumstances in which authorised persons must collect waste, including which authorised persons must do so;

(e) the charging by authorised persons for collecting waste, for recycling waste and for otherwise ensuring waste is recycled;

(f) subject to section 60—

(i) the enforcement authority in relation to the regulations; and

(ii) the functions of that authority;

(g) the keeping of records and their production to the enforcement authority;

(h) the enforcement of the duties imposed by the regulations;

(i) offences in relation to failures to comply with requirements of the regulations.

(3) The enforcement authority must have regard to any guidance given by the Scottish Ministers to it in relation to the functions conferred on it by the regulations.

(4) The Scottish Ministers may not, by regulations under this section, impose requirements on persons to provide facilities for the deposit of waste in circumstances in relation to which regulations under section 55 may be made.

(5) In this section and in section 55, “authorised person” has the same meaning as in section 34(3) of the 1990 Act.

55 Recyclable waste: facilities for deposit at events etc.

(1) The Scottish Ministers may, by regulations, confer power on local authorities to issue notices requiring—

(a) persons responsible for organising temporary events open to the public to provide facilities for the deposit of waste by persons attending those events;

(b) authorised persons to—

(i) collect waste deposited by virtue of paragraph (a);

(ii) ensure, in so far as reasonably practicable, that such waste collected by or transferred to them (whether in accordance with section 34 of the 1990 Act or otherwise) is recycled.

(2) The regulations may in particular include provision about—

(a) the events in relation to which notices can be issued;

(b) the circumstances in which facilities must be provided, including the places at which they must be provided;

(c) the persons for whom facilities must be provided;

(d) the kinds of waste for which facilities must be provided;

(e) the persons to whom notices can be issued;

(f) the content of notices;

(g) the form of and manner in which notices can be issued, including the times at which notices can be issued;

(h) appeals against notices;
(i) the circumstances in which authorised persons must collect waste, including which authorised persons must do so;

(j) the charging by authorised persons for collecting waste, recycling waste and otherwise ensuring waste is recycled;

(k) subject to section 60—
   (i) the enforcement authority in relation to notices; and
   (ii) the functions of that authority;

(l) the keeping of records by persons to whom notices are issued and their production to the enforcement authority;

(m) the enforcement of duties imposed by notices;

(n) offences in relation to failures to comply with requirements of notices.

(3) Local authorities must have regard to any guidance given by the Scottish Ministers to them in relation to the functions conferred on them by the regulations.

(4) The enforcement authority must have regard to any guidance given by the Scottish Ministers to it in relation to the functions conferred on it by the regulations.

Procurement of recyclate

56 Procurement of recyclate

(1) The Scottish Ministers may, by regulations, require persons of the kinds specified to comply with the requirement in subsection (2).

(2) That requirement is to ensure that things procured or constructed by or on behalf of such persons—
   (a) comprise of; or
   (b) include or contain a certain proportion of, recyclate.

(3) The regulations may in particular include provision about—
   (a) the circumstances in which the requirement applies;
   (b) the kinds of things in relation to which the requirement applies;
   (c) the proportion of recyclate that such things must include or contain;
   (d) how such proportions are to be determined;
   (e) the circumstances in which a person may apply to the Scottish Ministers to have the requirement disapplied;
   (f) subject to section 60—
       (i) the enforcement authority in relation to the regulations; and
       (ii) the functions of that authority;
   (g) the keeping of records and their production to the enforcement authority;
   (h) the enforcement of the duties imposed by the regulations;
   (i) offences in relation to failures to comply with requirements of the regulations.
(4) The enforcement authority must have regard to any guidance given by the Scottish Ministers to it in relation to the functions conferred on it by the regulations.

(5) Persons to whom the regulations apply must have regard to any guidance given by—
   (a) the Scottish Ministers;
   (b) the enforcement authority,
   to them in relation to the requirements imposed by the regulations.

(6) In this section, “recyclate” means waste that has been recycled.

**Reduction of packaging**

57 **Targets for reduction of packaging etc.**

10 (1) The Scottish Ministers may, by regulations—
   (a) set targets—
       (i) for the reduction of packaging;
       (ii) for the reduction of greenhouse gas emissions produced by the manufacture of or otherwise associated with packaging;
   (b) require persons of the kinds specified to comply with those targets.

(2) The regulations may in particular include provision about—
   (a) the circumstances in which the requirement in subsection (1)(b) applies;
   (b) the kinds of packaging in relation to which targets may be set;
   (c) the targets in relation to such packaging (including how targets may be set);
   (d) the methods of determining whether targets have been met;
   (e) subject to section 60—
       (i) the enforcement authority in relation to the regulations; and
       (ii) the functions of that authority;
   (f) the keeping of records and other information and their production to the enforcement authority (including the periods to which records or information must relate and within which it must be produced to the authority);
   (g) the enforcement of the duties imposed by the regulations;
   (h) offences in relation to failures to comply with requirements of the regulations.

(3) The enforcement authority must have regard to any guidance given by the Scottish Ministers to it in relation to the functions conferred on it by the regulations.

(4) In this section and in section 58, “packaging” has the meaning given by Article 3 of Directive 94/62/EC of the European Parliament and of the Council on packaging and packaging waste.

**Deposit and return**

58 **Deposit and return schemes**

(1) The Scottish Ministers may, by regulations, establish deposit and return schemes.
(2) A “deposit and return scheme” is a scheme under which—
(a) the sale price of articles includes a returnable element (a “deposit”);
(b) persons who return the packaging associated with such articles are entitled to be
paid a sum equal to that deposit.

(3) Retailers may be required, under a deposit and return scheme, to—
(a) include a deposit in the price of articles placed on the market by them;
(b) pay a sum equal to the deposit to persons who return packaging associated with
such articles to them;
(c) return such packaging to the producers of it or of the articles with which it is
associated.

(4) Producers may be required, under a deposit and return scheme, to—
(a) include a deposit in the price of articles placed on the market by them;
(b) pay a sum equal to the deposit to retailers who return packaging to them;
(c) ensure that some or all of such packaging is recycled.

(5) A deposit and return scheme may also provide for a person or body (in place of retailers
and producers) to—
(a) ensure that deposits are included in the price of articles placed on the market;
(b) receive returned packaging;
(c) pay sums equal to deposits to persons who return such packaging;
(d) return such packaging to the producers of it or of the articles with which it is
associated;
(e) recover sums equal to deposits from such producers;
(f) ensure that some or all of the packaging returned is recycled.

(6) The Scottish Ministers may make regulations under this section only where they
consider it necessary or expedient to do so for the purpose of promoting or securing an
increase in the recycling of materials.

(7) The regulations may in particular include provision about—
(a) the persons who are retailers and producers for the purposes of deposit and return
schemes;
(b) the articles to which such schemes apply;
(c) the deposits to be included in the price of such articles;
(d) the packaging associated with such articles, the return of which entitles persons
returning it to payment of sums equal to deposits;
(e) the methods by which such packaging is to be identified;
(f) information on the operation of schemes (including notices on premises where
articles are offered for sale and the content of such notices);
(g) the places to which packaging can be returned;
(h) the registration of retailers and producers to whom schemes apply (including the
reasonable fees payable in relation to such registration);
Part 5—Other climate change provisions
Chapter 4—Waste reduction and recycling

(i) subject to section 60—
   (i) the enforcement authority in relation to the regulations; and
   (ii) the functions of that authority;
(j) the keeping of records and other information and their production to the enforcement authority;
(k) the enforcement of the duties imposed by the regulations;
(l) offences in relation to failures to comply with requirements of the regulations.

Carrier bag charges

Charges for supply of carrier bags

(1) The Scottish Ministers may, by regulations, require suppliers of goods—
   (a) to charge for carrier bags supplied at the place where the goods are supplied for the purpose of enabling the goods to be taken away or delivered;
   (b) to apply the net proceeds raised by such charges to the advancement of environmental protection or improvement or to any other purposes that may be reasonably regarded as analogous.

(2) The regulations may in particular include provision about—
   (a) the circumstances in which the requirement applies;
   (b) the suppliers to whom the requirement applies;
   (c) the carrier bags to which the requirement applies;
   (d) the minimum amount to be charged for each carrier bag;
   (e) how the net proceeds raised by the charge are to be ascertained;
   (f) the purposes to which those net proceeds are to be applied;
   (g) subject to section 60—
      (i) the enforcement authority in relation to the regulations; and
      (ii) the functions of that authority;
   (h) the keeping of records and their production to the enforcement authority;
   (i) the enforcement of the duties imposed by the regulations;
   (j) offences in relation to failures to comply with requirements of the regulations.

(3) The enforcement authority must have regard to any guidance given by the Scottish Ministers to it in relation to the functions conferred on it by the regulations.

General provision

Enforcement authorities

(1) This section applies to any regulations made under this Chapter other than under section 53.

(2) The enforcement authority provided for in the regulations is to be—
   (a) SEPA;
(b) a local authority; or
(c) such other person or body as the Scottish Ministers consider appropriate.

(3) The regulations may provide for the functions of the enforcement authority in relation to the regulations to be exercised by two or more such authorities and about the functions of each such authority.

(4) The regulations may also provide for enforcement authorities to levy charges to recover the reasonable costs incurred by them in exercising their functions under the regulations.

61 Penalties

(1) A person who commits an offence under regulations made under this Part is liable to such penalties, not exceeding those mentioned in subsection (2), as are provided for in the regulations.

(2) Those penalties are—
   (a) on summary conviction, a fine not exceeding the statutory maximum;
   (b) on conviction on indictment, a fine.

62 Equal opportunities

(1) The persons mentioned in subsection (2) must exercise their functions under this Act in a manner which encourages equal opportunities and in particular the observance of the equal opportunities requirements.

(2) Those persons are—
   (a) the Scottish Ministers;
   (b) the advisory body.

(3) In this section, “equal opportunities” and the “equal opportunities requirements” have the same meanings as those expressions have in section L2 of Part 2 of Schedule 5 to the Scotland Act 1998 (c.46).

63 Crown application

(1) This Act and any orders and regulations made under it bind the Crown.

(2) No contravention by the Crown of any provision made by virtue of this Act makes the Crown criminally liable.

(3) But the Court of Session may, on the application of any public body or office-holder having responsibility for enforcing that provision, declare unlawful any act or omission of the Crown which constitutes such a contravention.

(4) Despite subsection (2), any provision made by virtue of this Act applies to persons in the public service of the Crown as it applies to other persons.
64 Subordinate legislation

(1) Any power conferred by this Act on the Scottish Ministers to make orders or regulations is exercisable by statutory instrument.

(2) Any such power—

(a) may be exercised so as to make different provision for different cases or descriptions of case or for different purposes;

(b) includes power to make such consequential, incidental, supplementary, transitory, transitional or saving provision as the Scottish Ministers consider appropriate.

(3) An order or regulations under this Act may modify any enactment (including this Act).

(4) Subject to subsections (5) to (8), no statutory instrument containing an order or regulations under this Act (other than an order under section 67(2)) may be made unless a draft of the instrument has been laid before, and approved by resolution of, the Scottish Parliament.

(5) A statutory instrument containing an order mentioned in subsection (6) or regulations mentioned in subsection (7) is subject to annulment in pursuance of a resolution of the Scottish Parliament.

(6) Those orders are orders under—

(a) section 17(b);

(b) section 38(1);

(c) paragraph 2(2) of schedule 1.

(7) Those regulations are—

(a) the second or subsequent regulations under section 12(2) (other than regulations which make provision altering the amount by which a carbon unit credited or debited to the net Scottish emissions account for a period reduces or, as the case may be, increases the net Scottish emissions account for that period);

(b) the second or subsequent regulations under section 18(1) (other than regulations which make provision specifying a carbon unit of a kind not previously specified in regulations under that section);

(c) regulations under section 50(1) which make provision about the matter mentioned in section 50(4) only;

(d) regulations under section 58(1) which make provision about one or more of the following matters only—

(i) the deposits mentioned in section 58(7)(c);

(ii) the form and content of notices mentioned in section 58(7)(f);

(iii) setting the registration fees mentioned in section 58(7)(h);

(e) regulations under Chapter 4 of Part 5 which make provision about the matter mentioned in section 60(4) only.

(8) Subsection (5) does not apply to an order or regulations which includes provision modifying an Act or an Act of the Scottish Parliament.

65 Interpretation

In this Act—
“additional greenhouse gas” has the meaning given by section 11(2);
“advisory body” has the meaning given by section 19(2);
“advisory functions” has the meaning given by section 19(3);
“annual target” has the meaning given by section 3(3);
“authorised person” has the meaning given by section 54(5);
“baseline” has the meaning given by section 10(1);
“baseline year” means—
(a) in relation to a greenhouse gas mentioned in section 10(2), the year mentioned in subsection (2)(a), (b), (c), (d) or, as the case may be, (e);
(b) in relation to an additional greenhouse gas, any year designated by virtue of section 11(3);
“carbon unit” has the meaning given by section 18(4);
“climate change duties” means duties imposed on public bodies by virtue of section 36(1);
“Committee” means the Scottish Committee on Climate Change;
“deposit and return scheme” means a scheme established by virtue of section 58(1);
“emissions” has the meaning given by section 15(1);
“energy efficiency” has the meaning given by section 48(8);
“greenhouse gas” has the meaning given by section 9(1);
“interim target” has the meaning given by section 2(2);
“international carbon reporting practice” has the meaning given by section 17;
“local authority” means a council constituted under section 2 of the Local Government etc. (Scotland) Act 1994 (c.39);
“monitoring body” has the meaning given by section 39(2);
“net Scottish emissions” has the meaning given by section 15(1);
“net Scottish emissions account” has the meaning given by section 12(1);
“packaging” has the meaning given by section 57(4);
“public body” has the meaning given by section 19(5);
“relevant body” has the meaning given by section 5(5);
“relevant public body” has the meaning given by section 36(2);
“recycling” has the meaning given by section 52(4);
“renewable sources” has the meaning given by section 48(8);
“Scottish Committee on Climate Change” has the meaning given by section 20(2);
“Scottish emissions” has the meaning given by section 15(1);
“Scottish removals” has the meaning given by section 15(1);
“SEPA” has the meaning given by section 53(5);
“target year” means a year for which an annual target has been set;  
“target-setting criteria” means the matters mentioned in section 4(4)(a) to (h);  
“the 1990 Act” means the Environmental Protection Act 1990 (c.43);  
“the 2008 Act” means the Climate Change Act 2008 (c.27);  
“the 2050 target” has the meaning given by section 1(2);  
“UK Committee on Climate Change” has the meaning given by section 5(6);  
“waste” has the meaning given by section 52(4).

66 Minor and consequential modifications

Schedule 2 makes minor modifications and modifications consequential on the provisions of this Act.

67 Short title and commencement

(1) This Act may be cited as the Climate Change (Scotland) Act 2009.

(2) This Act (other than this section and sections 22 to 27 and 64) comes into force on such day as the Scottish Ministers may, by order, appoint.

(3) Sections 22 to 27 come into force in accordance with section 21.

(4) Different days may, under subsection (2), be appointed for different purposes.
SCHEDULE 1
(introduced by section 20)

THE SCOTTISH COMMITTEE ON CLIMATE CHANGE

Status

1 (1) The Committee is a body corporate.

(2) The Committee is not to be regarded as a servant or agent of the Crown, nor is it to be regarded as having any status, privilege or immunity of the Crown.

(3) The Committee’s members and employees are not to be regarded as civil servants.

(4) The Committee’s property is not to be regarded as property of, or held on behalf of, the Crown.

Membership of the Committee

2 (1) The Committee is to consist of the following members—

(a) a person to chair the Committee (“the Chair”); and

(b) not fewer than five and not more than eight other members.

(2) The Scottish Ministers may, by order, modify sub-paragraph (1)(b) so as to alter the number of other members of the Committee.

(3) Members of the Committee are appointed by the Scottish Ministers.

(4) In appointing members to the Committee, the Scottish Ministers must have regard to the desirability of the Committee (taken as a whole) having expertise or experience in the following—

(a) business competitiveness;

(b) climate change policy at Scottish, UK and international level (in particular the social impact of such policy);

(c) climate science and other branches of environmental science;

(d) economic analysis and forecasting;

(e) emissions trading;

(f) energy production and supply;

(g) financial investment;

(h) technology development and diffusion.

Period, and conditions, of appointment of members

3 (1) Each member of the Committee is to be appointed for a period not exceeding five years.

(2) A member holds and vacates office in accordance with the terms and conditions of appointment.

(3) A member may resign office as a member of the Committee by giving written notice to the Scottish Ministers.

(4) On ceasing to be a member, a person is eligible to be reappointed for one further period.
Persons not eligible for appointment

4 No person may be appointed as a member of the Committee if that person is, or has at any time during the previous year been, a member of—

(a) the House of Commons;
(b) the Scottish Parliament;
(c) the European Parliament.

Removal of members of Committee

5 (1) Subject to sub-paragraph (3), the Chair may, by giving written notice, remove a member from office if the Chair is satisfied that one of the situations set out in sub-paragraph (2) exists.

(2) Those situations are—

(a) that the member is insolvent;
(b) that the member has been convicted of a criminal offence;
(c) that the member has been absent from meetings of the Committee for a period longer than six months without the permission of the Chair;
(d) that the member is otherwise unable or unfit to discharge the functions of a member or is unsuitable to continue as a member.

(3) The Chair may only remove a member from office with the agreement of the Scottish Ministers.

(4) The Scottish Ministers may, by giving written notice, remove the Chair from office if the Scottish Ministers are satisfied that one of the situations set out in sub-paragraph (2) exists.

(5) For the purposes of sub-paragraph (2)(a), a member is insolvent when—

(a) a voluntary arrangement proposed by the member is approved;
(b) the member is adjudged bankrupt;
(c) the member’s estate is sequestrated;
(d) the member enters into a debt arrangement programme under Part 1 of the Debt Arrangement and Attachment (Scotland) Act 2002 (asp 17) as the debtor;
(e) the member grants a trust deed for creditors.

Remuneration, allowances and pensions of members

6 (1) The Committee must pay its members such remuneration and allowances as the Scottish Ministers may in each case determine.

(2) The Committee may, with the agreement of the Scottish Ministers—

(a) pay (or make arrangements for the payment);
(b) make payments towards the provision;
(c) provide and maintain schemes (whether contributory or not) for the payment,
of such pensions, allowances or gratuities to or in respect of any person who is or has ceased to be a member of the Committee, as the Committee may determine.

(3) The reference in sub-paragraph (2) to pensions, allowances and gratuities includes pensions, allowances and gratuities paid by way of compensation for loss of office.

Chief executive and other employees

7 (1) The Committee is to employ a chief executive.

(2) The chief executive is to be appointed by the Committee on such terms and conditions as the Committee may determine.

(3) The appointment of the chief executive and the terms and conditions of that appointment are subject to the agreement of the Scottish Ministers.

(4) The Committee may appoint other employees on such terms and conditions as the Committee may determine.

(5) The Scottish Ministers may give directions to the Committee as regards the appointment of employees under sub-paragraph (4), which may relate in particular to—

(a) the number of appointments;

(b) the terms and conditions of employment.

(6) The Committee must comply with directions given under sub-paragraph (5).

(7) The Committee may, with the agreement of the Scottish Ministers—

(a) pay (or make arrangements for the payment);

(b) make payments towards the provision;

(c) provide and maintain schemes (whether contributory or not) for the payment, of such pensions, allowances or gratuities to or in respect of any person who is or has ceased to be an employee of it, as the Committee may determine.

(8) The reference in sub-paragraph (7) to pensions, allowances and gratuities includes pensions, allowances and gratuities paid by way of compensation for loss of office.

Accounts

8 (1) The Committee must—

(a) keep proper accounts and accounting records;

(b) prepare in respect of each financial year a statement of accounts;

(c) send the statement of accounts to the Scottish Ministers.

(2) The Committee must comply with any directions which the Scottish Ministers gives it in relation to the matters mentioned in sub-paragraph (1).

(3) The Scottish Ministers must, as soon as reasonably practicable after receiving the statement of accounts from the Committee—

(a) send the statement of accounts to the Auditor General for Scotland for auditing;

(b) lay the audited statement before the Scottish Parliament.

(4) The Committee must make its audited statement of accounts and its accounting records available so that they may be inspected by any person.
(5) Those documents are to be made available—
(a) at any reasonable time; and
(b) without charge.

(6) In this paragraph and paragraph 9, “financial year” means—
(a) the period beginning with the day the Committee is established and ending with
31 March in the following calendar year;
(b) each subsequent period of 12 months ending with 31 March.

Reports

9 (1) As soon as practicable after the end of each financial year, the Committee must prepare
a report on—
(a) the discharge of the Committee’s functions during that year;
(b) the actions that the Committee proposes to take during the following year in
pursuance of its functions.

(2) The Committee must—
(a) send a copy of the report to the Scottish Ministers; and
(b) publish the report.

(3) The Committee must prepare and publish the report in accordance with any directions
which the Scottish Ministers may give.

(4) The Scottish Ministers must as soon as reasonably practicable after receiving the report
from the Committee, lay a copy of it before the Scottish Parliament.

(5) The Committee may publish such other reports on matters relevant to its functions as it
considers appropriate.

Sub-committees

10 (1) The Committee may establish sub-committees for any purposes relating to its functions.

(2) A sub-committee must comply with any directions given to it by the Committee.

Proceedings

11 (1) Subject to the remaining provisions of this paragraph, the Committee may regulate—
(a) its own procedure (including any quorum);
(b) the procedure of any sub-committee (including any quorum).

(2) The Chair must, if present, chair meetings of the Committee or any sub-committee of
the Committee.

(3) If the Chair is not available to be present at a meeting of the Committee (or any sub-
committee of the Committee), the Chair is to appoint another member to chair the
meeting.

(4) The Chair has a casting vote and any person appointed by the Chair under sub-paragraph
(3) has a casting vote for the purposes of that appointment.
(5) The validity of any proceedings of the Committee (or any of its sub-committees) is not affected by a vacancy in membership nor by any defect in the appointment of a member.

**Delegation of functions**

12 (1) The Committee may, subject to sub-paragraph (2), authorise—

(a) any of its members;
(b) any of its sub-committees;
(c) its chief executive;
(d) any other employee,

to exercise such of its functions (and to such extent) as it may determine.

(2) The Committee may not authorise the exercise of the following functions under sub-paragraph (1)—

(a) the approval of annual reports and accounts;
(b) the approval of any budget or other financial plan.

(3) Sub-paragraph (1) does not affect the responsibility of the Committee for the exercise of its functions.

**General powers**

13 (1) The Committee may do anything which appears to it—

(a) to be necessary or expedient for the purpose of, or in connection with, the exercise of its functions;
(b) to be conducive to the exercise of its functions.

(2) In particular, the Committee may—

(a) enter into contracts;
(b) with the agreement of the Scottish Ministers, borrow money;
(c) with the agreement of the Scottish Ministers, acquire and dispose of land;
(d) obtain advice and assistance from any person who, in the Committee’s opinion, is qualified to give it.

(3) The Committee may pay to any person from whom advice or assistance is obtained such fees, remuneration and allowances as the Committee may, with the agreement of the Scottish Ministers, determine.

**Hill Farming Act 1946 (c.73)**

1 In section 23(1) of the Hill Farming Act 1946 (prohibition of muirburn at certain times), after “section” insert “and to section 23A,”.
Environment Act 1995 (c.25)

2 In section 41(1) of the Environment Act 1995 (power to make schemes imposing charges), after paragraph (e), insert—

“(f) as a means of recovering costs incurred by it in performing functions conferred by regulations under section 53 of the Climate Change (Scotland) Act 2009 (asp 00), SEPA may require the payment to it of such charges as may from time to time be prescribed;”.

Ethical Standards in Public Life etc. (Scotland) Act 2000 (asp 7)

3 In the Ethical Standards in Public Life etc. (Scotland) Act 2000, in schedule 3 (devolved public bodies) at the appropriate place, insert—

“The Scottish Committee on Climate Change”.

Scottish Public Services Ombudsman Act 2002 (asp 11)

4 In the Scottish Public Services Ombudsman Act 2002, in Part 2 of schedule 2 (listed authorities) at the appropriate place, insert—

“The Scottish Committee on Climate Change”.

Freedom of Information (Scotland) Act 2002 (asp 13)

5 In the Freedom of Information (Scotland) Act 2002, in Part 7 of schedule 1 (Scottish public authorities) at the appropriate place, insert—

“The Scottish Committee on Climate Change”.

Public Appointments and Public Bodies etc. (Scotland) Act 2003 (asp 4)

6 In the Public Appointments and Public Bodies etc. (Scotland) Act 2003, in schedule 2 (specified authorities) at the appropriate place in the list of advisory bodies, insert—

“The Scottish Committee on Climate Change”.

Housing (Scotland) Act 2006 (asp 1)

7 In the Housing (Scotland) Act 2006, section 179 (duty of Scottish Ministers to prepare strategy for improving energy efficiency of living accommodation) is repealed.
An Act of the Scottish Parliament to set a target for the year 2050, an interim target for the year 2030, and to provide for annual targets, for the reduction of greenhouse gas emissions; to provide about the giving of advice to the Scottish Ministers relating to climate change; to confer power on Ministers to impose climate change duties on public bodies; to make further provision about mitigation of and adaptation to climate change; to make provision about energy efficiency; to make provision about the reduction and recycling of waste; and for connected purposes.

Introduced by: John Swinney
On: 4 December 2008
Supported by: Stewart Stevenson
Bill type: Executive Bill
These documents relate to the Climate Change (Scotland) Bill (SP Bill 17) as introduced in the Scottish Parliament on 4 December 2008

CLIMATE CHANGE (SCOTLAND) BILL

EXPLANATORY NOTES

(AND OTHER ACCOMPANYING DOCUMENTS)

CONTENTS

1. As required under Rule 9.3 of the Scottish Parliament’s Standing Orders, the following documents are published to accompany the Climate Change (Scotland) Bill introduced in the Parliament on 4 December 2008:

   • Explanatory Notes;
   • a Financial Memorandum;
   • the Scottish Government’s Statement on legislative competence; and
   • the Presiding Officer’s Statement on legislative competence.

A Policy Memorandum is printed separately as SP Bill 17–PM.
EXPLANATORY NOTES

INTRODUCTION

2. These Explanatory Notes have been prepared by the Scottish Government in order to assist the reader of the Bill and to help inform debate on it. They do not form part of the Bill and have not been endorsed by the Parliament.

3. The Notes should be read in conjunction with the Bill. They are not, and are not meant to be, a comprehensive description of the Bill. So where a section or schedule, or a part of a section or schedule, does not seem to require any explanation or comment, none is given.

THE BILL

4. Climate change is one of the most serious threats facing Scotland and the world. The most severe consequences include famine, drought and extinction of species. Urgent action is needed by all nations to avoid the most severe climate change.

5. The aim of the Climate Change (Scotland) Bill is to establish a framework to drive greater efforts at reducing Kyoto Protocol greenhouse gas emissions in Scotland. The Bill will create mandatory climate change targets to reduce Scotland’s greenhouse gas emissions. This will signal clearly that the Scottish Government is serious in tackling greenhouse gases and wishes to set a strong example to other countries in the global effort to reduce climate change.

6. The provisions in this Bill will set a long-term target to reduce Scotland’s emissions of Kyoto Protocol greenhouse gases by 80% by the year 2050. This long term target will be supported by a framework of annual targets intended to drive the policies necessary for achieving this target. Many of the policy measures required to meet these targets will not require legislation to implement, but certain climate change mitigation and adaptation policies have been identified which do require legislation and this Bill contains provisions in Part 5 to allow these to be taken forward.

7. The Bill policy areas are separated into five parts.

- **Part 1** creates the statutory framework for the greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050. To help ensure the delivery of these targets this part of the Bill also requires that the Scottish Ministers set annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050.

- **Part 2** contains provisions which will allow the Scottish Ministers to establish a Scottish Committee on Climate Change or to designate an existing body to exercise advisory functions.

- **Part 3** places duties on the Scottish Ministers requiring that they report regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill.
• **Part 4** contains powers to allow the Scottish Ministers, by order, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

• **Part 5 – Chapter 1** requires the Scottish Ministers to lay programmes on adaptation to climate change before the Scottish Parliament and provides for an enabling power for the Scottish Ministers to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

• **Part 5 – Chapter 2** will allow modification by secondary legislation of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change.

• **Part 5 – Chapter 3** contains three distinct sets of provisions.
  - The first set of provisions require the Scottish Ministers to produce an action plan setting out their current and proposed measures to promote the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change towards energy efficiency.
  - The second set of provisions contains measures for assessing the energy performance of existing non-domestic buildings in order to raise awareness of the contribution that those buildings can make to mitigating climate change through reducing energy demand and thereby emissions of greenhouse gases.
  - The third set of provisions places a duty on the Scottish Ministers to take such steps as they consider appropriate to promote the use of heat from renewable sources.

• **Part 5 – Chapter 4** contains provisions which will enable the Scottish Ministers to make regulations relating to the acquisition of accurate information about waste and the promotion of waste reduction and recycling by different methods.

**PART 1 – EMISSIONS REDUCTION TARGETS**

8. The provisions set out in Part 1 of the Bill create the statutory framework for the greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050. To help ensure the delivery of these targets the Bill requires that the Scottish Ministers set annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050.

**The 2050 target**

9. Section 1 sets out the 80% target for 2050. Subsection (1) defines the obligation on the Scottish Ministers as reducing the net Scottish emissions account by 80% by 2050 relative to the defined baseline year. The net Scottish emissions account is defined in section 12 of the Bill. For any one year it will consist of the total of Scottish emissions, reduced by the amount of Scottish removals and adjusted to reflect carbon units credited and debited to the account.
The interim target

10. Section 2 sets out the 50% interim target for 2030. It will work in the same way as the 2050 target.

Annual targets

11. Subsection (1) of section 3 requires that the Scottish Ministers set annual targets for the maximum amount of the net Scottish emissions account for each year in the period 2010-2050 and must ensure that those targets are not exceeded.

12. Subsection (2) establishes criteria that the annual targets must meet. Subsection (2)(a) specifies that the annual target for the year 2010 is an amount which is less than the estimated net Scottish emissions account for 2009. Subsection (2)(b) requires that the targets for each year in the period 2011-2019 must be set so that each is an amount which is less than the target for the preceding year. Subsection (2)(c) requires that the targets for each year in the period 2020-2050 must be set so that each is an amount which is at least 3% less than the target for the preceding year.

Setting annual targets

13. Section 4 contains a number of conditions which must be met when the Scottish Ministers set annual targets. Subsections (1) and (2) establish that the targets must be set by order and must be set for certain periods by prescribed dates.

14. Subsection (3) imposes a duty on the Scottish Ministers to take account of both the interim 2030 target and the final 2050 target when setting the annual targets up to 2030. After 2030, the Scottish Ministers must consider the 2050 target when setting the annual targets from 2031 onwards.

15. Subsection (4) details a number of scientific, economic, social and international criteria which must be considered by the Scottish Ministers when setting annual targets. This list is not intended to be the sole list of factors that the Scottish Ministers consider when setting annual targets and additional factors can also be considered.

Advice before setting annual targets

16. Section 5 requires the Scottish Ministers to request expert advice before laying an order containing annual targets and to publish a statement explaining why the annual targets are being set at certain levels, and how these annual targets take account of the target-setting criteria described in section 4(4) of the Bill. If the Scottish Ministers have chosen to set annual targets in a manner which differs from the expert advice provided, they must publish a statement setting out the reason why. Subsection (5) defines “relevant body” for the purposes of the Part, which will be the UK Committee on Climate Change or a Scottish body designated under section 19.
Modifying annual targets

17. Section 6 allows the Scottish Ministers to modify, by order, annual targets, the minimum annual target percentage reduction applying from 2020, dates by which annual targets must be set and target-setting criteria. The annual targets set by order may only be modified if the Scottish Ministers believe there have been significant changes to the basis on which an annual target was set.

18. Subsection (6) further constrains this ability to modify by preventing its use in the year to which a target relates and its use in a way which would result in the target for the year being greater than the target for the preceding year (i.e. allowing emissions to increase between years). An order to modify the 3% minimum reduction in emissions applying from 2020 may be made only where it is no longer considered necessary for that minimum to be achieved, and it can expressly not be used to substitute a percentage of less than zero. An order to modify either the date by which annual targets are to be set, or the target-setting criteria, may be made only where the Scottish Ministers consider it appropriate.

19. Section 7 requires the Scottish Ministers to request expert advice from the relevant body before laying an order for modification under section 6 and if this advice is not followed, this provision requires the Scottish Ministers to publish a statement explaining why.

Progress towards targets

20. Section 8 requires the Scottish Ministers, from 2011, to request that the relevant body prepare a report on its view on the progress towards achievement of annual targets, the interim target and the 2050 target, a view on whether these targets are likely to be achieved and what further effort may be required to meet the targets.

21. Subsection (2) requires that in the second year following an annual target, the Scottish Ministers must request the relevant body to prepare a report detailing its views on whether the annual target for the target year was met, the way in which the target was or was not met and the action taken by the Scottish Ministers to reduce net Scottish emissions during that year. Subsection (3) requires the Scottish Ministers to lay a response to this report before the Scottish Parliament as soon as reasonably practicable after receiving the report.

Greenhouse gases

22. Section 9 defines the greenhouse gases targeted by the Bill and allows for this list of gases to be amended, by order, by adding gases or modifying their description. The power to add new greenhouse gases may be exercised only if it appears to the Scottish Ministers that European or international agreements or arrangements recognise the contribution to climate change of a gas. Before laying an order modifying section 9(1), the Scottish Ministers must request advice from the relevant body.
The baseline

23. Section 10 defines the baseline years for each greenhouse gas covered by the statutory targets.

Baseline years for additional greenhouse gases

24. Section 11 applies in the situation where the list of target gases for the Bill is expanded and a baseline year is required. If a new greenhouse gas is added to the list of target gases for the Bill, subsections (3) and (4) allow the Scottish Ministers to specify by order what the baseline year is to be and how the net Scottish emissions are to be determined for the baseline year for the new gas.

Net Scottish emissions account

25. Section 12 defines the net Scottish emissions account as the aggregate of net Scottish emissions, minus any carbon units credited to the account for the period plus any carbon units debited from the account for the period. Subsection (2) enables the Scottish Ministers to define in regulations which carbon units can be credited to and debited from the net Scottish emissions account, and how this can be done. Subsection (3) provides that regulations must ensure that, where carbon units are used to reduce the net Scottish emissions account, they are not also used to offset other emissions elsewhere. This would lead to their “double-counting”.

Attribution of emissions to Scotland

26. Section 13 defines which greenhouse gases are attributable to Scotland for the purposes of calculating net Scottish emissions. These are emissions of greenhouse gases emitted from sources in Scotland plus Scotland’s share of emissions from international aviation and international shipping.

Scottish share of emissions from international aviation and international shipping

27. Section 14 allows the Scottish Ministers to make provision, by order, for a proportion of emissions from international aviation and international shipping to be attributed to Scotland. That order may make provision for the period or periods in which gases are to be regarded as Scottish emissions, and as to the manner in which such emissions are to be taken into account. Before laying such an order, the Scottish Ministers must seek advice from the relevant body and if this advice is not followed, they must publish a statement explaining why they are following a different approach.

Scottish emissions and removals

28. Section 15 defines Scottish emissions and Scottish removals of greenhouse gases, and defines the total of these for a period as the net Scottish emissions for that period.
29. Subsection (2) allows the Scottish Ministers to modify the definition of Scottish removals by order. Subsection (3) requires the amount of emissions and removals to be determined, in so far as reasonably practicable, consistently with international carbon reporting practice, defined in section 17.

Measurement of emissions

30. Section 16 provides that emissions, emissions reductions and removals are to be measured in tonnes of carbon dioxide equivalent, and defines that term.

International carbon reporting practice

31. Section 17 defines international carbon reporting practice in terms of the protocols to the United Nations Framework Convention on Climate Change, or other European or international arrangements or agreements which the Scottish Ministers specify by order. This power allows the definition to be updated to take account of new international arrangements and agreements.

Carbon units and carbon accounting

32. Section 18 enables the Scottish Ministers to define “carbon unit” in regulations, and provides the Scottish Ministers with the power by regulations, to establish a scheme or use an existing scheme, for the registering and tracking of carbon units and for establishing and maintaining accounts in which carbon units may be held.

PART 2 – ADVISORY FUNCTIONS

Advisory body

33. The emissions reduction provisions in the Bill impose duties on the Scottish Ministers, which require them to establish annual emissions reductions targets in secondary legislation. Ministers will be required to seek expert, independent advice in advance of setting or modifying annual targets, adding greenhouse gases to the Bill, or making provision attributing a proportion of greenhouses gases from international aviation and international shipping to Scotland.

34. Subsections (1) and (2) of section 19 give the Scottish Ministers the power to designate a body or person to undertake the advice functions in sections 5, 7, 8 and 9 and the additional advice functions in sections 22 to 27. Thereafter the body or person will be referred to as the advisory body and will take on the role of the UK Committee on Climate Change.

35. Subsection (3) sets out the functions (the “advisory functions”) which the advisory body has.

36. Subsection (4) sets out examples of what may be included in an order under subsection (1), such as the information requirements for the advice. Subsection (5) defines the term “public body” as used in subsection (1).
Scottish Committee on Climate Change

37. Section 20 allows the Scottish Ministers to establish, by order, a body to undertake the advisory functions under the Bill. If established, this body would be known as the Scottish Committee on Climate Change.

38. Subsection (3) gives effect to schedule 1 which sets out details of the constitution and operation of this Committee and subsection (4) identifies the types of further provision which may be included in an order establishing a Scottish Committee on Climate Change.

39. Section 21 makes it clear that the obligations for this body to provide advice to the Scottish Ministers under sections 22-27 do not apply until the Scottish Ministers designate, under section 19, a body to exercise advisory functions. Until such an advisory body is designated, the Scottish Ministers will seek advice from the UK Committee on Climate Change (which will be the relevant body for the purposes of sections 5 to 9).

Advice on annual targets

40. Section 22 obliges the advisory body to respond to requests by the Scottish Ministers for advice on proposed annual targets and proposed modifications of annual targets.

41. Subsection (2) requires the body to provide a view on whether a proposal for an annual target is appropriate, and explain that view.

42. Subsection (3) requires the body to express views on a number of factors relating to annual targets. Specifically, it should provide a view on the relative merits of taking action to reduce emissions, compared with the use of carbon units. It should also express a view on the contributions to targets which may be provided by sectors covered by trading schemes and those not covered by such schemes, and the contributions to targets that may be made by reductions in emissions of greenhouse gases in particular sectors of the economy.

43. Subsection (4) requires that the body must provide its advice within the period requested by the Scottish Ministers. Subsection (5) defines the meaning of ‘traded sector’ for subsection (3)(b)(i). This refers to the definition contained in section 66 of the UK Climate Change Act 2008.

Reporting on progress towards targets

44. Section 23 requires the advisory body to prepare an annual report setting out its views on the Scottish Ministers’ progress towards meeting the annual targets, the interim target, and the 2050 target. It should also provide views on whether these targets are likely to be achieved and views on any action considered necessary to achieve these targets. This duty will be switched on by the Scottish Ministers at an appropriate time after an advisory body has been designated.
45. Subsection (3) requires that the body’s report in the second year after the year covered by a target ends must express a view on whether the annual target for the target year was met and a view on the action taken by the Scottish Ministers to reduce greenhouse gas emissions during that year.

46. Subsection (4) specifies deadlines for laying the reports before the Scottish Parliament.

Scottish Ministers’ response to reports on progress

47. Section 24 obliges the Scottish Ministers to respond to a report provided by the advisory body under section 23 and to lay that response before the Scottish Parliament.

Duty of body to provide advice or other assistance

48. Section 25 obliges the advisory body to respond to requests for advice, analysis, information and assistance by the Scottish Ministers in connection with their functions under the Bill, their other climate change functions, or in relation to climate change generally.

Guidance to advisory body

49. Section 26 requires that the advisory body must have regard to any guidance given by the Scottish Ministers in respect of its functions under the Bill. Subsection (2) provides that the Scottish Ministers may not give the body guidance on the content of any advice or report. Subsection (3) permits the Scottish Ministers to vary or revoke any guidance issued.

Power to give directions to advisory body

50. Section 27 gives the Scottish Ministers the power to direct the advisory body in terms of its functions under the Bill. Subsection (2) provides that the Scottish Ministers may not direct the body on the content of any advice or report and subsection (3) permits the Scottish Ministers the power to vary or revoke the directions. Subsection (4) requires the body to comply with any directions given.

PART 3 – REPORTING DUTIES

51. The Bill requires that the Scottish Ministers report regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill.

Reports on annual targets

52. Section 28 requires the Scottish Ministers to lay annual reports before the Scottish Parliament in respect of each year from 2010 to 2050. Subsections (2) to (4) specify information that the annual report must contain. Subsection (5) requires the annual report to be laid before the
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Scottish Parliament no later than 31 October in the second year after that to which the annual target discussed in the report relates.

53. Section 29 specifies further requirements for the content of the information contained in each annual target report.

Reports on proposals and policies for meeting annual targets

54. Subsection (1) of section 30 requires the Scottish Ministers to produce a report as soon as reasonably practicable after making an order under section 4 setting annual targets. Subsection (2) requires this report to set out the proposals and policies intended to meet the annual targets, and their timescales, with an explanation of how these are expected to contribute towards the delivery of the interim target and the 2050 target.

55. Subsection (3) requires the report to explain how the proposals and policies are expected to affect the different sectors of the Scottish economy and subsection (4) requires the second and each subsequent report to provide an assessment of progress towards implementation of the policies and proposals in earlier reports, and any adjustments to those policies considered appropriate.

Reports on proposals and policies where annual targets not met

56. If the annual report indicates that the annual target has not been met, section 31 requires the Scottish Ministers to lay a report before the Scottish Parliament, which sets out the proposals and policies to compensate in future years for the excess emissions.

Report on the interim target

57. Section 32 requires the Scottish Ministers to lay a report before the Scottish Parliament in respect of the interim target, for the year 2030. Subsections (2) to (8) determine what the report must contain and its timescale for laying.

Report on the 2050 target

58. Section 33 requires the Scottish Ministers to lay a report before the Scottish Parliament in respect of the 2050 target. Subsections (2) to (8) determine what the report must contain and its timescale for laying.

Reports: provision of further information to the Scottish Parliament

59. Section 34(1) requires that where the Scottish Ministers lay various reports before the Scottish Parliament relating to annual targets, the interim target and the 2050 target, they must, as soon as reasonably practicable, make a statement on the report in the Scottish Parliament. Subsection (2) specifies all the reports which trigger this obligation. Subsection (3) requires that in terms of the report on the annual target, the Scottish Ministers must also meet with the
Scottish Parliament committee conveners. All of these duties apply only as far as is reasonably practicable.

Further provision about reporting duties

60. Section 35 permits the Scottish Ministers to impose new duties on themselves, by order, to report to the Scottish Parliament. Subsection (2) sets out further provision which may also be made by such an order.

PART 4 – DUTIES OF PUBLIC BODIES RELATING TO CLIMATE CHANGE

Duties of public bodies

61. Section 36 enables the Scottish Ministers to impose duties relating to climate change, by order, on bodies or persons exercising functions of a public nature, referred to as ‘relevant public bodies’. Subsection (3) allows the order to impose different duties on different public bodies.

62. Subsections (4) and (5) oblige the Scottish Ministers, in so far as reasonably practicable, to consult with such associations of local authorities and such other persons as they consider appropriate before laying an order imposing such duties. Subsection (6) states that the Scottish Ministers must co-operate with the relevant public bodies to help those bodies comply with duties imposed under this section.

Guidance to relevant public bodies

63. Section 37 requires relevant public bodies to have regard to any guidance issued by the Scottish Ministers in relation to climate change duties. Subsections (2) and (3) oblige the Scottish Ministers to consult with such associations of local authorities and such other persons as they consider appropriate before creating guidance, in so far as it is reasonably practicable to do so. Subsection (4) allows the Scottish Ministers to vary or revoke this guidance and subsection (5) requires the Scottish Ministers to publish guidance.

Reporting on climate change duties

64. Section 38 enables the Scottish Ministers, by order, to require relevant public bodies to report on how they are complying with a duty imposed under section 36 and enables the Scottish Ministers to set out what must be in the report, its format, and the time by which it must be submitted to them. Where relevant public bodies are working together on a particular duty, the Scottish Ministers may require them to co-operate with each other to prepare a joint report.

Appointment of monitoring body

65. Section 39 enables the Scottish Ministers, by order, to designate one or more persons or bodies to monitor how relevant public bodies are complying with duties imposed under section
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36 or how they are having regard to guidance given under section 37. The person or body is referred to as the “monitoring body”.

Investigations

66. Section 40 enables a monitoring body to carry out investigations into how relevant public bodies are complying with duties imposed under section 36, or whether they are having regard to guidance given under section 37. Section 41 defines the powers of investigators in these circumstances; “investigators” may be either the monitoring body or a person authorised by that body.

Reporting by monitoring body

67. Section 42 enables the Scottish Ministers to direct a monitoring body to prepare a report on its activities, use of resources and any other matters. Those reports will not normally mention continuing investigations unless the Scottish Ministers direct this. Subsection (3) requires the monitoring body to submit the report to the Scottish Ministers.

Guidance to monitoring body

68. Section 43 requires a monitoring body to have regard to any guidance issued by the Scottish Ministers relating to its functions under Part 4 of the Bill. Subsections (2) and (3) oblige the Scottish Ministers to consult with the monitoring body and such other persons as they consider appropriate, in so far as reasonably practicable, before giving guidance.

69. Subsection (4) allows the Scottish Ministers to vary or revoke this guidance and where a variation is substantial, the Scottish Ministers are obliged to consult the persons listed in subsection (3), in accordance with subsection (2), before varying the guidance. Subsection (5) requires the Scottish Ministers to publish any guidance given under this section.

Power to direct monitoring body

70. Section 44 enables the Scottish Ministers to give directions to a monitoring body relating to its functions under Part 4 of the Bill. Subsection (2) allows a direction given under this section to be varied or revoked. Subsection (3) requires the monitoring body to comply with a direction given under this section.

PART 5 – OTHER CLIMATE CHANGE PROVISIONS

Chapter 1 – Adaptation

Programme for adaptation to climate change

71. Section 45 applies when the Secretary of State lays a report before the UK Parliament on the impact of climate change on the United Kingdom under section 56 of the Climate Change Act.
These documents relate to the Climate Change (Scotland) Bill (SP Bill 17) as introduced in the Scottish Parliament on 4 December 2008

2008. Receipt by the Scottish Ministers of this report triggers an obligation under this section for the Scottish Ministers to lay a programme before the Scottish Parliament addressing the risks identified in the report and setting out the Scottish Ministers’ objectives, proposals and policies in relation to adaptation to climate change.

72. Subsection (3) requires subsequent programmes to contain an assessment of progress towards objectives set out in the previous programme. Subsection (4) requires the Scottish Ministers to lay each programme under this section before the Scottish Parliament as soon as reasonably practicable after receiving the Secretary of State’s report.

Variation of permitted times for making muirburn

73. Section 46 of the Bill inserts a new section 23A into the Hill Farming Act 1946 (the “1946 Act”).

74. Subsection (1) of new section 23A enables the Scottish Ministers to make an order specifying the dates before which or after which it is lawful to make muirburn in any year. Subsection (2) of new section 23A clarifies the effect of an order made under subsection (1), that is, to substitute for any of the dates specified in section 23(1), (2) or (3) of the 1946 Act, the dates specified in any such order.

75. Subsection (3) of new section 23A provides that the Scottish Ministers may make an order under new section 23A(1) of the 1946 Act only where they consider it necessary or expedient to do so in relation to climate change. Subsection (5) of new section 23A of the 1946 Act provides that any statutory instrument containing an order made under subsection (1) of that section is subject to negative resolution procedure.

76. Schedule 2 to the Bill provides for a minor amendment of section 23(1) of the 1946 Act, to clarify that section 23 of the 1946 Act is subject to any provision made by order under new section 23A(1) of that Act.

Chapter 2 – Forestry

Power to modify functions of Forestry Commissioners

77. Section 47(1) allows the Scottish Ministers, by order, to modify the functions of the Forestry Commissioners in or as regards Scotland. Subsection (2) provides that such modifications may be made only where the Scottish Ministers consider it necessary or expedient to allow them to comply with their duties under sections 1, 2 or 3(1)(b) of the Bill to reduce greenhouse gas emissions or more generally in relation to climate change.

78. Subsection (3) provides that the order may modify the Forestry Commissioners’ functions to allow them to form or participate in corporate bodies or trusts.
79. Subsection (4) provides that the order may also allow the Forestry Commissioners to delegate functions to other bodies.

80. Section 64 makes more general provision in relation to the power to make an order under section 47, and makes provision as to the Parliamentary procedure for such an order. Subsections (2) and (3) of section 64, provide that an order made by the Scottish Ministers under section 47 may make different provision for different cases or purposes, or make any appropriate consequential, incidental, supplementary, transitory, transitional or saving provision, including modification of any enactment. Section 64(4) provides that an order made under section 47 is subject to affirmative resolution procedure.

Chapter 3 – Energy efficiency

Duty of the Scottish Ministers to promote energy efficiency

81. Section 48 requires the Scottish Ministers, within 12 months of the section coming into force, to publish a plan for the promotion of energy efficiency in Scotland. The plan must specifically cover the promotion of the energy efficiency of living accommodation. Under subsections (4) and (5), Ministers are required to review the plan at least every 3 years.

82. Following a review, the Scottish Ministers must in accordance with subsection (6) publish the plan if the review results in changes to the plan.

83. When preparing a plan and when varying it after a review, subsection (7) requires the Scottish Ministers to have regard to the contribution that improvements to buildings and changes in building standards can make to improving overall energy efficiency and lowering carbon emissions in Scotland.

84. “Energy efficiency” is defined in subsection (8) and includes the use of technologies reliant on renewables sources of energy and the use of materials that produce lower greenhouse gas emissions than alternatives. “Fossil fuel” and “renewable sources” are also defined in subsection (8).

Laying of plans and reports

85. Section 49(1) requires the Scottish Ministers to lay the initial plan and any subsequent revised plan before the Scottish Parliament as soon as is reasonably practicable after it is published. Subsections (2) and (3) require Ministers to lay a report before the Scottish Parliament on what steps have been taken to implement the plan. The report must be laid within 12 months of the plan being first published and at least annually thereafter.
Non-domestic buildings: assessment of energy performance and emissions

86. Section 50 confers power on the Scottish Ministers to make regulations providing for the assessment of: (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings.

87. Subsection (2) sets out some of the provisions which may be included in the regulations, including: the kinds of non-domestic buildings covered; persons who are required to obtain assessments; time periods for carrying out assessments; procedures and methodologies for assessing energy performance and emissions; persons who can carry out such assessments; the issuing of certificates following assessment; enforcement authorities; the keeping of records; enforcement of the regulations; and offences.

88. Subsection (3) makes provision about the enforcement authority provided for in the regulations and subsection (4) allows the enforcement authority to levy charges to recover reasonable costs incurred by exercising the functions under the regulations.

89. Subsection (5) defines “non-domestic building” as all buildings, other than buildings which are dwellings. Yards, gardens, outbuildings and other land or buildings associated with dwellings, and any common areas so associated, are also excluded from the meaning of “non-domestic building”.

Promotion of renewable heat

90. Section 51(1) imposes a duty on the Scottish Ministers to put in place measures, as appropriate, to promote the use of heat produced from renewable sources. These include the measures mentioned in subsection (2) relating to the promotion of the installation of a new renewable energy system fuelled wholly or partly from renewable sources and the adaptation of equipment so that it can be fuelled by renewable sources.

Chapter 4 – Waste reduction and recycling

Waste prevention and management plans

91. Section 52 enables the Scottish Ministers to make detailed provision, by regulations, requiring persons specified in such regulations to make waste prevention and management plans, and to comply with them. Some of the detail which may be included in the regulations is specified in subsection (2), but this is without prejudice to the generality of the section. Some essential terms are defined in subsection (4).

92. The effect of regulations made under this section could be, for example, to provide that a builder should draw up plans for how he proposed to reduce waste generated by a building operation by, for example, the re-use of rubble on-site. On a different scale, they might require an office to prepare a plan showing how it will minimise waste – for example by adopting double-sided printing. A person might be required by virtue of subsection (2)(a) to prepare more than one plan, for instance to deal with different types of waste.
93. Subsection (3) ensures that any enforcement authority appointed in relation to this section must have regard to any guidance the Scottish Ministers may give in relation to its functions, which may include the approval of waste prevention and management plans (subsection (2)(e)(ii)). Further provision about enforcement authorities is made by section 60.

94. It is very likely that a system of enforcement, including offences and penalties, would be required to ensure that plans were actually drawn up and complied with, but this will be a matter for regulations. Maximum penalties which may be imposed in any regulations made under this Chapter are specified in section 61.

**Information on waste**

95. Section 53 enables the Scottish Ministers to make detailed provision, by regulations, requiring the provision of information by persons specified in those regulations about waste associated with their activities to the Scottish Environment Protection Agency (SEPA). Some of the detail which may be included in the regulations is specified in subsection (2), but without prejudice to the generality of the section. “Waste” is a term which has already been defined in section 52(4): this definition matches that of Directive 2006/12/EC on waste\(^1\).

96. Subsection (3) refers to section 34(5) of the Environmental Protection Act 1990\(^2\) (the “1990 Act”). This enables the Scottish Ministers to make regulations requiring those who import, produce, carry, keep, treat or dispose of controlled waste to make, retain and furnish documents. The powers have been used to make the Environmental Protection (Duty of Care) Regulations 1991\(^3\) (the “1991 Regulations”) and the Special Waste Regulations 1996 (the “1996 Regulations”)\(^4\). These regulations require notes to be prepared when waste covered by them is transferred. Subsection (3) ensures that regulations made under section 53 are not construed as replacing the separate requirements contained in existing regulations.

97. It is very likely that a system of enforcement, including offences and penalties, would be required to ensure that information is provided correctly and timeously, but this will be a matter for regulations. Powers to make such provision are contained in subsection (2)(g) and (h).

**Recyclable waste: facilities for deposit etc.**

98. Section 54 enables the Scottish Ministers to make detailed provision, by regulations, requiring persons specified in those regulations to provide facilities for the deposit of waste, and requiring that waste deposited in such facilities be collected by an authorised person and, as far as practicable, recycled. Some of the detail which may be included in the regulations is specified in subsection (2), but without prejudice to the generality of the section. “Waste” and “recycling” are terms which have already been defined in section 52(4). “Authorised person” is defined in subsection (5) in terms of section 34(3) of the 1990 Act, and includes local authorities and holders of waste management licences.

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\(^1\) OJ No. L 114, 27.4.2006, p9

\(^2\) 1990 c.43

\(^3\) SI 1991/2839, as amended by SSI 2003/533

99. The power this section grants could be used to require offices to have facilities to collect paper for recycling, for example. Such facilities might be no more than a box, but more complex facilities, such as can-crushers, could also be required, as appropriate. This section could not be used to require facilities to be provided at temporary public events, which are covered by section 55 (see section 54(4)). Subsection (2)(b) may be used to restrict the categories of person who must be allowed to use the facilities, such as staff only in an office environment.

100. Subsection (2)(d) may be used to require an authorised person to remove the waste deposited, for example where the person providing the facilities could otherwise encounter difficulties in getting the waste uplifted. If this power were exercised, subsection (2)(e) could be used to set charges to finance this collection, and the recycling of the relevant material.

101. It is very likely that a system of enforcement, including offences and penalties, would be required to ensure that facilities were provided and used properly, but this will be a matter for regulations. Relevant powers are contained in subsection (2)(h) and (i).

Provision of facilities for deposit of recyclable waste at events etc.

102. Section 55 enables the Scottish Ministers to make detailed provision, by regulations, empowering local authorities to issue notices requiring organisers of temporary public events to provide facilities for the deposit of waste, and requiring that the waste be collected by an authorised person and, as far as practicable, recycled. Subsection (4) of section 54 ensures that events are not subject to requirements, possibly competing, made under both sections.

103. An example of how the power might be used could be a local authority requiring the holder of a music festival to ensure that facilities to collect the kinds of waste to which such a festival might give rise (such as bottles, cans, or plastic cups) are provided for the duration of that festival.

104. Subsection (2)(g) could be used to ensure that notices were issued sufficiently far in advance of the relevant events. Provision for appeals against notices may be made under subsection (2)(h). Subsection (2)(k) to (n) deal with enforcement and provide for the appointment of an enforcement authority, which need not necessarily be the local authority. Further provision on enforcement authorities is made by section 60.

Procurement of recyclate

105. Section 56 enables the Scottish Ministers to make detailed provision, by regulations, requiring persons specified in those regulations to ensure that specified things procured or constructed by them include or contain a certain amount or proportion of recyclate. Some of the detail which may be included in the regulations is specified in subsection (3), but without prejudice to the generality of the section. “Recyclate” is defined by subsection (6) in relation to the definition of “recycling” in section 52(4).

106. Subsection (3)(d) could be used to deal with measurement of the proportion of recyclate present in complex items. Subsection (3)(e) could be used to allow the requirement to procure
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recyclate to be disapplied on application to the Scottish Ministers, for example where this could conflict with Community internal market rules.

107. It is very likely that a system of enforcement, including offences and penalties, would be required to ensure that recyclate was procured in at least the proper proportion, but this will be a matter for regulations.

Targets for reduction of packaging etc.

108. Section 57 enables the Scottish Ministers to make detailed provision, by regulations, setting targets for reducing the amount of packaging in use (subsection (1)(a)(i)), or the amount of greenhouse gas emissions associated with packaging (subsection (1)(a)(ii)). Some of the detail which may be included in the regulations is specified in subsection (2), but without prejudice to the generality of the section. “Packaging” is defined by subsection (4) in terms of Directive 94/62/EC on packaging and packaging waste.

109. Subsection (2)(c) would allow targets to be set by a variety of means, for instance by reference to turnover or market share. Subsection (2)(f) could be used to require the production of baseline information about the amount of packaging in circulation, which might then be used to set targets. It is very likely that a system of enforcement, including offences and penalties, would be required to ensure that accurate information was provided and the targets actually met, but this would be a matter for the regulations.

Deposit and return schemes

110. Section 58 enables the Scottish Ministers to make detailed provision, by regulations, setting up deposit and return schemes for packaging associated with specified products, where Ministers are satisfied that it is necessary or expedient to do so in order to promote recycling. Some of the detail which may be included in the regulations is specified in subsections (3), (4) (5) and (7), but without prejudice to the generality of the section. Subsections (4)(c) and (5)(f) would confer power to require that packaging returned under such a scheme was recycled.

111. Subsection (5) would permit regulations to establish an administrative body to act on behalf of relevant producers and retailers in certain respects. Subsection (7) deals with matters such as mechanisms for identifying packaging as falling within a scheme, customer information and specification of the places to which packaging could be returned and the deposit reclaimed. The latter could for example be used to deal with return of packaging to a different retailer selling similar types of product. It is very likely that a system of enforcement, including offences and penalties, would be required to ensure that deposits were actually taken and repaid, and subsection (7)(i) to (l) contain appropriate powers.

Charges for the supply of carrier bags

112. Section 59 enables the Scottish Ministers to make detailed provision, by regulations, requiring persons supplying carrier bags to take goods away to charge for those bags, and requiring that the net proceeds of such charges be applied to environmental good causes. Some of the detail which may be included in the regulations is specified in subsection (2), but without prejudice to the generality of the section.

113. Subsection (2)(c) provides a power to specify the carrier bags in respect of which a charge would have to be made. This could be used to exempt certain bags, for example where Ministers were satisfied that they were likely to be re-used rather than quickly becoming waste.

114. The amount of the charge is to be fixed, and may be varied, by regulations. The charge is to be levied, not by central or local government, but by the supplier of the bag to which the regulations may apply. Subsection (2)(a) to (c) provide that the regulations may apply the charge to particular kinds of goods, or bags, or suppliers of goods. Subsection (2)(e) enables regulations to provide a mechanism for the calculation of the net proceeds of the charge.

115. Subsections (1)(b) and (2)(f) would allow Ministers to ensure that the net proceeds were spent on broadly environmental purposes, and to define those purposes in more detail if that was thought necessary (such as specifying that funds raised were to be spent in Scotland). It is very likely that a system of enforcement, including offences and penalties, would be required to ensure that charges were levied, appropriately accounted for, and devoted to appropriate causes, but this would be a matter for the regulations.

Enforcement authorities

116. Section 53 names SEPA as the enforcement authority in respect of waste information. Other provisions in this Chapter enable the Scottish Ministers to specify, by regulations, enforcement authorities in respect of them. Section 60 allows the Scottish Ministers to specify SEPA, a local authority or such other person or body as may be selected. Subsection (3) allows the functions of an enforcement authority to be divided between different specified bodies. Subsection (4) provides that enforcement authorities may charge to recover costs reasonably incurred in connection with their functions. SEPA, however, already has a charging power under section 41(1) of the Environment Act 1995, so charging in respect of its functions under section 53 has been dealt with as a consequential amendment of that section (see schedule 2, paragraph 2).

Penalties

117. Section 61 sets out the maximum penalties for offences created by regulations under any section in Part 5 of the Bill (namely, section 50 in Chapter 3 and sections 52 to 59 in Chapter 4). The statutory maximum for summary cases (those heard without a jury) is currently £10,000, and was set by the Criminal Proceedings etc. (Reform) (Scotland) Act 2007. It may, however, be varied by order by the Scottish Ministers by powers given by the Criminal Procedure (Scotland) Act 2007.

6 2007 asp 6
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Act 1995. Where a prosecution is on indictment rather than under summary procedure, the court may impose an unlimited fine.

PART 6 – GENERAL AND MISCELLANEOUS

118. Section 62 requires the Scottish Ministers and the advisory body, when exercising their functions under the Bill, to encourage equal opportunities and the observance of the equal opportunities requirements.

119. Section 63 provides that the Bill applies to the Crown, including to Her Majesty in her private capacity.

120. Section 64 provides for the procedure for the making of orders and regulations under the Bill. Subsections (2) and (3) provide that such orders and regulations may make different provision for different cases or purposes, or make any appropriate consequential, incidental, supplementary, transitory, transitional or saving provision, including modification of any enactment. Subsections (4) and (5) provide that all orders and regulations made under the Bill, except a commencement order made under section 67, are subject to affirmative resolution procedure except those listed in subsections (6) and (7). The orders and regulations listed in those subsections are subject to negative resolution procedure, unless they modify an Act of Parliament or an Act of the Scottish Parliament (in which case they are subject to affirmative resolution procedure).

121. Section 65 brings together defined expressions used in the Bill and either defines them or indicates where in the Bill definitions of them can be found.

122. Section 66 introduces schedule 2, which contains amendments and repeals to other legislation.

123. Section 67 provides that all of the provisions of the Bill, except this section, sections 22 to 27 (powers and duties of advisory body) and section 64 (providing for procedure for orders and regulations), are to come into force on a day set by the Scottish Ministers by order. This section and section 64 come into force on Royal Assent. Sections 22 to 27 come into force in accordance with section 21 (i.e. when an order designating the advisory body is made under section 19). This section also provides for the short title of the Bill.

SCHEDULE 1 – THE SCOTTISH COMMITTEE ON CLIMATE CHANGE

124. Schedule 1 makes provision for the detailed constitution, powers and proceedings of the Scottish Committee on Climate Change which may be established under section 20 of the Bill. The Committee is to consist of a chair and no fewer than five and no more than eight other members. These numbers may be varied by order made by the Scottish Ministers, subject to negative resolution procedure. Members are to be appointed for a period of up to five years. Members are eligible to be reappointed for one further period.

7 1995 c. 46
125. In appointing members, the Scottish Ministers are to have regard to the desirability of the Committee (taken as a whole) having expertise or experience in business competitiveness, climate change policy, climate science and other branches of environmental science, economic analysis and forecasting, emissions trading, energy production and supply, financial investment and technology development and diffusion.

126. Schedule 1 provides for the circumstances in which members may be removed, for the disqualification of MPs, MSPs and MEPs from membership, and for remuneration, pensions and allowances.

127. Schedule 1 also provides for the appointment of a Chief Executive of the Committee, with the approval of the Scottish Ministers, and for the appointment of other staff by the Committee. The schedule makes provision for the procedure of the Committee, for the establishment of sub-committees, for its general powers and for the delegation of its functions. The Committee is to be required to keep proper accounts to be audited by the Auditor General for Scotland, and to publish an Annual Report which is to be laid before the Scottish Parliament by the Scottish Ministers.

SCHEDULE 2 – MINOR AND CONSEQUENTIAL MODIFICATIONS

128. Schedule 2 sets out minor and consequential modifications to other legislation required as a result of the Bill.

FINANCIAL MEMORANDUM

INTRODUCTION

129. This document sets out the financial implications of the Climate Change (Scotland) Bill. It should be read in conjunction with the Policy Memorandum and the Bill itself. The Policy Memorandum, published separately, explains in detail the policy intentions of the Bill.

130. The main aim of the Climate Change (Scotland) Bill is to establish a challenging long term target which requires the Scottish Ministers to reduce the emission of those greenhouse gases covered by the Kyoto Protocol by 80% by 2050. The Kyoto Protocol greenhouse gases are carbon dioxide, methane, nitrous oxide and the fluoride gases (hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride), collectively referred to as the basket of greenhouse gases. The Bill also contains provisions on topics with a contribution to make to tackling climate change – through mitigation of greenhouse gases or adaptation to the impacts of climate change.

131. The topics in the Climate Change (Scotland) Bill are set out under five significant parts:

- **Part 1** creates the statutory framework for the greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050. To help ensure the delivery of these targets this part of the Bill also
These documents relate to the Climate Change (Scotland) Bill (SP Bill 17) as introduced in the Scottish Parliament on 4 December 2008

requires that the Scottish Ministers set annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050.

- **Part 2** contains provisions which will allow the Scottish Ministers to establish a Scottish Committee on Climate Change or to designate an existing body to exercise advisory functions.

- **Part 3** places duties on the Scottish Ministers requiring that they report regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill.

- **Part 4** contains powers to allow the Scottish Ministers, by order, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

- **Part 5 – Chapter 1** requires the Scottish Ministers to lay programmes on adaptation to climate change before the Scottish Parliament and provides for an enabling power for the Scottish Ministers to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

- **Part 5 – Chapter 2** will allow modification by secondary legislation of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change.

- **Part 5 – Chapter 3** contains three distinct sets of provisions.
  
  - The first set of provisions require the Scottish Ministers to produce an action plan setting out their current and proposed measures to promote energy efficiency in Scotland, as well as measures to encourage behavioural change towards energy efficiency.
  
  - The second set of provisions contains measures for assessing the energy performance of existing non-domestic buildings in order to raise awareness of the contribution that those buildings can make to mitigating climate change through reducing energy demand and thereby emissions of greenhouse gases.
  
  - The third set of provisions places a duty on the Scottish Ministers to take such steps as they consider appropriate to promote the use of heat from renewable sources.

- **Part 5 – Chapter 4** contains provisions which will enable the Scottish Ministers to make regulations relating to the acquisition of accurate information about waste and the promotion of waste reduction and recycling by different methods.

**PART 1 – EMISSIONS REDUCTION TARGETS**

**2050 Target**

132. Part 1 of the Bill establishes the 2050 emissions reduction target for the basket of greenhouse gases and underpins this long term target with a framework of annual targets. This Bill establishes targets which go beyond the findings of known studies and reports which explore and estimate the potential costs of addressing climate change, globally and in the UK.
133. Estimating costs can be done in two ways. One is to look at the resource costs of measures including the introduction of low carbon technologies and changes in land use, compared with the costs of the business as usual alternative. The second is to use macroeconomic models to explore the system-wide effects of the transition to a low carbon economy. These can be helpful in tracking the dynamic interactions of different factors over time. However these approaches are inevitably complex and their results can be affected by a whole range of assumptions. The studies described below provide a useful starting point for identifying the potential costs to Scotland of delivering emission reductions in 2050 in order to meet the 80% target.

134. The Stern Review on the Economics of Climate Change is considered to be the most comprehensive review carried out to date on the economics of climate change. The Stern Review report states all countries will be affected by climate change and unabated climate change risks raising average temperatures by over 5°C from pre-industrial levels. Based on the assessment of the science carried out by the Intergovernmental Panel on Climate Change on 2001, the Review report states that the dangers of unabated climate change will be an increase in global temperature and that an increase of 2-3 °C will reduce global GDP by between 5% and 20%.

135. By contrast the report estimates the costs of stabilising greenhouse gas concentrations in the atmosphere to avoid such a temperature rise, to be 1% (+/-3%) of global GDP. This range assumes that sensible policies are put in place and deliver the induced technological progress required.

136. Stern goes further to indicate that there are also likely to be economic benefits associated with taking action to shift to a low carbon economy and reports that the global market for low carbon technologies could worth at least $500 billion per annum by 2050 if the world acts on the scale required.

137. The “80% Challenge: Delivering a low-carbon UK” report by the Institute for Public Policy Research, WWF and RSPB, published in October 2007, used the same economic model as that used for the UK Impact Assessment for the UK Climate Change Act (refer to paragraph 8), to indicate that an 80% reduction in carbon dioxide emissions, including international aviation and shipping emissions, may cost up to 3% of GDP in 2050. It can be expected that increasing the target to include the other five gases will increase this estimated cost.

138. The Final Impact Assessment for the UK Climate Change Act, published April 2008, indicates that the long run costs to the UK of achieving a 60% reduction in carbon emissions are likely to be in the range 0.3-1.5% of GDP in 2050, depending on the price of fossil fuel and the availability of low-carbon technologies.

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8 The Stern Review was published on 20 October 2006 by HM Treasury and was carried out by Sir Nicolas Stern, Head of the UK Government Economic Service and former World Bank Chief Economist. [http://www.hm-treasury.gov.uk/sternreview_index.htm](http://www.hm-treasury.gov.uk/sternreview_index.htm)
9 World Bank estimates suggest that 1% of global GDP equates to around $650 billion, taking into account both exchange rates and also the purchasing power of each world currency against the dollar, in 2007. [http://www.ippr.org/members/download.asp?f=%2Fecomms%2Ffiles%2F80%5Fchallenge%5Fpdf](http://www.ippr.org/members/download.asp?f=%2Fecomms%2Ffiles%2F80%5Fchallenge%5Fpdf)
139. On 7 October 2008, the expert, independent UK Committee on Climate Change\textsuperscript{13} issued its advice on the level of emissions reductions recommended for the UK. It advised that the UK should aim to reduce emissions of Kyoto Protocol greenhouse gases by at least 80\% by 2050. Based on the Stern Review Report data, the Committee estimates that stabilisation of greenhouse gases at levels of 500-550ppm carbon dioxide equivalent, are between 1\%-2\% of GDP in 2050. This is significant, but is fully consistent with continued growth and development, in contrast with unabated climate change which will eventually pose significant threats to growth. The Committee also stated that the costs to the UK of this level of emissions reductions can be made affordable with appropriate policies and trajectories.

140. The UK Government has agreed with this recommendation and announced on 16 October 2008 that they would seek to amend the target in the UK Climate Change Act to match these recommendations. These amendments to the UK Bill were agreed on 28 October. Meeting an 80\% target is viewed by the Committee as challenging but feasible based on a range of options for reducing emissions including:

- Energy efficiency improvement in buildings and industry (eg. loft and cavity wall insulation, use of more efficient appliances, turning appliances off and using less air conditioning), which will be particularly important for reducing emissions in the period to 2020.
- Decarbonisation of the power sector, starting now and continuing through the 2020s, based on replacing existing conventional fossil fuel fired plant with renewable technologies (eg wind, tidal) and carbon capture and storage.
- Transport sector decarbonisation, first through improving fuel efficiency of conventional engines and increased use of sustainable first generation Biofuels, with progressive introduction of new technologies such as electric cars, plug in hybrids and hydrogen vehicles, and second generation Biofuels.
- Heat sector decarbonisation through increased use of biomass in boilers and combined heat and power, air exchange and ground source heat pumps, and modern electric storage heating.
- Decarbonisation of industry and the energy intensive sector in particular, through the introduction of new technologies such as carbon capture and storage to decarbonise the energy used to produce products such as cement, iron and steel.

2050 target – Costs for the Scottish Government, local authorities, public bodies and Scottish businesses

141. The Scottish Government’s assessment of the potential range and timing of options to deliver an 80\% reduction are tied up with actions at the EU and UK level. The first overview assessment of potential options has recently been published\textsuperscript{14} with a focus on measures likely to have a material and lasting impact on emissions in 2050. This is not to downplay the importance

\textsuperscript{13} The UK Committee on Climate Change is currently operating in shadow form pending its formal establishment under the UK Climate Change Act.

\textsuperscript{14} AEA Energy & Environment, ‘Mitigating against climate change in Scotland: Identification and initial assessment of policy options.’ November 2008
of other supporting policy measures such as advice, procurement and training, but recognition of
the overarching nature of the initial study.

142. The study concludes that options available and currently known could generate around a
75% emissions reduction based upon our 1990 emissions figure. This percentage includes
options about which there is currently considerable uncertainty so focussing in on the more
certain options within this long list, the report concludes that this sub-set of options could
potentially deliver around 63% of the total emissions reduction necessary. It is extremely
difficult to cost even this sub-set of options but the report further concludes that implementing
these measures in 2050 might cost in the region of £1.7 billion (expressed in 2005 prices). This
figure is not an assessment of the wider economic costs from implementation nor does it
disaggregate the overall cost to show how it falls between producers, consumers or taxpayers.
The cost simply relates the cost of implementing those particular measures in that year.

143. A further study covering the wider economic and societal costs and benefits was
commissioned and it has also recently been published. The overall conclusions suggest that
reductions in carbon dioxide emissions from a number of policy options may be at the cost of a
small reduction in GDP, but it is always important to bear in mind Stern’s conclusions that the
do nothing option will be far more costly in the long run. The results from the Fraser of Allander
study15 should be seen as early findings illustrating the potential trade offs across different
sectors of the economy rather than a comprehensive answer on the economic cost of meeting our
emissions target.

144. The UK Committee on Climate Change cost estimate for delivering the UK Bill target of
80% emissions reduction in 2050, ie. 1%-2% of GDP is a close cost comparison available for
calculating the cost of delivering the Scottish 2050 emissions reduction target. Estimates for the
impact on the UK as a whole are an appropriate proxy for the cost for Scotland as the structure of
the Scottish economy is broadly similar to the structure of the UK economy. For example the
manufacturing sector represents approximately 14% of the output from the Scottish economy,
whereas the corresponding figure for the UK is 14.7%.

145. On this basis the potential costs of delivering an 80% emissions reduction in Scotland
could also be considered to be in the region of 1%-2% of GDP in 2050. Were this cost
applicable in 2006, not 2050, then Table 1 shows that the potential Scottish costs would be in the
region of £1-£2 billion. Clearly 1-2% of GDP in 2050 will generate a higher figure. These costs
will apply across the whole of the Scottish economy – Scottish Government, local authorities,
public bodies and Scottish businesses.

146. The cost referred to in paragraph 142 is an estimate based on the preliminary work
commissioned by the Scottish Government in identifying how Scotland can meet the 80%
emissions reduction target in 2050. This preliminary work represents the first steps in a
progressive process and will be built on by the Scottish Government’s Strategic Overview
project, expected to report in 2009. For the purposes of costing the delivery of the 2050 target at

15 Fraser of Allander Institute and Department of Economics, University of Strathclyde, ‘The impact on the Scottish
economy of reducing greenhouse has emissions in Scotland: Illustrative findings from an experimental computable
general equilibrium model for Scotland, November 2008
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this time, the Scottish Government intends to use the cost information referred to in paragraph 145 i.e. 1-2% of GDP in 2050.

147. Costs in 2050 are not transferrable to earlier years as there will likely be a very different cost profile in between. Emissions reductions to 2050 are unlikely to follow a straight line trajectory. Reductions will occur through the advancement of technology as well as through changing demand and changing behavioural patterns. The introduction of a small number of measures can be expected to result in a step change in Scottish emissions (e.g. new, more carbon efficient power stations coming on line). Others will lead to a gradual change in emissions (e.g. take up of new vehicle technology) while advances in building efficiencies may be significantly slower to reduce emissions. Each of these changes will impose different costs on different sectors of the economy at different times over the period to 2050. It is not possible to accurately predict when technologies will be introduced or the rates of reductions that will occur from changing behaviours and shifting demand. Overall with all these factors in play, it is impossible to accurately predict what will happen and when. That is why it is not possible to predict cost profiles during the period of change in the years out to 2050.

Table 1: GDP estimates for Scotland, 2006

<table>
<thead>
<tr>
<th>2006 data</th>
<th>UK £ million</th>
<th>Scotland £ million</th>
<th>Scotland as % of UK</th>
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</thead>
<tbody>
<tr>
<td>Gross Domestic Product (GDP)</td>
<td>current market prices 1,299,622</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross Value Added (GVA)</td>
<td>GDP at basic prices 1,154,959</td>
<td>91,024</td>
<td>7.88%</td>
</tr>
<tr>
<td>Population</td>
<td>60,587.3</td>
<td>5,116.9</td>
<td>8.45%</td>
</tr>
<tr>
<td>Estimate of Scottish GDP in market prices</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. based on GVA split</td>
<td>102,425</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. based on population split</td>
<td>109,759</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimate of 2% of GDP in market prices</td>
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<td></td>
</tr>
<tr>
<td>1. based on GVA split</td>
<td>2,048</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. based on population split</td>
<td>2,195</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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148. These costs will be borne by producers and tax payers through higher input prices for goods and public services and by consumers through higher retail prices, leading to lower overall GDP of the order highlighted in the previous paragraph. There is considerable uncertainty about precisely where these costs will fall and how they will impact on output by sector will depend upon the paths chosen to deliver the emissions reductions.

149. However, in a global context, it should be noted that the cost estimate of taking action to reduce emissions is lower than the cost to society if no action is taken to alleviate climate change – estimated by the Stern Review to be in the order of 5-20% of global GDP.

2030 target – Costs for the Scottish Government, local authorities, public bodies and Scottish businesses

150. Similar difficulties arise with costing the delivery of the 2030 target with any certainty. In addition to steady, year-on-year emissions reductions (eg arising from enhanced energy efficiency), some of the more significant emissions reductions will take the form of step changes resulting from, for example, the introduction of new technology. This means that in practice a straight line reduction trajectory is unlikely. For example if carbon capture and storage is successfully introduced as a mechanism for avoiding emissions of carbon dioxide into the atmosphere, the national reduction trajectory will take the form of series of step changes as the technology is adopted at fossil fuelled power stations.

151. Unfortunately no climate change studies have been identified which estimate the costs of reducing emissions by 2030 which could provide a reference point on which to base Scottish costs. Because emissions reductions will not occur in a straight line trajectory, taking a proportion of the cost estimated for delivering the 2050 target would not provide a credible cost estimate. The risks and errors with such an approach are too significant.

Annual targets – Costs for the Scottish Government, local authorities, public bodies and Scottish businesses

152. The long term target 2050 target will be underpinned by a series of annual targets, the first of which will be set by order in 2010. The Bill does not specify the methods by which the annual emissions reductions targets are to be delivered. The costs and efficiencies arising as a result of the proposals will depend on a large number of interrelated factors. These include wider economic variables such as macroeconomic conditions and GDP growth, largely exogenous factors such as average winter temperatures and the stability of European energy markets and points more specific to Scotland such as the level at which the annual targets are set, the gradient of the emissions reductions trajectories selected and the costs of the available abatement technologies adopted over the period to 2050. All statutory orders prescribing annual targets will be accompanied by a regulatory impact assessment (RIA) which details the likely cost implications.

153. The Scottish Ministers will be required by the Bill to seek expert, independent advice to identify the most cost effective emissions reductions available when setting annual targets and when identifying the most cost effective way of delivering the post-2020 emissions reduction trajectory required by the Bill.
154. At this time it is not possible to identify what these annual targets will be or how much it will cost to deliver them, at least in part because baseline future emissions are strongly linked to economic activity. As discussed earlier, costs in 2050 are not transferrable to earlier years as there will likely be a very different cost profile in between. This why it is not possible to provide costs for the delivering the emissions reductions targets in earlier years.

155. More specifically the Scottish Government expects to be informed on a number of issues by independent advice, which in the first instance is to be obtained from the UK Committee on Climate Change. Under the UK Climate Change Act, the Committee is required to provide advice to the UK Government by 1 December 2008 on the recommended emissions budgets for the first three UK budget periods. The Scottish Government intends to ask the Committee to draw on this advice and advise on the level of annual targets to be set under the Scottish Bill and on the most cost effective abatement methods available to deliver these targets. This advice is not expected to be available until the second half of 2009. Pending this advice it is not possible to quantify the cost of delivering the annual targets to be set under the Bill.

156. In the event of Scotland failing to meet an annual target, the Bill includes powers to address any excess in emissions through the purchase of carbon units. Carbon units represent emissions reductions from recognised sources outside of Scotland.

157. Emissions data for Scotland is currently produced by disaggregating UK emissions data. This information is available eighteen to twenty months after the end of a reporting year. Therefore the first year in which these costs might arise for the purchase of units is 2012 in connection with Scotland’s emissions performance in 2010. The cost of purchasing carbon units is determined by the market but is expected to range from at least £15 - £30 per tonne of carbon dioxide equivalent. Should Ministers take up the option to purchase carbon units, the cost can be expected to fall to the Scottish Government from 2012 onwards. It is not possible to estimate at this time exact costs of purchasing carbon credits as this will depend on whether the annual targets are met and if there is any failure, the extent of that failure.

158. The cost of meeting a specific annual or interim target will form part of the overall cost of meeting the 2050 target. For information the cost of any carbon unit purchase represents a transfer of money from Scotland to the country generating a validated carbon unit.

**Carbon accounting – Costs for the Scottish Government local authorities, public bodies and Scottish businesses**

159. In relation to the net Scottish emissions account, the Bill will allow for the Scottish Ministers to create a scheme, by order, for the tracking of carbon units and establishing and maintaining accounts for holding carbon units. Such a scheme could be administered by the Scottish Government and any costs would be absorbed within existing administration budgets. The potential annual cost of this task is estimated to be **£60,000**. This cost is based on the employer costs of employing the equivalent of a policy analyst, costed at approximately £60,000 per annum. It is possible that this cost could also be applied in an alternative manner by employing a range of lower grade staff, with employer costs not exceeding this £60,000 estimate.
160. If the Scottish Ministers do create a carbon accounting scheme, these costs will apply to the Scottish Government. There will not be any associated costs for local authorities or Scottish businesses. If the Scottish Ministers require a public body to undertake this activity on their behalf, for example the Scottish Environment Protection Agency, these costs could apply to the public body instead of the Scottish Government.

PART 2 – ADVISORY FUNCTIONS

Advice from the UK Committee on Climate Change Committee

161. The emissions reduction provisions in the Climate Change (Scotland) Bill impose duties on the Scottish Ministers, which among other things, require the Scottish Ministers to establish annual emissions reductions targets in secondary legislation. Ministers will be required to seek expert, independent advice in advance of setting annual targets. It is expected that this advice will be sought from the UK Committee on Climate Change, or corresponding Scottish Committee, on these annual targets, on the basis of the most cost effective abatement mechanisms for reducing greenhouse gas emissions.

162. If the Bill is approved by Parliament, the first main task for the Scottish Ministers, after it is enacted, will be to set the annual targets for greenhouse gas emissions reductions. These annual targets will be set in batches with the first batch of annual targets expected to cover the period up to and including 2022. Each set of annual targets will be prescribed in orders. All such orders will be accompanied by a fully costed Regulatory Impact Assessment (RIA), detailing the abatement and mitigation policies required to deliver the relevant set of annual targets. The Bill will require the first set of annual targets to be established by June 2010 with subsequent sets established by order at intervals thereafter. This will ensure that a clearly defined statutory reduction pathway is available to guide abatement effort over the short to medium term.

163. The Scottish Ministers intend to seek advice in the short term from the UK Committee on Climate Change. As one of the devolved administrations contributing to the UK target, Scotland has committed to fund this independent, expert Committee and its financial contribution for 2008-09 is £275k, which includes set-up costs and the initial phase of research. Future contributions are expected to be similar although additional funding may be required if the Committee is commissioned to provide advice and the cost of that task is particularly expensive, for example, because the Committee requires to recruit more staff or commission external research in order to develop the advice. Analysis related to the Scottish target and trajectory may at times require extra funding for this reason.

164. If the Scottish Ministers decide to establish a Scottish Committee on Climate Change in the future, for which provision is made in the Bill, the annual costs could be in the region of £2.5m, similar to the current annual cost of running the UK Committee (refer to Table 2). The nature of the advice required and the range of expertise necessary in such a Committee suggests that it would be difficult to save costs by adopting a scaled down operation for Scotland. This would represent a potential increase in costs. There would be little, if any, saving on the core contribution to the UK Committee which advises all 4 administrations on their shared objective of the UK target in the context of a wide-ranging analysis of the UK situation as a whole. There would be a saving in that it would not be necessary to commission any analysis relating to the Scottish target from the UK Committee on Climate Change which might incur extra costs if the
task were expensive to carry out. Utilising the expertise of the UK Committee on Climate Change remains the most cost effective option for obtaining advice, currently available to the Scottish Ministers.

Table 2: Outline of estimated first year and on-going costs for the UK Committee on Climate Change as detailed in the UK Climate Change Act Final Impact Assessment, April 2008

<table>
<thead>
<tr>
<th>Function</th>
<th>2007/08 Shadow Committee</th>
<th>On-Going Costs – Post Royal Assent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secretariat</td>
<td>£680,000</td>
<td>£1,300,000</td>
</tr>
<tr>
<td>Committee</td>
<td>£62,000</td>
<td>£210,000</td>
</tr>
<tr>
<td>Research</td>
<td>£750,000</td>
<td>£500,000</td>
</tr>
<tr>
<td>Running Costs</td>
<td>£132,000</td>
<td>£300,000</td>
</tr>
<tr>
<td>Accommodation</td>
<td>-</td>
<td>£270,000</td>
</tr>
<tr>
<td>Corporate Identity(^{16})</td>
<td>-</td>
<td>£150,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>£1,624,000</strong></td>
<td><strong>£2,730,000</strong></td>
</tr>
</tbody>
</table>

PART 3 – REPORTING DUTIES

165. The Bill establishes a number of reporting requirements for the Scottish Ministers linked to the greenhouse gas emissions targets. All of these will have a minimal cost impact on the Scottish Government and any costs will be absorbed within existing administration budgets. The potential annual cost of this administration task is estimated to be £17,000 (50% of a policy officer’s employer costs costed at approximately £34,000 per annum).

166. The different reporting requirements are:

- An annual report on greenhouse gas emissions in Scotland;
- A report and statement on proposals and policies designed to meet future annual targets, published as soon as practicable after each set of annual targets are set;
- A report and statement on remedial measures in the event that an annual emissions target is exceeded;
- Reports on policies and proposals for adaptation to climate change (under Part 5, section 45), in response to each UK wide risk assessment issued under the UK Climate Change Act;

\(^{16}\) Corporate identity costs will only be incurred in 2008-09 when the Committee becomes a statutory body after Royal Assent.
• A statement as to whether the 2030 greenhouse gas emissions reduction target has been met;
• A final statement on whether the 2050 greenhouse gas emissions reduction target has been met.

167. The main emissions target provisions do not apply any reporting duties to local authorities or other public bodies.

PART 4 – DUTIES OF PUBLIC BODIES RELATING TO CLIMATE CHANGE

Power to impose duties on public bodies in relation to climate change

168. The Scottish Ministers anticipate that all sectors of society will play their appropriate part in reducing the emissions of greenhouse gases and therefore contribute to tackling climate change. But it is recognised that as emissions reductions become harder and more expensive to deliver, there may come a time when the Scottish Ministers have to ensure consistent and fair contributions to delivery across the public sector. This is why the Bill proposes a power to allow, by order, to impose duties on public bodies in relation to climate change. There will be full consultation with the bodies concerned before such provisions would be used.

169. If such powers are introduced, the Scottish Ministers can also be expected to identify an appropriate monitoring body to ensure that the new duties are met. The cost of undertaking such duties will depend on the requirements of the duty and the extent to which the duty is applied across the public sector. There would be full discussion and consultation with the future monitoring body before any monitoring duty is applied. These negotiations would include the provision of additional funding if this is required by the body to meet the monitoring duty.

170. Overall this can be considered to contribute to delivering the emissions targets contained by the Bill and therefore would not pose an additional cost above that required to meet the annual targets, the 2030 target and the 2050 target. If additional duties for public bodies are introduced through an order, such an order would be accompanied by a fully costed Regulatory Impact Assessment.
Table 3: Summary of potential costs for Parts 1-4 Emissions Reductions

<table>
<thead>
<tr>
<th>Estimated cost for Scotland’s economy* for delivering the greenhouse gas emissions reduction target in Scotland 2050</th>
<th>1-2% GDP in 2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scottish Government cost (or public body cost) - Estimated annual cost staff cost for managing a carbon unit scheme</td>
<td>£60,000</td>
</tr>
<tr>
<td>Scottish Government cost - Estimated annual cost for administering the reporting duties required for the emissions reductions targets</td>
<td>£17,000</td>
</tr>
<tr>
<td>Scottish Government cost - Estimated annual cost for advice from a Scottish Climate Change Committee, based on current costs.</td>
<td>£2.5m</td>
</tr>
</tbody>
</table>

Note. Potential for some saving on payment to UK Committee on Climate Change for work in relation to Scottish target – see paragraph 164.

* Note - The estimated cost for delivering the 2050 target will apply across all sectors of the economy in Scotland – central government, public sector including local government and private businesses.

PART 5 – OTHER CLIMATE CHANGE PROVISIONS

CHAPTER 1 – ADAPTATION

Programmes for adaptation to climate change

171. Section 45 requires the Scottish Ministers to take specific action where the Secretary of State lays a report before the UK Parliament on the impact of climate change under section 56 of the Climate Change Act 2008.

172. As soon as reasonably practicable following receipt by them of the Secretary of State’s report, the Scottish Ministers must respond by laying a programme before the Scottish Parliament which addresses the adaptation risks identified under section 56 of the UK Act and which sets out the Scottish Ministers’ adaptation objectives and their proposals and policies for meeting these objectives. After the first laying of the report, subsequent reports will require the Scottish Ministers to include within their programmes an assessment of progress under the previous programme.
173. This action will initially be triggered within three years of the in-force date of the relevant section of the UK Act, and thereafter at least once every five years. But the response required will form a considerable part of a policy official’s workload when it is required. Overall it is anticipated that this work will be absorbed within existing administration budgets and will approximate to 50% of a policy analyst’s time during the year in which the duty is triggered. This is cost is estimated as £30,000 based on the employer costs of employing the equivalent of a policy analyst, costed at approximately £60,000 per annum. This cost will only occur for the Scottish Government. It is possible that this cost could also be applied in an alternative manner by employing a range of lower grade staff, with employer costs not exceeding this £30,000 estimate.

Variation of permitted times for making muirburn

174. Muirburn is a current land management activity, which must adapt to the effects of climate change in order to remain effective. The making of muirburn is the act of controlled burning of vegetation on open muir or moorland. Its use provides fresh food sources on rough grassland or actively managed grouse moors and it manages older vegetation which can be a source of fuel for wildfires.

175. The making of muirburn is regulated by the Hill Farming Act 1946 which provides that muirburn is permitted at prescribed times of the year. In Scotland, climate change has altered climate and seasonal weather patterns and as a result, the ability of muirburn as a land management tool has been, and will in the future be adversely affected.

176. The provisions in Part 5, Chapter 1 of the Bill will give the Scottish Ministers the power to use secondary legislation to set and vary the permitted periods for making muirburn where they consider it necessary in relation to climate change. As muirburn is a current activity, the order-making power is not expected to give rise to additional costs. The administrative costs incurred by the Scottish Government in bringing forward an order are expected to be minimal and will be absorbed within existing administration budgets.

CHAPTER 2 – FORESTRY

Renewable energy development and releasing capital for woodland creation

177. These provisions will allow the Scottish Ministers to confer functions on Forestry Commissioners in Scotland by secondary legislation, where they consider it necessary or expedient in relation to climate change. The immediate intent is to take forward proposals to allow the Forestry Commission to enter into joint ventures for renewable energy development and to allow them to let timber cutting rights to fund climate change activity.

The National Forest Estate – renewable energy development

178. Renewable energy development on the National Forest Estate through joint ventures will be revenue generating. Recent studies have shown that there is significant untapped potential for wind and hydro developments on the national forest estate. Annual net income potential might be expected to reach perhaps £10m/yr by 2012 and perhaps £30m/yr by 2020. Initial capital costs
to the Forestry Commission will depend on specific joint venture arrangements, but the use of the renewables sites themselves as the Forestry Commission share is preferred. There are further options to fund initial capital from routine land disposal programmes.

179. Additional cash resources will be required by the Forestry Commission Scotland (FCS) initially to establish joint venture arrangements, estimated at £0.5m/yr in 2009/10 and 2010/11. This will be found from FCS’s operational budgets.

The National Forest Estate – releasing capital for woodland creation

180. It is intended to secure powers through the Bill to allow, by secondary legislation, the release of capital from the National Forest Estate through the letting of timber cutting rights. The intention is to evaluate options for releasing value from the £850M total estimated value of the Estate. This would be done by letting cutting rights over some of the more commercial parts of the estate. The income would depend upon a range of factors including, critically, the area covered by a lease and its terms; one option being evaluated is a 75 year lease over about 100,000 hectares (or up to 25% of the national forest estate). The receipts might be secured as an up-front payment or as an income stream. Additional cash resources would be required initially to let the cutting rights and establish contracts, estimated at £0.2m/yr in 2009/10 and 2010/11. This will be found from Forestry Commission operational budgets. Current timber supply contracts will be safeguarded through the letting process and it is expected that the forestry and timber sectors will benefit from resultant market diversification. All secondary legislation will be accompanied by a fully costed Regulatory Impact Assessment.

181. The receipts from the letting of cutting rights would provide additional funding for woodland creation. One option being consulted upon is to supplement current woodland creation measures by transferring cutting rights receipts to a membership-led body created to use this resource for woodland creation. Such a body might also be given the landlord’s interest in the leased land to hold in perpetuity for the nation. Detailed proposals have yet to be developed, and will include consideration of State Aids issues. Additional cash resources would be required initially to establish the appropriate bodies, estimated at £0.3m/yr in 2009/10 and 2010/11. This will be found from Forestry Commission operational budgets.

182. This proposal will not create additional financial burdens on local authorities or other public bodies, individuals and businesses. As well as helping to mitigate climate change, an enhanced rate of woodland creation will provide economic stimulus to Scotland’s forestry sector.
Table 4: Summary of potential estimated costs for the Scottish Government for Forestry provisions

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional annual cost for FCS to establish joint venture arrangements</td>
<td>£0.5m</td>
</tr>
<tr>
<td>Additional annual cost for FCS to let timber cutting rights</td>
<td>£0.2m</td>
</tr>
<tr>
<td>Additional annual cost for FCS to establish a body corporate or trust</td>
<td>£0.3m</td>
</tr>
</tbody>
</table>

* Note – After the first two years it is expected that the annual running costs of these activities will not exceed the figures shown and will be funded from the income generated.

PART 5, CHAPTER 3 – ENERGY EFFICIENCY

183. Chapter 3 of the Bill aims to improve the energy performance of non-domestic buildings and improve energy efficiency generally across Scotland.

Energy efficiency

184. These provisions will put a duty in statute on the Scottish Ministers to produce a plan for promoting energy efficiency in Scotland. The action plan will provide details of the measures to improve energy efficiency and/or to promote micro-generation across all Scottish Government Directorates. This duty is part of current planned activity, is not expected to give rise to additional resources and will be met from within existing Scottish Government administration budgets.

Energy performance of non-domestic buildings

185. The aim of improving the energy performance of existing non-domestic buildings is to raise the contribution that the existing non-domestic stock can make to mitigating climate change. Buildings account for over 40% of emissions and there is scope to further reduce these levels. They are to be subject to an assessment of the emissions of greenhouse gases and energy performance, an enhanced form of energy performance certificate (EPC). The results of the recent consultation on this will inform the detailed route forward but could call on building owners or their delegated persons to draw up improvement action plans. These plans may include building work actions for owners to follow which lead to improved performance, and where appropriate could also include operational measures that building users may choose to act on. To deliver this policy, substantive provision is made in five areas some of which are subject to the results of the ongoing consultation as follows:

1) Extending the scope of enhanced EPCs to take account of operational ratings as well as asset ratings and also embodied energy/carbon when a robust methodology is available to
address the issue of historic and traditional buildings. Varying the lifespan of such assessments/certificates.

2) Requiring owners or their delegated persons to obtain enhanced EPCs (even though they are not selling or renting out their buildings).

3) Requiring owners of non-domestic buildings to formulate action plans for building work arising from the advice on their enhanced EPCs and encouraging them to implement their action plan.

4) Developing appropriate standards for such building work e.g. energy efficient lighting, roof space insulation or sub-metering.

5) Empowering local authorities, or similar public bodies, to check and enforce enhanced EPCs.

186. The costs and savings outlined in this memorandum are those costs and efficiencies that are directly attributable to responsibilities and tasks set out in the energy performance of existing non-domestic buildings part of the Bill. The provisions in the Bill will clarify the roles and responsibilities of the Scottish Ministers, local authorities, building owners and other responsible persons and authorities for improving the energy performance of existing non-domestic buildings in Scotland. This will result in reductions in emissions and energy use, which will ultimately lead to the reduction in economic costs to occupiers of non-domestic buildings and in general, the greater good of the population.

187. The costs identified are preliminary estimates in the absence of detailed secondary legislation, which cannot be developed until the Bill is enacted and the new responsibilities that will be placed on building owners or their delegated persons and the authorities involved, are agreed. All secondary legislation introduced will be accompanied by costed regulatory impact assessments. The menu of provisions in the Bill can be assembled in different ways and for the purpose of this Memorandum have been formed into seven different scenarios which will be informed by the consultation. This illustrates the range of costs that could occur, depending on the approach to implementation adopted. The consultation, Action on Climate Change: Proposals for Improving the Energy Performance of Existing Non-Domestic Buildings was issued on 2 September 2008 and closed on 25 November 2008.

188. The total cost depends on a number of factors. The variables that could cause the greatest fluctuation in costs will be the type of buildings covered and the extent to which the enhanced EPCs are applied to the stock. The consultation on proposals for improving the energy performance of existing non-domestic buildings sought views on these scenarios. The responses to this consultation will inform the development of the regulations (in particular scenarios 3), 4) and 5)) which the provisions in this Bill will enable the Scottish Ministers to create.

189. The seven scenarios are as follows:

1) Enhanced EPC on sale or rent for all buildings and for larger public buildings frequently visited by the public with additional guidance to promote uptake of recommendations;

17 http://www.scotland.gov.uk/Publications/2008/08/15155233/1
2) Enhanced EPC on sale or rent for all buildings and all large buildings with additional guidance to promote uptake of recommendations and an increase in the frequency of certification;

3) Enhanced EPC on sale or rent for all buildings and for larger public buildings frequently visited by the public with additional guidance, an increase in the frequency of certification, and compulsory uptake of recommendations;

4) Enhanced EPC on sale or rent for all buildings and for all large buildings with additional guidance, an increase in the frequency of certification, and compulsory uptake of recommendations;

5) Enhanced EPC on sale or rent for all buildings and for all buildings with additional guidance, an increase in the frequency of certification, and compulsory uptake of recommendations;

6) Enhanced EPC and operational rating on sale or rent and for larger public buildings frequently visited by the public; and

7) Enhanced EPC and operational rating on sale or rent and for larger public buildings frequently visited by the public with additional guidance.

Improving the energy performance of existing non-domestic buildings

190. Additional costs to the Scottish Government will be incurred as a result of the new Ministerial duties and powers set out in the Bill and are set out below on the basis of the scenario adopted and any financial support.

Table 5: Potential costs for Scottish Government for each energy performance scenario

<table>
<thead>
<tr>
<th>Scenario</th>
<th>One-off Costs - £m</th>
<th>Average Annual Cost - £m pa</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>£0.5</td>
<td>£0.5</td>
</tr>
<tr>
<td>2</td>
<td>£0.5</td>
<td>£0.5</td>
</tr>
<tr>
<td>3</td>
<td>£0.6</td>
<td>£1.0</td>
</tr>
<tr>
<td>4</td>
<td>£0.6</td>
<td>£2.2</td>
</tr>
<tr>
<td>5</td>
<td>£0.6</td>
<td>£12.4</td>
</tr>
<tr>
<td>6</td>
<td>£0.3</td>
<td>£0.3</td>
</tr>
<tr>
<td>7</td>
<td>£0.5</td>
<td>£0.5</td>
</tr>
</tbody>
</table>
191. The costs have been abstracted from the Partial Regulatory Impact assessment contained within the Consultation Action on Climate Change: Proposals for Improving the Energy Performance of Existing Non-Domestic Buildings\textsuperscript{18}. Scenarios 1, 2, 6 and 7 require ACEPs to be carried out buildings for sale or rental and for large buildings but there is not compulsion to implement the recommendations. Scenario 3 restricts the compulsory uptake of recommendations to large public buildings and Scenario 4 restricts the compulsory uptake of recommendations to large buildings. The high cost in relation to Scenario 5 in relation to all of the other scenarios is that ACEPs require to be obtained for all buildings irrespective of sale or rental and size and the recommendations have to be implemented for all buildings.

192. The one-off costs include staff costs to develop secondary legislation, impact assessments and guidance, media campaigns to create public awareness, training and research. The average annual cost includes staff for maintaining the system, support funding for businesses where appropriate and additional research and media campaigns where necessary to alert the public of changes to the system.

\textit{Costs on local authorities}

193. The Bill will have both cost and resource implications for local authorities. It is difficult to estimate the likely total cost of these new duties. The costs of implementing this will depend on how the menu of provisions in the Bill is assembled in the secondary legislation. The secondary legislation will be accompanied by a costed regulatory impact assessment. The scenarios below give an indication of potential costs and are likely to include the commissioning of building surveys, calculating energy and carbon performance of buildings, formulating action plans and carrying out building work. One off costs are not anticipated. If local authorities are exempt through relaxation provisions from enhanced EPCs then as building owners they will not bear any costs. If the provisions do apply, then the estimated costs in Table 6 will fall to local authorities. If enforcement responsibilities are given to local authorities, it is expected that a self financing system based on penalty charges could be utilised.

\textsuperscript{18} \url{http://www.scotland.gov.uk/Publications/2008/08/15155233/1}
These documents relate to the Climate Change (Scotland) Bill (SP Bill 17) as introduced in the Scottish Parliament on 4 December 2008

Table 6: Potential costs for local authorities

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Average Annual Cost - £m pa</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>£3.4m - £4.5m</td>
</tr>
<tr>
<td>2</td>
<td>£4.1m - £5.5m</td>
</tr>
<tr>
<td>3</td>
<td>£21.3m - £28.4m</td>
</tr>
<tr>
<td>4</td>
<td>£27.4m - £36.6m</td>
</tr>
<tr>
<td>5</td>
<td>£27.7m - £37m</td>
</tr>
<tr>
<td>6</td>
<td>£2.6m - £3.5m</td>
</tr>
<tr>
<td>7</td>
<td>£3.6m - £4.8m</td>
</tr>
</tbody>
</table>

Costs on other bodies, individuals and businesses

194. Building owners or their delegated persons are likely to incur costs as a result of future secondary legislation brought in under the powers set out in the Bill. The costs of implementing this will be dependent on how the menu of provisions in the Bill is assembled in the secondary legislation. The secondary legislation will be accompanied by a costed regulatory impact assessment. Table 7 outlines the ranges of potential costs, based on scenarios 1-7 and are likely to include the commissioning of building surveys, calculating energy and carbon performance of buildings, formulating action plans and carrying out building work. One off costs are not anticipated.

Table 7: Potential costs for other bodies, individuals and businesses for each energy performance scenario

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Average Annual Cost - £m pa</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>£6.7m - £7.8m</td>
</tr>
<tr>
<td>2</td>
<td>£8.2m - £9.6m</td>
</tr>
<tr>
<td>3</td>
<td>£42.6m - £49.7m</td>
</tr>
<tr>
<td>4</td>
<td>£54.9m - £64m</td>
</tr>
<tr>
<td>5</td>
<td>£55.4m – 64.7m</td>
</tr>
<tr>
<td>6</td>
<td>£5.3m - £6.2m</td>
</tr>
<tr>
<td>7</td>
<td>£7.2m - £8.4m</td>
</tr>
</tbody>
</table>
Renewable heat

195. These provisions in the Bill are designed to enable the Scottish Ministers to encourage, incentivise and promote the generation of heat from renewable sources. These measures are not expected to give rise to additional costs for the Scottish Government as this activity is currently undertaken and funded as part of the Community and Householder Renewables Initiative and the Scottish Biomass Support Scheme. It is not envisaged that there will be any costs arising from these provisions for local authorities, bodies, individuals or businesses.

196. The Scottish Community and Householder Renewables Initiative aims to bring renewable energy to households and communities across Scotland. It has two funding streams to assist with the installation of a range of renewable technologies, one stream for households and one for communities. The support includes capital grants and advice which is delivered by a team of development officers based across Scotland. The total budget allocation over the current spending review period is £13.5 million per annum.

197. The Scottish Biomass Support Scheme is a capital grants scheme targeted at the business sector to help with the costs of installing a biomass heating system and for demonstration of district heating. The budget for the programme is £2 million over the financial years, 2009-10 and 2010-2011. This total budget is used for renewable heat.

PART 5, CHAPTER 4 – WASTE REDUCTION AND RECYCLING

198. These provisions set out measures aimed at improving waste and recycling in Scotland, to help move Scotland to a “zero waste” society. “Zero waste” is about reducing the unnecessary use of raw materials, sustainable design of products, preventing waste, and recovering value from products and materials when they reach the end of their lives through recycling, composting or energy recovery.

199. The provisions in this part of the Bill establish enabling powers to introduce secondary legislation. The costs and efficiencies arising as a result of the proposals will vary widely according to how and when they are implemented. Consequently it is not possible to provide exact costings for the proposals which will come forward in secondary legislation. All secondary legislation will be accompanied by a Regulatory Impact Assessment and what follows is an indication of possible costs and savings in a range of scenarios.

Costs for the Scottish Government

200. In the case of all the provisions in this part of the Bill, the Scottish Government would incur the costs of making the regulations. These would arise in the ordinary course of the Scottish Government’s business, and it is anticipated that they will be absorbed into the administration budget.

Waste prevention and management plans

201. Depending on the provisions of the regulations, the Scottish Government may also be required to produce plans of its own to prevent and manage waste. The costs of these plans would depend on their complexity, and the range of issues they are intended to address. Since it
is envisaged that a plan should be made for each individual relevant project the costs would also depend on the number of relevant projects the Government might undertake.

202. A useful comparator may be the costs assessed for Site Waste Management Plans, which are compulsory in England & Wales under the Site Waste Management Plans Regulations 2008. These are likely to represent the minimum set of parameters Scottish regulations might set for plans. (Plans similar to those which are statutory in England are presently optional in Scotland, and are encouraged by Scottish Planning Policy 10.) These plans apply to all aspects of construction work including preparatory work such as demolition and excavation. They are required for civil engineering projects as well as projects involving the maintenance, alteration and decoration of existing structures. The installation, maintenance or removal of all related services such as electrical, gas, water, sewage and telecommunications are also subject to this requirement.

203. Details of these costs are available in the Department for Food and Rural Affairs (Defra) consultation paper (http://www.defra.gov.uk/environment/waste/topics/construction/index.htm) which assesses the costs of writing a site waste management plan over a number of project values, from £350 in the case of a project worth £70,000, to £1,600 for a project worth £1,600,000. However, in practice drawing up such a plan can deliver cost efficiencies by reducing waste, and therefore waste costs. At the time the consultation paper was published, these efficiencies were estimated at £210 for a project worth £70,000 to £4,800 for a project worth £1,600,000. At the time, it estimated that a site waste management plan was cost-neutral at a project value of £250,000. Above that figure, the larger the project value, the greater the efficiency. Clearly this is an aspect which may be borne in mind when drawing up any Regulations made under this provision.

204. The consultation paper notes that factors such as ongoing increases in landfill tax could further enhance the potential savings of site waste management plans. Landfill tax is currently escalating by £8/tonne per annum for non-inert waste. As time goes on, therefore, it is likely that the break-even point will reduce.

205. These provisions give the Scottish Ministers powers to require a wider range of waste prevention and management plans than site waste management plans drawn up under the 2008 regulations in England & Wales. Costs will relate to the range of aspects which must be considered, and arise through the necessity to carry out an assessment of wastes arising, identifying how the wastes may be dealt with and preparing the plan. In all cases, it is likely that the preparation of a waste prevention and management plan will lead to efficiencies in waste related costs, through minimisation in particular, but also through identifying opportunities to extract value through reuse and/or recycling, leading to resource savings. The value of these efficiencies is likely to increase owing to the landfill tax escalator, irrespective of resource costs. Envirowise currently estimates waste costs at 4% of turnover (http://www.envirowise.gov.uk/dsur5yhjtw) [Link no longer operates]. Addressing more aspects in a waste plan can increase plan costs, while also increasing opportunities for efficiencies.

Waste data returns

206. The Scottish Ministers will be required to make returns on any waste produced, and which was the subject of regulations. A transfer note containing information on the weight,
nature and destination of the waste must be prepared under the Environmental Protection (Duty of Care) Regulations 1991. In the case of hazardous waste, more detailed provision is made in the Special Waste Regulations 1996. It is likely that similar information would be required. The additional costs would therefore be **marginal**.

**Duties to provide recycling facilities**

207. The Scottish Ministers may be subject to a requirement to provide receptacles for material to be recycled. Costs will depend on the type of recycling facilities required, which will be a matter for regulations made under these provisions. However, any regulations are likely to concentrate, at least initially, on materials which are easy to collect and for which there is a ready market, and in this respect the Scottish Ministers already provide receptacles for recycling paper, beverage cans, plastic cups and batteries. It is therefore not anticipated that there would be additional costs arising from this provision.

208. An estimate of the costs involved in the provision of recycling facilities may be found in a consultation carried out by Defra last year on public place recycling (on materials which can occur in litter bins) on a voluntary basis, which can be found at http://www.defra.gov.uk/corporate/consult/recyclebins/consultation.pdf.[Link no longer operates] This suggested a range of one-off costs for England of £1.1 million to £3.3 million, with annual recurring costs thereafter ranging from £0.3 million to £0.9 million. These costs are for a voluntary scheme: any compulsory scheme would be likely to have a wider reach and could cost more.

209. The provision of the bins was estimated to cost between £484 and £600 per bin. These costs are dependent on the nature of the facilities provided and the cost of receptacles varies widely. For example, at the Scottish Government offices at Victoria Quay, Edinburgh, paper collection boxes are provided free as part of the general waste contract, specialised containers for plastic cups each cost £60, can crushers can cost up to £600 individually and those currently in use cost £120 nine years ago.

210. Organisations which provide these facilities are likely to find that they must arrange for the collection and recycling of wastes for which they are not the producers. This will increase costs but also potentially benefit society through the more efficient use of resources, and a reduction in waste disposal by landfill thereby reducing the generation of methane emissions. As an indication of costs, the total waste for the Victoria Quay offices (about 2000 people) in 2007-08 was approximately 260 tonnes (82% paper and card, 4% wood and 3% plastic). Most was collected in a container whose rental was £1.18 a day and whose daily uplift cost £60.60. The majority of this was recycled - 200 tonnes.

211. On the other hand, there are likely to be some off-setting efficiencies. Where recycling facilities are provided it is likely that the organisation providing them will recycle more of its own wastes. This has the effect of reducing disposal costs. Regulations made under these provisions are not likely to come into force before 2010. In 2010 – 2011, the landfill tax will be £48/tonne for non-inert wastes, and is predicted to increase at a rate of £8/tonne every year thereafter. Gate fees at landfill, net of tax, are in the region of £20/tonne at present.
**Procurement contracts and recyclate**

212. If regulations are established for this provision, the Scottish Ministers would also be subject to their requirements. However, this is unlikely to add any costs. The type of materials likely to be specified are traded widely therefore must be priced competitively. It is reasonable to assume that the replacement of virgin materials with recycled ones is unlikely to increase costs. Rather than a price barrier, the recycling industry often talks of a “perception” barrier preventing the use of products derived from waste. A requirement that recycled products be used is a means of addressing such a perception barrier.

**Targets for reducing packaging**

213. The Scottish Ministers do not produce packaging therefore are unlikely to be affected by a substantive scheme, except by the costs of making Regulations.

**Deposit and return schemes**

214. Costs arising from these provisions will depend on the detail of the regulations. There are currently operational deposit and return schemes in Scotland which do not result in costs for the Scottish Ministers, for example the AG Barr scheme. At the other end of the scale, all those who contribute to a particular type of packaging entering the Scottish market could be obliged to participate in a scheme which provides for the return and recycling of that packaging. Clearing-house functions may arise from this and the set-up costs would probably have to be met by the Scottish Government (though they may be recovered through charges to users).

215. Both Norway and Denmark, countries with a similar sized population to Scotland’s, operate deposit and return schemes which depend on a central function. Details may be found at [http://www.resirk.no](http://www.resirk.no) and [http://www.dansk-retursystem.dk](http://www.dansk-retursystem.dk) respectively. Some indication of the set up costs may be gleaned from the value of the material assets of these organisations at dates close to set-up. Resirk’s “property, plant and equipment” were worth NKR 3.9m (currently c. £40,000) in 2002 (four years after foundation) and Retursystem’s were worth DKR 14.7m (currently c. £161,000) in 2000, the year of founding. This gives a range of £40,000 to £200,000 for value of physical assets at today’s prices. Beyond this, of course, there would be time costs and fees involved in any set-up process, but much of this would be absorbed into the administration budget.

**Carrier bag charges**

216. The only costs, other than those incurred through making the regulations, anticipated for the Scottish Government are those related to publicity campaigns.

217. A Member’s Bill to introduce a levy on plastic bags was introduced in an earlier session of Parliament. The Regulatory Impact Assessment (RIA) for this Bill can be found at [http://www.scottish.parliament.uk/business/committees/environment/papers-05/rap05-28.pdf#page=20](http://www.scottish.parliament.uk/business/committees/environment/papers-05/rap05-28.pdf#page=20). This document contains links to a research report, *Proposed Plastic Bag Levy – Extended Impact Assessment*, which forms the basis for much of its material. The features of the scheme proposed in the Climate Change (Scotland) Bill are somewhat different from this Member’s Bill but much of the information is relevant. For example, the RIA mentions the cost of an education campaign which it estimates at £750,000.
Costs for local authorities

Waste prevention and management plans

218. Local authorities could be required by regulation to make waste prevention and management plans – the costs (£350 - £1,600) and potential efficiencies (£210 - £4,800) attributable to the Scottish Government (detailed in paragraph 203) would potentially apply here also.

219. It is also possible that enforcement duties may fall to local authorities, depending on the nature of the regulations. This could include enforcement powers and duties including the registration of plans, and ensuring that obligated bodies have the necessary plans. The number of obligated bodies would depend on the nature of the plans. However, registration of any single plan is unlikely to take in excess of an hour. Assuming that the average employer cost of a member of staff is £25,000, this would make the cost of registration of any plan unlikely to exceed £15, since a FTE is assumed to work about 2,000 hours a year. Any regulations could provide for registration charge to off-set these administrative costs.

220. Where a report is required for the procurator fiscal with a view to prosecution, this may take three hours of an officer’s time and be equivalent to a cost of £45. Legal officers’ costs could be significantly higher than this, potentially bringing the preparation costs for a case to be in excess of £1,000 - but these are likely to be rare.

Waste data returns

221. Local authorities would be obliged to make returns on any waste produced which was the subject of future regulations. They are already obliged to provide information by the 1991 and 1996 Regulations mentioned above. It is likely that similar information would be required here and the additional costs would be marginal. As local authorities handle significant waste for third parties, information is already provided for this waste and no change is anticipated here.

Duties to provide recycling facilities

222. Local authorities may be expected to provide recycling facilities under the provisions of any regulations brought forward on this matter, and the estimate of £60 - £600 for each receptacle, mentioned in paragraph 209, would apply.

223. The same principle would apply to the enforcement of the provision of recycling facilities. This could apply to local authorities and is particularly likely in the case of the provision of facilities at one-off events. Enforcement is likely to consist of ensuring that facilities are provided, are properly used and that the materials collected are sent for recycling rather than to landfill for disposal. Similarly costs for the officers involved are likely to be in the region of £15 an hour plus travelling time and expenses. In the event of any prosecutions becoming necessary, the costs indicated above would also apply.
These documents relate to the Climate Change (Scotland) Bill (SP Bill 17) as introduced in the Scottish Parliament on 4 December 2008

Procurement contracts and recyclate

224. Regulations on this would likely apply to local authorities but are unlikely to add costs. The type of materials which may be specified are already traded widely and the replacement of virgin materials with recycled materials is unlikely to increase costs.

225. Depending on the form of the regulations, local authorities may be the enforcing body. This would involve examining invoices, and perhaps also making spot checks. The amount of work involved is unlikely to amount to as much as 1 FTE per local authority, so no more than 32 FTEs would be needed in Scotland as a whole (at an annual cost of about £800,000). In the event of prosecution being necessary the costs outlined earlier could be incurred.

Targets for reducing packaging

226. Costs will be dependent on the eventual form of any regulations and it is possible that local authorities would enforce the targets. As they would apply over Scotland as a whole, this could involve Designating "home" or "lead" authorities with a particular connection to main retailers. In these instances particular arrangements would have to be made to support that authority in its work. Local authorities are already responsible for enforcing the Packaging (Essential Requirements) Regulations 2003, which provide that packaging should meet “essential requirements”.

227. Potential costs are unlikely to include visits to retailers and other users of packaging. Instead, the function of enforcing targets may be carried out by examining records, many of which are likely to exist already, such as those relating to materials used, and waste returns. There are approximately 265,000 private sector businesses in Scotland, many of which very small, and either do not produce packaging or are likely to be excluded under a de minimis provision. The Scottish Retail Consortium records 13,805 VAT registered enterprises in Scotland, and the Federation of Small Businesses has a membership of over 19,000, which it believes is over 99% of the relevant businesses in Scotland. It seems likely that a figure of 20,000 could reasonably represent the number of enterprises which put packaging on the market in Scotland. If inspection of a data return is estimated to take one hour, inspection of 20,000 returns would take 20,000 hours, which represents approximately 10 FTEs, on the assumption than a FTE is assumed to work about 2,000 hours a year. The cost of 10 FTEs is approximately 10 x £25,000 = £250,000 per annum.

228. There will be opportunities for efficiencies through creating less packaging. For local authorities in particular this would mean that household waste disposal costs could reduce. For every 1% reduction, savings in landfill tax costs could amount to £144,000 – based on 60% of household waste being disposed of at landfill at a cost of £48/tonne in 2010-2011. This equates to almost 6 FTEs.

Deposit and return schemes

229. It is not anticipated that any variant of a deposit and return scheme, introduced under regulations would have significant costs for local authorities. These proposals are more likely to have a financial benefit for local authorities, by reducing the amount of waste they have to handle. Materials which have a monetary value when handed back are less likely to become litter
– which local authorities have a duty to clear. Experience in Denmark indicates that 85% of bottles are returned via their scheme.

**Carrier bag charges**

230. Costs may arise for local authorities if regulations apply an enforcement duty. The RIA produced for the Members Bill indicated a potential cost of £3.5 million per annum. It is likely that any eventual Regulations would be aimed at carrier bags generally rather than just plastic bags and this may increase the costs beyond those indicated by the RIA. Enforcing and policing is estimated at £2.5m. Occasional prosecution costs may also arise.

**Costs on other bodies, individuals and businesses**

**Waste prevention and management plans**

231. Other bodies, individuals and businesses are likely to be among those whom Regulations made under this part of the bill could require to make waste prevention and management plans. Similar costs (£350 - £1600) and efficiencies (£210 - £4,800) to those outlined in para 203 could apply.

232. The regulations could specify a different enforcement body – for example the Scottish Environment Protection Agency (SEPA). Potential costs are likely to be similar to the £15 per registration described before although there could be economies of scale if this function were carried out by a single national body, which could mean that, overall, fewer individuals need to be employed. Again, it is possible that the regulations would enable SEPA (or any other body charged with enforcement) to recover these costs by charging.

233. Where charges were levied for purposes such as registering plans, this could be a cost for all bodies under a duty to prepare such plans, including the Scottish Government and local authorities.

**Waste data returns**

234. Other bodies and businesses would be required to make returns on any waste produced, which may be covered by future regulations. As described earlier there are already existing controls for the transfer of waste. It is likely that much the same information would be required and additional costs should therefore be marginal. Householders would not be required to make such returns.

235. While these costs should be marginal, they would be dependent on the detail of regulations - including the complexity of the business, and the frequency with which it generated waste. The regulations could also exempt certain bodies or businesses from providing this information.

236. These provisions are aimed at providing information on the volumes of waste which arise to improve information on overall impacts and help create more effective strategies for waste prevention, minimisation and recovery. It will be necessary to collate this data – and to ensure that it is correctly provided. It is appropriate that such a duty would fall on SEPA. SEPA already
collects data on household waste and makes estimates for commercial and industrial waste. These provisions would improve the accuracy of the information for this duty.

237. However it is to be expected that new enforcement costs will arise as additional activity will be required. It would be reasonable to estimate this as one FTE (\textbf{\£25,000 per annum}). The prosecution costs outlined earlier may also occasionally arise.

\textit{Duties to provide recycling facilities}

238. Other bodies, individuals and businesses are likely to be amongst those bodies required through regulations to provide recycling facilities and similar costs to those given in paragraph 209 would apply (\textbf{\£60 - \£600 per receptacle}).

239. As before, the Scottish Environment Protection Agency (SEPA) could be designated the enforcement body for any regulations made under these provisions. Similar costs and opportunities for efficiencies and cost recovery would apply.

\textit{Procurement contracts and recyclate}

240. Other bodies, businesses etc would be subject to the requirements made by Regulations. However, this is unlikely to add any costs for the reasons explained previously.

241. A national organisation such as SEPA could be the enforcing body for any regulations. Enforcement would include examining invoices and perhaps also making spot checks. The amount of work involved is likely to cost less than is outlined for enforcement costs by local authorities (\textbf{\£800,000 per annum}), given that economies of scale would be available. In the event of prosecution being necessary the costs outlined previously could also apply. This would be extremely rare, given that there appears to be little or no cost incentive to avoid the procurement of recyclate.

\textit{Targets for reducing packaging}

242. Another body, possibly SEPA, could oversee the regime established to enforce the targets for packaging reduction. The costs would be similar to those described previously - \textbf{\£250,000 per annum}. Obligated bodies and businesses would be required to return forms. As many bodies and businesses, are obliged to provide similar information for the purposes of the existing Producer Responsibility Obligations (Packaging Waste) Regulation 2007, the additional cost is unlikely to be significant.

243. Meeting the target could involve costs. For example, research and development costs for “lightweighting” and for new methods of presenting products involving less packaging. This could involve the purchase of machines for consumers to insert refillable containers. However these costs could be offset by efficiencies elsewhere in areas such as transportation costs and the resulting reduction in shelf space. Additionally less packaging could mean reductions in obligations to recover packaging in terms of the 2007 Regulations - in July 2008 a packaging waste recovery note for paper cost £2 – 3 per tonne, and for aluminium it cost £60 – 70 per tonne (http://www.letsrecycle.com/prices/prnPrices.jsp). This obligation would not impact on householders.
Deposit and return schemes

244. Any form of deposit and return scheme which may be developed under regulations would be likely to have costs for other bodies and for businesses. This cost could be off-set by an increase in re-use and recycling of the materials collected and lower disposal costs.

245. The extent to which such a scheme would cost or benefit individuals would depend on the extent to which they returned all the materials subject to the scheme. Broadly, a 100% return would be cost neutral – the deposit fee, included in the price, would be recovered. Those persons choosing not to return the materials would be unable to recover the deposit fee thereby discouraging thoughtless disposal.

246. If schemes similar to the existing AG Barr scheme were compulsory for a range of Scottish operators, retailers would incur storage and packaging return costs. However, retailers are already obliged, under the Producer Responsibility Obligations (Packaging Waste) Regulations 2007, to recover a certain amount of glass, steel, aluminium paper/board, plastic and wood, which are principally the materials likely to be targeted for deposit and return schemes. Any deposit and return scheme would supplement, and not replace, these producer responsibility obligations. This could make it easier for retailers to meet the relevant targets, which are expected to increase over time.

247. Producers would be likely to incur a one-off cost of arranging for marking to refer to the deposit. Retailers and producers would also incur the cost of maintaining records and possibly making returns.

248. Regulations could require the designation of a competent authority to inspect returns and ensure a scheme is operated. With more ambitious schemes, such as those operated in Norway and Denmark, there is also a clearing house function. In the case of the Danish scheme, packaging captured by the scheme is registered and marked, to indicate that the deposit fee has been paid. Retailers return the materials and the clearing house issues a payment from the deposit fees. The clearing house collects, or arranges to collect, the materials from the retailers and also arranges for it to be recycled. The clearing house may also carry out the functions of overseeing and enforcing the system.

249. This is clearly a more expensive option. In 2006, the Danish and Norwegian systems cost £17.8m and £17.4m respectively to operate. An estimate of £15-£20 million per annum running costs for a Scottish system handling the same materials (essentially soft drinks packaging) would appear to be reasonable. These costs would have to be recovered through the deposit fees and other possible means, such as sale of recyclate. A similar system could apply to a wider or narrower range of materials, which would affect the costs accordingly.

250. The greater expense of the Danish/Norwegian model could be off-set by the collection and recycling of greater volumes of materials and the subsequent reduction of disposal costs. There could be added benefits through the greater disincentive for littering and fly-tipping and other forms of unauthorised disposal.
251. The Danish experience illustrates an 85% return rate. Dansk Retursystem is empowered to spend any profit on improving the system as it was set up as a non-profit making body. The same principle could be applied in Scotland. Regulations could permit the scheme to spend money on improvements and these could include supporting recycling facilities or the provision of reverse vending machines, which automate the return of the relevant material.

252. However AG Barr’s experience with its current scheme indicates that return rates have dropped from 99% in 1976 to 70% at the beginning in 2007. The firm has recently increased its deposit from 20p to 30p a bottle to address this but it is too early to analyse any results arising from this.

**Carrier bag charges**

253. The RIA mentions the costs incurred by the Irish Government, which set up a centralised collection service. The set-up costs were approximately €1.5m. This, however, included the costs of an advertising campaign, which would probably be borne by the Scottish Government rather than by other bodies. Ongoing costs are €300,000 (currently c. £240,000) pa, while €12 million (currently c. £9,700,000) a year is raised by the levy. Any scheme the Scottish Government would establish will be subject to set-up and collection costs. It is appreciated that there might be a disproportionate outlay at the beginning of any scheme: for example, the Regulatory Impact Assessment suggests a cost of £1,349,000 for updating tills etc.

254. Costs would arise for the enforcing authority for the regulations. As discussed earlier, this could be local authorities. The Regulatory Impact Assessment referenced in the Member’s Bill estimated that these costs could be **£3.5 million per annum**. It is likely that any eventual Regulations would be aimed at carrier bags in general, rather than just the plastic ones considered in the Member’s Bill. Although this may increase the costs, a single enforcement body could derive economies of scale and reduce costs. Enforcement and policing was estimated to cost **£2.5m**.

255. Retailers who issue carrier bags would be subject to a requirement to set a charge and to administer that charge including the potential transfer to good causes approved by the Scottish Ministers. It is expected that any costs would be recoverable from the income realised from charges. The UK Government will levy VAT on the charge, payable to HM Revenue & Customs; this too will be a cost, which will presumably be passed on to the consumer.

256. Users of the carrier bags would pay the charge. The Regulatory Impact Assessment indicated an income of £7.75m on the basis of a charge of 10p per bag. For comparison, in Ireland the income raised from a tax of €0.15, is approximately €12m (£9.7m) a year. If SMEs, charities and promotions were exempted from the charges indicated by the Member’s Bill, the Regulatory Impact Assessment calculated the potential income as £5.43m a year. The proposals included in the Climate Change (Scotland) Bill may have a higher cost as a wider range of bags is under consideration. However this could be off-set by greater efficiencies in waste reduction, litter clear-up, loss of amenity etc. The inclusion of paper bags (as is probable under the present proposals) would result, according to the Regulatory Impact Assessment, in an income of **£8.14 million per annum**.
257. Consumers can avoid paying this type of charge by using their own bags (though this may mean they have to purchase other items, such as bin-liners). A “bag-for-life” which may be used for carrying shopping instead of the kind of carrier bag likely to be aimed at costs from £1 - £3 and may last indefinitely.

258. Good causes in Scotland would benefit from any profits arising from the system. It is also possible that the Scottish Ministers could provide that only profit arising from the minimum level of charge would be allocated to good causes. If retailers chose to charge more, it is possible that additional profit could be retained by the retailer.

259. The Regulatory Impact Assessment suggested that the changes proposed in the Member’s Bill would cost 300 – 700 jobs in Scotland. This figure would be likely to increase if non-plastic carrier bags were also subject to a charge. However there would be some off-setting such as increased employment in the manufacture and distribution of bags for life.
Table 8: Summary of potential estimated costs for Part 5, Chapter 4 – Waste provisions

<table>
<thead>
<tr>
<th>Provision</th>
<th>Costs on Scottish Government</th>
<th>Costs on Local Authorities</th>
<th>Costs on other bodies, individuals and businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste prevention and management plans</td>
<td>£350 - £1,600 per plan.</td>
<td>£350 - £1,600 per plan.</td>
<td>£350 - £1,600 per plan.</td>
</tr>
<tr>
<td></td>
<td>Savings of £210 - £4,800 per plan</td>
<td>Savings of £210 - £4,800 per plan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Registration costs: £15 per plan</td>
<td></td>
<td>Registration costs: £15 per plan</td>
</tr>
<tr>
<td>Duties to provide recycling facilities</td>
<td>Receptacles £60 - £600 each</td>
<td>Receptacles £60 - £600 each</td>
<td>Receptacles £60 - £600 each</td>
</tr>
<tr>
<td></td>
<td>Enforcement: £15/hour each officer</td>
<td></td>
<td>Enforcement: £15/hour each officer</td>
</tr>
<tr>
<td>Deposit and return schemes</td>
<td>Set-up costs: £200,000</td>
<td>-</td>
<td>£15 - £20 million per annum</td>
</tr>
<tr>
<td>Waste data returns</td>
<td>Marginal</td>
<td>Marginal</td>
<td>£25,000 per annum</td>
</tr>
<tr>
<td>Targets for reducing packaging</td>
<td>-</td>
<td>£250,000 per annum</td>
<td>£250,000 per annum</td>
</tr>
<tr>
<td>Carrier bag charges</td>
<td>Campaign: £750,000</td>
<td>Enforcement: £3.5 million per annum</td>
<td>Enforcement: £3.5 million per annum</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Updating costs: £1,349,000</td>
<td>Annual amount of charge: £8.14 million</td>
</tr>
<tr>
<td>Procurement contracts and recyclate</td>
<td>-</td>
<td>Enforcement: £800,000 per annum</td>
<td>Enforcement: &lt;£800,000 per annum</td>
</tr>
</tbody>
</table>

**Note:** costs shown are not totalled as they are not cumulative. For example, enforcement costs would generally fall either on local authorities or on another body, e.g. SEPA.
**SUMMARY OF ADDITIONAL COSTS**

*Table 9: Summary of potential costs for Parts 1-4 Emissions Reductions and Part 5 Adaptation Programme*

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated cost for Scotland’s economy* for delivering the greenhouse gas emissions reduction target in Scotland 2050</td>
<td>1-2% GDP in 2050</td>
</tr>
<tr>
<td>Scottish Government cost (or public body cost) - Estimated annual cost staff cost for managing a carbon unit scheme</td>
<td>£60,000</td>
</tr>
<tr>
<td>Scottish Government cost - Estimated annual cost for administering the reporting duties required for the emissions reductions targets</td>
<td>£17,000</td>
</tr>
<tr>
<td>Scottish Government cost - Estimated annual cost for advice from a Scottish Climate Change Committee, based on current costs.</td>
<td>£2.5m</td>
</tr>
<tr>
<td>Note. Potential for some saving on payment to UK Committee on Climate Change for work in relation to Scottish target – see paragraph 164.</td>
<td></td>
</tr>
<tr>
<td>Scottish Government cost – Estimated cost for the Scottish Ministers response to a report on impact of climate change laid under the UK Climate Change Act. In the first instance, this cost will occur within the first three years. Thereafter, this cost will only occur once every five years.</td>
<td>£30,000</td>
</tr>
</tbody>
</table>
These documents relate to the Climate Change (Scotland) Bill (SP Bill 17) as introduced in the Scottish Parliament on 4 December 2008

* Note - The estimated cost for delivering the 2050 target will apply across all sectors of the economy in Scotland – central government, public sector including local government and private businesses.

**Key to financial data in Table 9**

1 – Paragraph 146  
2 - Paragraph 159  
3 - Paragraph 165  
4 - Paragraph 164  
5 – Paragraph 173

**Table 10: Part 5, Chapter 2 – Forestry costs for the Scottish Government**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional annual cost for FCS to establish joint venture arrangements</td>
<td>£0.5m</td>
</tr>
<tr>
<td>Additional annual cost for FCS to let timber cutting rights</td>
<td>£0.2m</td>
</tr>
<tr>
<td>Additional annual cost for FCS to establish a body corporate or charitable trust</td>
<td>£0.3m</td>
</tr>
</tbody>
</table>

* Note – After the first two years it is expected that the annual running costs of these activities will not exceed the figures shown and will be funded from the income generated.

**Key to financial data in Table 10**

5 – Paragraph 179  
6 - Paragraph 180  
7 - Paragraph 181
These documents relate to the Climate Change (Scotland) Bill (SP Bill 17) as introduced in the Scottish Parliament on 4 December 2008

Table 11: Part 5, Chapter 3 – Non-Domestic Buildings – Summary of potential costs for each energy performance scenario

<table>
<thead>
<tr>
<th>Scenario</th>
<th>One-off Costs - £m Scottish Government⁸</th>
<th>One-off Costs - £m Local Authorities⁹</th>
<th>One-off Costs - £m Bodies, Individuals, Businesses¹⁰</th>
<th>Average Annual Cost - £m Scottish Government⁸</th>
<th>Average Annual Cost - £m Local Authorities⁹</th>
<th>Average Annual Cost - £m Bodies, Individuals, Businesses¹⁰</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>£0.5m</td>
<td>-</td>
<td>-</td>
<td>£0.5m</td>
<td>£3.4m - £4.5m</td>
<td>£6.7m - £7.8m</td>
</tr>
<tr>
<td>2</td>
<td>£0.5m</td>
<td>-</td>
<td>-</td>
<td>£0.5m</td>
<td>£4.1m - £5.5m</td>
<td>£8.2m - £9.6m</td>
</tr>
<tr>
<td>3</td>
<td>£0.6m</td>
<td>-</td>
<td>-</td>
<td>£1.0m</td>
<td>£21.3m - £28.4m</td>
<td>£42.6m - £49.7m</td>
</tr>
<tr>
<td>4</td>
<td>£0.6m</td>
<td>-</td>
<td>-</td>
<td>£2.2m</td>
<td>£27.4m - £36.6m</td>
<td>£54.9m - £64m</td>
</tr>
<tr>
<td>5</td>
<td>£0.6m</td>
<td>-</td>
<td>-</td>
<td>£12.4m</td>
<td>£27.7m - £37m</td>
<td>£55.4m - £64.7m</td>
</tr>
<tr>
<td>6</td>
<td>£0.3m</td>
<td>-</td>
<td>-</td>
<td>£0.3m</td>
<td>£2.6m - £3.5m</td>
<td>£5.3m - £6.2m</td>
</tr>
<tr>
<td>7</td>
<td>£0.5m</td>
<td>-</td>
<td>-</td>
<td>£0.5m</td>
<td>£3.6m - £4.8m</td>
<td>£7.2m - £8.4m</td>
</tr>
</tbody>
</table>

Key to financial data in Table 11

8 – Table 5 (page 37)

9 – Table 6 (page 39)

10 – Table 7 (page 39)
Table 12: Part 5, Chapter 4 – Waste Reduction and Recycling Costs

<table>
<thead>
<tr>
<th>Provision</th>
<th>Costs on Scottish Government</th>
<th>Costs on Local Authorities</th>
<th>Costs on other bodies, individuals and businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste prevention and management plans</td>
<td>£350 - £1,600 per plan</td>
<td>£350 - £1,600 per plan</td>
<td>£350 - £1,600 per plan</td>
</tr>
<tr>
<td></td>
<td>Savings of £210 - £4,800 per plan</td>
<td>Savings of £210 - £4,800 per plan</td>
<td>Savings of £210 - £4,800 per plan</td>
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<tr>
<td></td>
<td>Registration costs: £15 per plan</td>
<td>Registration costs: £15 per plan</td>
<td>Registration costs: £15 per plan</td>
</tr>
<tr>
<td>Duty to provide recycling facilities</td>
<td>Receptacles £60 - £600 each</td>
<td>Receptacles £60 - £600 each</td>
<td>Receptacles £60 - £600 each</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Enforcement: £15/hour each officer</td>
<td>Enforcement: £15/hour each officer</td>
</tr>
<tr>
<td>Deposit and return schemes</td>
<td>Set-up costs: £200,000</td>
<td>-</td>
<td>£15 - £20 million per annum</td>
</tr>
<tr>
<td>Waste data returns</td>
<td>Marginal</td>
<td>Marginal</td>
<td>£25,000 per annum</td>
</tr>
<tr>
<td>Targets for reducing packaging</td>
<td>-</td>
<td>£250,000 per annum</td>
<td>£250,000 per annum</td>
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<tr>
<td>Carrier bag charges</td>
<td>Campaign: £750,000</td>
<td>Enforcement: £3.5 million per annum</td>
<td>Enforcement: £3.5 million per annum</td>
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<td></td>
<td></td>
<td>Updating costs: £1,349,000</td>
<td>Annual amount of charge: £8.14 million</td>
</tr>
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<td></td>
<td></td>
<td>Enforcement: £800,000 per annum</td>
<td>Enforcement: £800,000 per annum</td>
</tr>
<tr>
<td>Procurement contracts and recyclate</td>
<td>-</td>
<td>Enforcement:</td>
<td></td>
</tr>
</tbody>
</table>

*Note: costs shown are not totalled as they are not cumulative. For example, enforcement costs would generally fall **either** on local authorities **or** on another body, eg SEPA.*
These documents relate to the Climate Change (Scotland) Bill (SP Bill 17) as introduced in the Scottish Parliament on 4 December 2008

**Key to financial data in Table 12**

11 – Paragraph 203, 12 – Paragraph 209, 13 – Paragraph 215, 14 – Paragraph 206
15 – Paragraph 217, 16 – Paragraph 218, 17 – Paragraph 219, 18 – Paragraph 222
19 – Paragraph 223, 20 – Paragraph 221, 21 – Paragraph 227, 22 – Paragraph 230
27 – Paragraph 249, 28 – Paragraph 237, 29 – Paragraph 242, 30 – Paragraph 254
31 – Paragraph 253, 32 – Paragraph 256, 33 – Paragraph 241

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**SCOTTISH GOVERNMENT STATEMENT ON LEGISLATIVE COMPETENCE**

260. On 4 December 2008, the Cabinet Secretary for Finance and Sustainable Growth (John Swinney MSP) made the following statement:

“In my view, the provisions of the Climate Change (Scotland) Bill would be within the legislative competence of the Scottish Parliament.”

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**PRESIDING OFFICER’S STATEMENT ON LEGISLATIVE COMPETENCE**

261. On 4 December 2008, the Presiding Officer (Alex Fergusson MSP) made the following statement:

“In my view, the provisions of the Climate Change (Scotland) Bill would be within the legislative competence of the Scottish Parliament.”
INTRODUCTION

1. This document relates to the Climate Change (Scotland) Bill introduced in the Scottish Parliament on 4 December 2008. It has been prepared by the Scottish Government to satisfy Rule 9.3.3(c) of the Parliament’s Standing Orders. The contents are entirely the responsibility of the Scottish Executive and have not been endorsed by the Parliament. Explanatory Notes and other accompanying documents are published separately as SP Bill 17–EN.

POLICY OBJECTIVES OF THE BILL

General overview

2. The provisions in this Bill will set a long-term target to reduce Scotland’s emissions of Kyoto Protocol greenhouse gases by 80% by the year 2050. This long term target will be supported by a framework of annual targets intended to drive the policies necessary for achieving this target. Many of the policy measures required to meet these targets will not require legislation to implement them, but certain climate change mitigation and adaptation policies have been identified which do require legislation and this Bill contains provisions in Part 5 which will allow these to be taken forward.

3. The Bill policy areas are separated into five Parts:

- **Part 1** creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050. To help ensure the delivery of these targets, this Part of the Bill also requires that the Scottish Ministers set annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050.

- **Part 2** contains provisions which will allow the Scottish Ministers to establish a Scottish Committee on Climate Change, or to designate an existing body, to exercise advisory functions.

- **Part 3** places duties on the Scottish Ministers requiring that they report regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill.

- **Part 4** contains powers to allow the Scottish Ministers, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.
Part 5 contains other climate change provisions and is divided into the following four chapters:

- **Chapter 1** contains provisions relating to adaptation to the impact of climate change. It requires that the Scottish Ministers produce a report setting out their objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced. Part 5 Chapter 1 of the Bill also contains an enabling power for the Scottish Ministers to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

- **Chapter 2** will allow modification by regulations of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change.

- **Chapter 3** contains three distinct sets of provisions. The first set of provisions in this Chapter require the Scottish Ministers to produce an action plan setting out their current and proposed measures to promote the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change towards energy efficiency. The second set of provisions contains measures for assessing the energy performance of existing non-domestic buildings in order to raise awareness of the contribution that those buildings can make to mitigating climate change through reducing energy demand and thereby emissions of greenhouse gases. The third set of provisions in this Chapter place a duty on the Scottish Ministers to take such steps as they consider appropriate to promote the use of heat from renewable sources.

- **Chapter 4** contains provisions which will enable the Scottish Ministers to make regulations addressing issues of importance in moving towards a zero waste society, and securing a more sustainable use of resources, thereby limiting the emissions of greenhouse gases which contribute to climate change.

**BACKGROUND**

**Scientific context**

4. Radiation from the sun is necessary to sustain all life on Earth. A proportion of this radiation passes through the atmosphere and warms the atmosphere and the surface of the Earth. The short wavelength radiation is absorbed by the Earth’s surface, which is heated as a result. This energy is then re-irradiated at longer wavelengths as infra-red radiation. A proportion of the out-going infra-red radiation is absorbed by greenhouse gases in the atmosphere. The higher the concentration of greenhouse gases in the atmosphere, the greater the proportion of longer-wave radiation that is trapped and so the greater is the warming. This process naturally keeps the Earth’s surface warmer than would be the case otherwise - an average surface temperature of +15°C as opposed to an average of -18°C without it. However, human-induced greenhouse gas emissions enhance this effect to create greater warming than would occur naturally.

5. The main greenhouse gases are water vapour and carbon dioxide (CO₂). Other important greenhouse gases include methane (CH₄), nitrous oxide (N₂O) perfluorocarbons (PFCs)
hydrofluorocarbons (HFCs) and sulphur hexafluoride (SF6). With the exception of water vapour, the concentration of these gases in the atmosphere has been increasing since the beginning of the industrial era. This increase is due largely to human activities. For example, carbon dioxide concentrations in the atmosphere have increased from a range of 275 to 285 parts per million (ppm) in the pre-industrial age to 375ppm in 2005 and the rate at which this concentration is increasing, is accelerating.

6. The weight of international scientific evidence highlights the serious and urgent nature of climate change. The Fourth Assessment Report (AR4) of the Intergovernmental Panel on Climate Change (IPCC)\(^1\) is clear that emission of greenhouse gases caused by human activity is the primary driver of the observed changes in climate.

7. According to AR4, mean global temperatures are projected to rise between 1.1 and 6.4°C above 1990 levels by the end of this century, depending on the level of global emissions. Such an increase in temperature will result in continued melting of ice caps, glaciers and sea ice, changes in rainfall patterns, intensification of tropical cyclones and a further rise in global sea levels of between 20 and 60cm by the end of this century.

International action

8. The international community has already begun a coordinated response to the challenge. The United Nations Framework Convention on Climate Change (UNFCCC) has as its ultimate objective “stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system”.

9. The current international agreement to reduce greenhouse gas emissions is the Kyoto Protocol. In ratifying the Protocol a number of industrialised countries have committed to reduce their emissions of carbon dioxide, methane, nitrous oxide, HFCs, PFCs, and sulphur hexafluoride (collectively known as the “basket of six greenhouse gases”) by on average, 5.2% below 1990 levels by 2008-2012. Another international agreement is needed to set commitments beyond 2012. Negotiations on this are set to be concluded by the end of 2009 at the UNFCCC Conference of the Parties in Copenhagen.

10. The European Union (EU), as a signatory to the Kyoto Protocol, has committed to reducing its collective greenhouse gas emissions by 8%. The United Kingdom share of the EU collective target is a reduction of 12.5% in its emissions of the basket of gases. At the Spring European Council on 8 and 9 March 2007, EU Heads of Government agreed a unilateral binding target to reduce the EU’s greenhouse gas emissions by at least 20% by 2020 (compared to 1990 levels) and to increase this commitment to a 30% reduction if an international agreement is reached.\(^2\)

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\(^2\) This commitment forms part of the European Commission’s proposed Energy and Climate Change Package. More information about this is available from: [http://ec.europa.eu/energy/climate_actions/index_en.htm](http://ec.europa.eu/energy/climate_actions/index_en.htm)
United Kingdom action

11. The UK Government introduced a Climate Change Bill into the House of Lords on 14 November 2007. The Bill received Royal Assent on 26 November 2008. The UK Act contains a headline target of reducing the UK’s emissions of the basket of six greenhouse gases by 80% by 2050 and it provides a framework for setting a limit on the total amount that can be emitted by the UK over successive five-year periods (carbon budgeting). It also establishes an independent Committee on Climate Change to advise on the level of those carbon budgets and on a range of other climate change issues. It contains reporting requirements, enabling powers to create trading schemes relating to greenhouse gas emissions, and provisions on adaptation to the effects of climate change. Following the Scottish Parliament’s agreement on 20 December 2007 to a Legislative Consent Motion, most of the provisions of the UK Act, on enactment, will extend to Scotland, although some provisions, such as those on waste, do not extend to Scotland.

Scottish action

12. In its Fourth Assessment Report, the Intergovernmental Panel on Climate Change states that global emissions should be 50 to 85% lower (than 2000 levels) in 2050 to limit warming to 2.0°C - 2.4°C. Although Scotland only accounts for 0.15% of global greenhouse gas emissions, the Scottish Ministers believe that it is right that Scotland, a country which led the industrial revolution, should show leadership in legislating to reduce emissions of greenhouse gases and should aim to achieve the top end of the scale indicated.

CONSULTATION

Proposals for a Scottish Climate Change Bill

13. Between 29 January and 23 April 2008, the Scottish Government held a public consultation on proposals for a Scottish Climate Change Bill. The consultation document provided a summary of the science of climate change and set out the Scottish Government’s proposals for legislating to reduce Scotland’s emissions and to adapt to the ongoing effects of climate change. The consultation document was made available on the Scottish Government’s website and a wide range of stakeholders were invited to respond.

14. A total of 21,046 responses were received. 318 non-campaign responses were received from individuals and organisations. A further 20,728 responses were received from campaigns run by five non-governmental organisations. Copies of the non-campaign responses and examples of campaign responses were published on the Scottish Government website where permission was given to do so by the respondents concerned.

Consultation workshops

15. As part of the consultation process, the Scottish Government held four stakeholder workshops. Three of these events were hosted in partnership with the Convention of Scottish Local Authorities, Highlands and Islands Enterprise and Scottish Enterprise respectively. All aspects of these workshops including the presentations, workshop notes for participants, and

3 The consultation on proposals for a Scottish Climate Change Bill and related documents are available from: http://www.scotland.gov.uk/Topics/Environment/Climate-Change/16327/Climate-Change-Bill/SCCBConsultation
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detailed reports on the views expressed, were recorded and made available on the Scottish Government website4.

Strategic Environmental Assessment

16. A Strategic Environmental Assessment of the consultation proposals was also undertaken, and the environmental report was published on 8 February 20085.

Analysis of consultation responses and the Scottish Government response

17. The majority of respondents welcomed the consultation, the commitment and intention to introduce legislation or establish a framework, and/or the leadership shown by Scotland. A large amount of primarily qualitative information was provided around four main themes: targets; supporting framework; reporting and scrutiny framework; and supporting measures. Some common themes or core messages arose repeatedly, in respondents’ consideration of the consultation questions, including: the seriousness of climate change and the need for early action; a commitment to taking action in Scotland; the need for targets and actions to be specified; the complexity of the issue of climate change; the need for a basis in science, knowledge and advice; the need for research; the need for regular monitoring and reporting; the need for scrutiny within a flexible but robust framework; the need for everyone in Scotland to play their part in tackling climate change; the need for leadership, direction, clarity and certainty in the way forward; and the need for links to other relevant work.

18. Given the large number of responses and variety of views expressed in answer to the open questions which were asked, it is not possible to go into further detail about the outcomes of the consultation in this Policy Memorandum. However, the Scottish Government commissioned an analysis of the consultation responses, the report of which was published on 20 August 2008. This report presents in detail the themes and messages which emerged from the consultation responses and is available on the Scottish Government’s website6.

19. On 27 October 2008, the Scottish Government published its response to the main points raised during the consultation on proposals for a Scottish Climate Change Bill. This response included the main policies proposed for the Bill. The response document is available on the Scottish Government’s website7. The policy content of the Bill is described in detail below.

20. The consultation on proposals for a Scottish Climate Change Bill principally covered the policies addressed by the provisions contained in Parts 1 to 4 of the Bill. Additional separate consultations were carried out in respect of the policies addressed by the provisions contained in

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4 Ibid.
5 All of the published documents associated with the Strategic Environmental Assessment of the consultation on proposals for a Scottish Climate Change Bill are available from: http://www.scotland.gov.uk/Topics/Environment/Climate-Change/16327/Climate-Change-Bill/SEAClimateBill
[Link no longer operates]
6 The analysis of responses to the consultation on proposals for a Scottish Climate Change Bill is available, with related documents, from: http://www.scotland.gov.uk/Topics/Environment/Climate-Change/16327/Climate-Change-Bill/SCCBConsultation
7 Ibid.
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the chapters of part 5 of the Bill. Details of these additional consultations are given under each of the respective topic headings of this Policy Memorandum.

PART 1: EMISSIONS REDUCTION TARGETS

Policy objectives

21. The provisions set out in Part 1 of the Bill create the statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050. To help ensure the delivery of these targets the Bill requires that the Scottish Ministers set annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050.

Net Scottish emissions account

22. The 2050 target is defined by placing a duty on the Scottish Ministers to ensure that the net Scottish emissions account for the year 2050 is at least 80% lower than the baseline year. This is commensurate with the Scottish Ministers’ desire to achieve close to the top end of the 50 to 85% reduction in greenhouse gas emissions as Scotland’s share of the reductions that the IPCC states in its Fourth Assessment Report is necessary, globally, by 2050 to limit average temperature rises to 2.0-2.4°C.

23. The Bill establishes that the following are “greenhouse gases”: carbon dioxide, methane and nitrous oxide, for which the baseline year is 1990; and perfluorocarbons, hydrofluorocarbons and sulphur hexafluoride, for which the baseline year is 1995. This is in accordance with the international practices established under the Kyoto Protocol.

24. “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping. In the case of the latter, this recognises that Scottish emissions from international aviation and international shipping will, by their very nature, occur in part outside Scotland’s borders.

25. The Bill defines the term “net Scottish emissions” as the amount of Scottish emissions minus the amount of Scottish removals. “Scottish removals” are defined as being removals of greenhouse gases from the atmosphere due to land use, land use change and forestry activities in Scotland. The Bill allows the Scottish Ministers to modify the definition of Scottish removals to take account of potential additional types of removal which may be recognised in the future.

26. The term “net Scottish emissions account” is established in the Bill as a point of reference against which the target can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland. It is the overall sum of these elements that form the net Scottish emissions account: i.e. net Scottish emissions (emissions plus removals) plus carbon units sold, minus carbon units purchased and used to offset emissions.
27. Carbon units represent emissions reductions or removals and emissions allowed under trading schemes. The Bill allows for the Scottish Ministers to make regulations specifying which carbon units are recognised for the purpose of the net Scottish emissions account. It is the Scottish Ministers' intention that such regulations specify units that are compliant with the internationally recognised criteria established under the Kyoto Protocol. 

28. The Bill also allows the Scottish Ministers to create regulations providing for a scheme for registering carbon units and for establishing accounts in which they may be held and/or transferred between. These regulations may also make provision for appointing a person or body to administer such a scheme. The number of carbon units purchased, held, used and sold in a given calendar year will be reported upon annually.

**Interim and annual targets**

29. The Bill creates an **interim target** which requires that the Scottish Ministers ensure that the net Scottish emissions account for the year 2030 is at least 50% lower than the baseline. The 2030 interim target is intended to act as a milestone on the path to 2050, strengthening the requirement for early emissions reductions to be delivered in the run up to 2050.

30. To ensure early and consistent action, the Bill requires that the Scottish Ministers set **annual emissions reduction targets** for each calendar year from 2010 to 2050. These annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive. Subsequent batches will include five annual targets: 2023 to 2027, 2028 to 2032 and so on. The Scottish Ministers are required to set the first batch of targets for 2010 to 2022 no later than 1 June 2010. Subsequent batches must be set no later than 31 October in the 12th year before the beginning of the period in question. This is intended to give stakeholders certainty of the Scottish Government’s emissions reduction trajectory so that they can plan with certainty over the longer term. These batches of annual targets will also coincide with the carbon budgets established under the provisions of the UK Climate Change Act 2008, to assist organisations operating throughout the UK. This approach also recognises that reserved policy measures introduced in support of the UK carbon budgets will bear down on emissions in Scotland, thereby contributing to the achievement of Scotland’s targets.

31. From the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Like the mid-point 2030 target, this is designed to ensure early action is taken to reduce Scottish emissions. Prior to 2020, the Scottish Ministers will be expected to set annual targets which build towards delivering emissions reductions of at least 3% each year.

**Measurement of emissions**

32. The measurement of Scottish emissions and removals must be carried out, as far as reasonably practicable, in accordance with international carbon reporting practice. It is intended that this will be achieved by using data disaggregated from the UK Greenhouse Gas Inventory. This Inventory is submitted each year by the UK Government to the United Nations Framework Convention on Climate Change.

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8 Details of the units compliant with emissions trading under the Kyoto Protocol are available from: [http://unfccc.int/kyoto_protocol/mechanisms/emissions_trading/items/2731.php](http://unfccc.int/kyoto_protocol/mechanisms/emissions_trading/items/2731.php)
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Convention on Climate Change. The Bill establishes that if this information is in accordance with the protocols of the United Nations Framework Convention on Climate Change it is considered to be in accordance with international practice. The Bill also gives the Scottish Ministers the power to specify a different European or international agreement, to allow flexibility should the basis of international carbon reporting change. The term “as far as reasonably practicable” is used in recognition of the fact that Scotland is not a full member of the United Nations or Member State of the European Union so may not be able to satisfy those requirements within international carbon reporting practice that can only be achieved by full members of such organisations.

PART 2: ADVISORY FUNCTIONS

33. The emissions reduction provisions in the Climate Change (Scotland) Bill impose duties on the Scottish Ministers, which require them to establish annual emissions reductions targets in secondary legislation. Ministers will be required to seek expert, independent advice in advance of setting annual targets.

34. The UK Climate Change Act 2008 establishes a Committee on Climate Change to provide expert advice to the UK Government and Devolved Administrations. Initially, the Scottish Ministers intend to seek independent, expert advice from the UK Committee. As one of the Devolved Administrations contributing to the UK emissions reduction target, Scotland contributes to the funding of this independent, expert Committee. In the longer term, the Scottish Ministers will take a view on the effectiveness of the advice from this Committee for Scotland’s interests. Should the Scottish Ministers determine that the UK Committee on Climate Change does not meet all the advice needs for Scotland, the Bill contains provisions which will allow the Scottish Ministers to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

35. Climate change is a wide-ranging and complex subject. The Bill requires that the Scottish advisory body, should one be established or designated, must provide advice, analysis, information or assistance regarding the Scottish Ministers’ functions relating to climate change when asked to do so by the Scottish Ministers. The UK Climate Change Act 2008 contains similar provisions requiring that the UK Committee on Climate Change provide relevant advice to the Scottish Ministers when requested to do so.

36. Each year, following the annual report on emissions, detailed in paragraph 37 below, the Scottish Ministers must, if no Scottish body has been tasked with carrying out the advisory functions mentioned in section 19 of the Bill, request the Committee to publish its views on the progress towards achievement of the annual targets that have been set, the interim 2030 target and the 2050 target. If a Scottish body has been tasked with carrying out the advisory functions, that body will, by virtue of the provisions in section 23 of the Bill, be required to publish an equivalent report. Ministers will be required to publish a response to the points made in these reports.

PART 3: REPORTING DUTIES

37. It is intended that the Scottish Ministers be subject to strong and robust reporting requirements. The Bill therefore requires that the Scottish Ministers report regularly to the
Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The reporting requirements in Part 3 are as follows:

- **Annual reporting duty**: the Scottish Ministers are placed under a duty to lay an annual report before the Parliament giving details of Scotland’s emissions, including the net Scottish emissions account; the use of carbon units; Scotland’s electricity consumption; and Scotland’s electricity generation. If the annual emissions target has been exceeded, the report should also explain why.

- **Report and statement on proposals and polices designed to meet future annual emissions targets**: as soon as reasonably practicable after setting any set of annual emissions targets, the Scottish Ministers will be required to lay a report before the Scottish Parliament setting out proposals and policies for meeting the current and future annual emissions targets, up to and including the annual targets just set. In practice, this report will require to be made at least once every five years.

- **Report and statement on proposals and policies designed to compensate for exceeding annual emissions targets**: where the net Scottish emissions account exceeds an emissions target, the Scottish Ministers are also required lay a report setting out the proposals and policies by which they intend to compensate for the excess emissions.

- **Final statements for 2030 and 2050**: the Scottish Ministers will also lay statements setting out whether the 2030 and 2050 emissions reduction targets have been met and, if not, why not. These reports will be distinct from the annual reports for 2030 and 2050 which will focus on the action in these two calendar years as opposed to the long-term targets.

**PART 4: DUTIES OF PUBLIC BODIES RELATING TO CLIMATE CHANGE**

38. The Scottish Ministers anticipate that all sectors of society in Scotland will contribute appropriately to taking action on climate change. In this context, the public sector in Scotland has a pivotal role to play, by showing leadership and by setting and delivering policies that encourage and enable action by others.

39. The Scottish Government is committed to working in partnership with the public sector in reducing the target greenhouse gas emissions which affect climate change. But it is recognised that as emissions reductions become harder and more expensive to deliver, there may come a time when the Scottish Ministers have to ensure consistent and fair contributions to delivery across the public sector. This is why the Bill contains a power to allow the Scottish Ministers, by regulations, to impose duties on public bodies in relation to climate change (these could concern emissions reduction or adaptation to the effects of climate change), to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

40. This part of the Bill also contains powers which enable the Scottish Ministers to designate one or more persons or bodies to monitor whether relevant public bodies are discharging their climate change duties appropriately. It is intended that, should the Scottish Ministers exercise this power, an existing body or bodies, or a person or persons already carrying out a similar function, would be designated for this purpose.
41. The Bill enables the Scottish Ministers to require the monitoring body to make reports on their activities and to issue guidance or directions to the monitoring body relating to the exercise of its functions. These measures are intended to ensure that any such monitoring body operates in a transparent way and that Ministers can ensure that it performs its monitoring functions in a way considered best suited to securing the best possible oversight and scrutiny of public bodies’ action on climate change.

42. If the Scottish Ministers decide to use these provisions in the future it is intended that there will be full consultation with the public bodies concerned.

**Alternative approaches considered for Parts 1 to 4**

43. The first consideration was whether a Scottish Climate Change Bill was required since the UK Government was in the process of legislating for a UK Climate Change Bill, now Act, at the time these proposals were first being considered. The Scottish Ministers are fully supportive of the UK efforts to reduce greenhouse gas emissions. In recognition of the fact that the UK Act relates in large part to areas which are devolved under the Scotland Act 1998, a Legislative Consent Motion was passed by the Scottish Parliament on 20 December 2007.

44. The Scottish Ministers wish to set a target to reduce greenhouse gas emissions by 80% by 2050, in line with the upper end of the 50 to 85% range set out in the Intergovernmental Panel on Climate Change’s Fourth Assessment Report. Proposals for the Scottish Climate Change Bill were originated at the time when the UK Government’s 2050 target was for 60% reduction of carbon dioxide emissions. In addition to participating in the shared UK objective, the Scottish Ministers wished to make a clear commitment for Scotland.

45. The UK Government requested early advice from the Committee on Climate Change (operating in a shadow capacity prior to the enactment of the UK Bill). This advice was issued on 7 October 2008 and, as a result, the UK Government, with the agreement of the Scottish Ministers, amended the UK Bill on 28 October 2008 to increase the 2050 target to 80% and to include all six greenhouse gases. Nevertheless, the Scottish Ministers consider that there should be separate, complementary UK and Scottish climate change legislation which allows Scotland to drive forward emissions reductions and break down barriers to reducing climate change and which will have the dual effect of meeting the Scottish target and contributing towards the achievement of the UK target.

46. Paragraphs 13 to 19 provide details on the public consultation on the proposals for a Scottish Climate Change Bill. Stakeholder views were sought on a wide range of issues during this exercise and the responses helped the development of the policies included in the Scottish Bill. Amongst the issues considered in the consultation the following issues were key:

- **Should the Bill’s targets focus solely on carbon dioxide rather than the basket of the six Kyoto Protocol greenhouse gases, which all contribute towards climate change?** Carbon dioxide has the lowest global warming potential per unit of the six

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gases but is emitted in vastly greater quantities than the others combined. However, it may be difficult or even impossible to eliminate some greenhouse gases and if other greenhouse gases prove difficult and/or very costly to abate, greater reductions in carbon dioxide will be needed to compensate. Therefore a target based on a basket of greenhouse gases could place additional costs on the economy as compared to a carbon dioxide only target.

The majority of responses to the consultation on proposals for a Scottish Climate Change Bill favoured targeting the basket of six gases. Based on the Stern Review Report\(^\text{11}\) data, the Committee on Climate Change estimates that the cost of stabilising greenhouse gases at levels of 500-550ppm carbon dioxide equivalent is between 1%-2% of GDP in 2050. This sum is significant, but is fully consistent with continued growth and development, in contrast with unabated climate change which will eventually pose significant threats to growth, estimated by Stern at between 5%-20% of global GDP. The Scottish Ministers therefore decided that the 2050 emissions reduction target set in the Climate Change (Scotland) Bill should cover the basket of six greenhouse gases.

**Should the framework supporting the delivery of the long term emissions reduction targets be based upon multi-year emissions budgets or annual targets?** Multi-year emissions budgets would provide flexibility within the long-term emissions reduction trajectory. However, annual targets provide greater certainty as to the magnitude of emissions reductions that need to be made at any given time. A large number of the responses to the Bill consultation expressed a preference for annual targets. The Scottish Ministers decided that the Bill should establish a framework of annual targets which will be based on expert advice from the Committee on Climate Change and will be set more than 10 years in advance so that private and public sector organisations can plan with certainty over the longer term. The science and economics of climate change will continue to develop between now and 2050 and the annual target model will create a credible framework which is flexible enough to adapt to changing circumstances but strong enough to drive sustained emissions reductions over the coming decades.

**Should the expert advisory body be the UK Committee on Climate change or an equivalent Scottish body?** The Scottish Ministers intend to seek advice initially from the UK Committee on Climate Change. This approach was supported by the majority of consultation responses on this issue. As one of the Devolved Administrations, contributing to the UK target, Scotland contributes to the funding of this independent, expert Committee. This currently costs the Scottish Ministers £275,000 a year. If the Scottish Ministers decide to establish a Scottish Committee on Climate Change in the future, the annual costs could be in the region of £2.5 million, based on achieving a number of efficiencies on the current annual cost of running the UK Committee. Utilising the expertise of the UK Committee on Climate Change remains the most cost effective option for obtaining advice currently available to the Scottish Ministers. However, this must be balanced with the need to obtain suitable advice which recognises Scotland’s individual circumstances. That is why the Climate Change (Scotland) Bill contains provisions to allow the Scottish

\(^{11}\) Stern Review on the Economics of Climate Change, available from: [http://www.hm-treasury.gov.uk/stern_review_climate_change.htm](http://www.hm-treasury.gov.uk/stern_review_climate_change.htm)
Ministers to create a Scottish body (or confer the functions on an existing body) to provide advice in the future. This recognises that the UK Committee on Climate Change is a new expert and independent body which has not yet been given the opportunity to prove itself. Should the Scottish Ministers find this Committee cannot provide the advice required by Scotland, the Bill makes adequate provision to take forward a tailored Scottish solution in the future.

47. The alternative approaches considered for the policies addressed by the provisions contained in the chapters of part 5 of the Bill are given under each of the respective topic headings of this Policy Memorandum.

PART 5: OTHER CLIMATE CHANGE PROVISIONS

PART 5, CHAPTER 1: ADAPTATION

Adaptation programmes

48. The UK Climate Change Act 2008 requires that the Secretary of State lay reports in the UK Parliament setting out an assessment of the risks for the United Kingdom of the current and predicted impact of climate change. These reports must also be sent to the Scottish Ministers. The Scottish Government will contribute to the preparation of these UK-wide risk assessments.

49. The UK Act requires that the Secretary of State lay programmes before the UK Parliament setting out the objectives of the UK Government in relation to adaptation to climate change. This is to be done as soon as reasonable practicable after the UK-wide risk assessment is laid in Parliament. The UK Act does not place these duties on the Scottish Government. The Scottish Government chose not to take part in this provision of the UK Act as the Scottish Ministers have the powers to direct their own adaptation programmes in devolved areas of responsibility and can introduce any necessary provisions through legislation made in the Scottish Parliament. Part 5 Chapter 1 of the Climate Change (Scotland) Bill therefore places a duty on the Scottish Ministers to produce an equivalent report for Scotland, setting out their objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced. These reports should respond to the risks posed by climate change identified in each UK-wide risk assessment. In practice, the UK climate change impact report will be published at least every five years and the Scottish Ministers response should be made as soon as practicable thereafter.

Alternative approaches

50. Adapting to the effects of changing weather patterns is a fundamental part of the measures required to respond to climate change. Consideration was given requiring that a climate change risk assessment for Scotland be carried out separate from the UK assessment detailed in paragraph 48 above. However, it was felt that the information contained in the UK report will be sufficient for Scotland’s purposes. Scottish Government officials sit of the steering group for the UK risk assessment.
Variation of permitted times for making muirburn

51. Part 5 Chapter 1 of the Bill also provides for an enabling power for the Scottish Ministers to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

52. Muirburn is an essential land management tool, the majority of which is currently carried out throughout the Scottish uplands; however it can be carried out on any land regardless of altitude. It is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. It is predominantly carried out by land managers such as hill farmers, crofters, estate managers and gamekeepers. The use of muirburn enables the provision of fresh food sources on rough grassland or managed moorland for livestock, game and wildlife, and the management of older vegetation which can act as a source of fuel for wildfires.

53. Some 8.7% of Scotland is covered by heather moorland, 15.7% by heather moorland and peatland mosaics and 14.5% by rough grassland and moorland mosaics. Moorland is an important breeding and feeding habitat for invertebrates, mammals and bird species. Well managed muirburn is important to maintain diversity of moorland vegetation. The aim of muirburn is to provide a mosaic of young, intermediate and mature heather and vegetation, which supports a range of habitats. Rough grasslands support a wide variety of plant species and this provides food and shelter for many invertebrates, birds and small mammals, along with providing grazing for livestock. Rotational muirburn carried out in small patches improves botanical diversity and vegetation structures. Aging plants become less productive and viable, and as they age the amount of dead material increases as the amount of live vegetation decreases.

54. The majority of Scottish soils are organic and most of the UK’s peat resource is in Scotland. 50% of the UK’s total soil carbon store is in Scotland and 80% of this is in peat. The approximate carbon storage is three thousand million tonnes of carbon. The majority of the land on which muirburn is carried out lies on top of these soils. Controlled burning aims to burn the vegetation above the height of the soil and for the fire not to penetrate into the soil and peat. Although carbon dioxide and nitrous oxide are released through muirburn, by burning, in particular, old heather, new heather growth is encouraged and plant density increases. The quantity of greenhouse gases released from burning can be minimised by the use of controlled muirburn as a measure to minimise the risk of wildfires occurring.

55. Wildfires are any unplanned and uncontrolled wildland fire that, regardless of ignition source, may require suppression response or other action. Although wildfires can occur naturally in the Scottish uplands as a result of lightning strikes, a number of such fires also occur as a result of man and can be the result of a vehicle exhaust, bonfire, campfire or a dropped cigarette. The risk of a wildfire occurring in remote upland areas of Scotland is significantly increased where effective muirburn has not been carried out, as muirburn reduces available fuel sources.

The impact of climate change

56. Climate change poses a serious challenge for our plants and wildlife, changing the natural environment at a faster rate than some species can adapt to. In Scotland, climate change has altered our climate and seasonal weather patterns. A number of key changes have been recorded
in Scotland since 1961\textsuperscript{12}. Temperatures have risen in every season. Scotland became 20% wetter by 2004, with an increase in precipitation of almost 70%. The snow season has shortened and there has been more than a 25% reduction in the number of frost days across the country. The growing season has lengthened significantly. Future climate scenarios produced in 2002\textsuperscript{13} suggest there will be a number of further changes to the Scottish climate. Annual temperatures will rise, winters may become wetter and summers will become generally drier. Average snowfall will decrease and snowless winters may become normal in some areas. There are no consistent or robust estimates of wind speed changes. Soil moisture changes will be dependant on precipitation, temperature and wind speed. In summer, Scotland as well as the rest of the UK will experience a decrease in the average soil moisture.

57. These climatic changes have impacted on the ability to undertake muirburn and have reduced the frequency of suitable burning days. As a result, the ability of muirburn to be used as a land management tool has been adversely affected.

\textit{Policy objective}

58. As a result of the need to adapt to the effects of climate change, greater flexibility is now required in relation to the periods during which muirburn is permitted. This is proposed to be achieved though an order-making power for the Scottish Ministers to specify the permitted muirburn dates in subordinate legislation. The policy objective is to enable the effective future continuation of this necessary land management activity.

\textit{Legislation}

59. The making of muirburn is regulated by the Hill Farming Act 1946 (“the 1946 Act”), which permits muirburn in Scotland in respect of land below 450m (1500ft) above sea level, between 1 October and 15 April inclusive. This period may be extended to 30 April in the circumstances provided for under the 1946 Act. For lands more than 450m (1500ft) above sea level there is the possibility of a further extension to 15 May. The permitted muirburn season has not varied since the 1946 Act came into force and, at present, there are no powers available to the Scottish Ministers, to vary the permitted muirburn season to enable the exercise of this land management tool to adapt to the changing climate.

60. In addition to the 1946 Act, the Muirburn Code published by the Scottish Government\textsuperscript{14} provides guidance for those making muirburn, and sets out the types and areas of land which are suitable for making muirburn and identifies those areas which are considered unsuitable for muirburn, such as exposed peat hags and gullies. The Code is supported by the Prescribed Burning on Moorland. A Supplement to The Muirburn Code: A Guide to Best Practice\textsuperscript{15}, a technical support document. Although the Code itself is not legally binding, it requires to be

\textsuperscript{12} The Scotland & Northern Ireland Forum for Environmental Research (SNIFFER), A Handbook of Climate Trends Across Scotland, 2006. Available from: http://www.sniffer.org.uk/Resources/CC03/Layout_Default/0.aspx [Link no longer operates]

\textsuperscript{13} The UK Climate Impacts Programme (UKCIP), Climate Change Scenarios for the United Kingdom, April 2002. Available from: http://www.ukcip.org.uk/index.php?id=161&option=com_content&task=view

\textsuperscript{14} The Muirburn Code, available from: http://www.scotland.gov.uk/Publications/2008/04/08154231/0

followed by those in receipt of Single Farm Payment as muirburn is also regulated through cross-compliance requirements. Suspected breaches of cross-compliance requirement obligations in relation to the Code are investigated by the Scottish Government, Scottish Natural Heritage or Scottish Environmental Protection Agency (SEPA).

61. This Part of the Bill contains a provision to enable the Scottish Ministers to vary, by order, the permitted muirburn season in subordinate legislation, in order for this activity to adapt to climate change.

Consultation process

62. The Scottish Government’s Consultation on Provisions Relating to Muirburn Dates\(^\text{16}\) started on 25 August 2008 and concluded on 17 November 2008. The consultation was sent to key non-government organisations and individuals and sought their views on whether it was necessary for the Scottish Ministers to be given powers to vary the permitted dates for muirburn in the future. The consultation also sought views on whether there are other amendments required to the muirburn provisions within the 1946 Act which are considered necessary in order to adapt to climate change. The consultation also requested views on the climate change related impacts that affect how practitioners carry out muirburn. The Scottish Government received 56 responses to the muirburn consultation, the detail of which was being analysed at the time this Bill was introduced to the Scottish Parliament.

Alternative approaches

63. The muirburn season could remain as specified in section 23 of the 1946 Act with no provision for the Scottish Ministers to be able to vary the permitted muirburn season. However, if the status quo is retained it is highly likely that in the future the Scottish Government will come under pressure to seek such a power to enable land managers to adapt to climate change, as weather patterns continue to show evidence of change, which has an adverse effect on the ability to effectively undertake muirburn.

64. If no action is taken, there is likely to be an adverse reduction in the number and frequency of available burning days as a result of changing climatic conditions. As a result, heather and other moorland and grassland vegetation will become less productive. This will lead to a reduction in available habitats for species, some of which are specially protected, and the future viability of those plant species will reduce. The increase in the amount of dry fuel sources resulting from less pro-active muirburn will lead to an increased risk of wildfires burning down into the soil and reaching the peat layer. This in turn will lead to the risk of significant releases of carbon from the peat. It is anticipated that the fire and rescue services will be required to attend more wildfires as this risk increases. Any increase in incidences of wildfires could also impact on the economy through disturbance to tourism in rural areas.

Implementation

65. Implementing this policy proposal will require subordinate legislation and a Regulatory Impact Assessment. It is anticipated that the current permitted muirburn season will not be changed immediately.

PART 5, CHAPTER 2: FORESTRY

Maximising the potential of Scotland’s forest estate to support the Scottish Government’s climate change objectives

66. Part 5 Chapter 2 of the Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation. A consultation on these proposals was launched on 4 November 2008 to help inform the detailed development of these regulations. The consultation will close on 27 January 2009.

The National Forest Estate – renewable energy development

67. The National Forest Estate – land owned by the Scottish Ministers – extends to 665,000 hectares and has the potential to make a significant contribution to Scotland’s renewable energy targets through wind and hydro power generation. The Bill will enable the Scottish Ministers to make an order which will allow the Forestry Commissioners to enter into joint ventures with developers and local communities to accelerate renewable energy development. The joint venture approach offers enhanced returns from developments on the National Forest Estate will give local communities an opportunity to have a stake in the developments and will facilitate a strategic approach to developing the renewables potential of the Estate.

The National Forest Estate – releasing capital for woodland creation

68. The Scottish Forestry Strategy articulates the significant potential of forestry to help Scotland mitigate and adapt to climate change. Many types of woodland creation can contribute cost-effectively towards net emissions reduction and there is good potential to increase Scotland’s woodland area. This is being encouraged through grant incentives and through direct woodland creation on the National Forest Estate. However, a new approach is needed to achieve a step-change in activity commensurate with the challenges of climate change.

69. One option being explored, and covered by the consultation, is to release capital from the National Forest Estate, through the letting of cutting rights, to provide additional funding for woodland creation.

70. The Scottish Government places a high priority on efficient management of its capital assets. The National Forest Estate is the single largest public land resource held by the Scottish

17 Consultation on forestry provisions in the Scottish Climate Change Bill, available from: [http://www.forestry.gov.uk/fcesclimateconsultation](http://www.forestry.gov.uk/fcesclimateconsultation)

18 The Scottish Forestry Strategy and associated documents are available from: [http://www.forestry.gov.uk/sfs](http://www.forestry.gov.uk/sfs)
This document relates to the Climate Change (Scotland) Bill (SP Bill 17) as introduced in the Scottish Parliament on 4 December 2008

Government with a capital value in the order of £850 million. Forestry Commission Scotland has been evaluating the contribution that each part of the estate makes to delivery of the Scottish Forestry Strategy. It is clear that many parts of the estate are widely appreciated for the public benefits they bring, for example in terms of recreation, conservation, and community involvement. However, for a proportion of the estate these benefits are limited and the focus is likely to remain on commercial outputs. These areas are the most appropriate for the letting of cutting rights.

71. The Bill will provide an order making power that will allow for the delegation of the Forestry Commission’s land management function. This will enable the Scottish Ministers to lease land for forestry purposes and enable Forestry Commission Scotland to let cutting rights over that land, with the land management function being delegated to the lessee. Public benefits will be safeguarded through careful structuring of the agreements and rigorous selection of appropriate areas. The shaping of proposals will be in discussion with stakeholders. The consultation paper launched on 4 November 2008 seeks views on transferring the proceeds from leases and cutting rights to a not-for-profit trust, for investment in woodland creation. It also seeks views on transferring the landlord’s interest in this land to a not-for-profit trust, and on Ministers stipulating the constitution of such a not-for-profit trust.

Alternative approaches

72. Alternative approaches were considered in relation to (i) maximising the potential of the National Forest Estate to contribute to Scotland’s renewable energy targets (ii) the use of woodland creation as a means of helping to mitigate climate change and (iii) the funding and delivery of an enhanced woodland creation programme.

73. It would be possible to continue with the current approach to developing renewable energy generation on the National Forest Estate, whereby land is leased to developers. While leases have worked reasonably well, joint ventures have the potential to offer better financial returns and to provide a vehicle for allowing the local community to have a stake in the development. Another option is direct development of renewables by the Forestry Commission itself; however, without access to major capital finance and the necessary technical expertise, this is only feasible for very small-scale (e.g. hydro) schemes.

74. Given the challenging nature of the 80% emissions reduction target, woodland creation is a cost effective way of reducing net greenhouse gas emissions. A strategy that did not utilise this potential would have to place greater reliance on more expensive mitigation measures, or increase the risk of exceeding the annual emissions targets. Given the Scottish Government’s level of ambition in emissions reduction this is not seen as a sensible alternative. Well-designed woodlands can also deliver a wide range of economic, social and environmental co-benefits. A recent discussion paper produced by Forestry Commission has demonstrated that suitable land is available to meet the Scottish Forestry Strategy aspiration of 25% of Scotland woodland cover by the second half of the century. These new woodlands would be sequestering over 4 million tonnes of carbon dioxide per year by 205019.

75. Current sources of funding for woodland creation are the Scotland Rural Development Programme (SRDP), and, to a much lesser extent, proceeds from land sales through an existing “repositioning” programme on the National Forest Estate. The SRDP has made provision for £23 million per year (over the period 2007-13) for woodland creation, but grant rates are constrained by the Rural Development Regulation (EC 1698/2005)\(^{20}\). Given the complex range of cultural and fiscal factors affecting land use change, woodland expansion under the SRDP is likely to fall well short of the desired 10,000 hectares per year. Another alternative is to scale up the repositioning programme on the National Forest Estate, selling more land for investment in woodland creation. However, undertaking this on the required scale would require a change in strategic direction, leading to concern over loss of public benefits in relation to land that was sold.

**PART 5, CHAPTER 3: ENERGY EFFICIENCY**

**Promotion of energy efficiency**

76. The provisions on energy efficiency are intended to cover how the Scottish Ministers will promote energy efficiency in Scotland, particularly in relation to how this will improve the energy performance of buildings in Scotland. The provisions require the Scottish Ministers to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

77. Section 179 of the Housing (Scotland) Act 2006\(^{21}\) requires the Scottish Ministers to prepare a strategy for improving the energy efficiency of living accommodation. Section 179(6) allows that strategy to be part of a strategy for improving energy efficiency generally. The proposals for an action plan in the Climate Change (Scotland) Bill will have that practical effect. The Scottish Ministers therefore propose to repeal section 179 of the 2006 Act to avoid duplication. In addition, the proposals in the Bill will strengthen the existing statutory duty in the 2006 Act in terms of reporting and publishing. Bringing the duty in relation to living accommodation within the general duty in the Bill will ensure a consistent approach to tackling energy efficiency across all sectors, and will allow for better alignment of reporting on implementation and carbon savings, which can then be accounted against the overall target of this Bill.

78. The Scottish Ministers are required to report on the action plan annually, and to revise the action plan on a regular basis, but as a minimum every three years in line with the Spending Review process.

79. The action plan could be developed without the need for primary legislation, but the Scottish Government believes that a legislative requirement to develop, revise and report on an action plan will give it the weight which this issue requires. It will show the level of importance that these measures will play in tackling climate change and helping with rising fuel costs. It will also be an important means for delivering a coordinated approach.

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This document relates to the Climate Change (Scotland) Bill (SP Bill 17) as introduced in the Scottish Parliament on 4 December 2008

Consultation

80. The then Scottish Executive published a draft consultation on an energy efficiency and microgeneration strategy for Scotland which ran from 12 March to 11 June 2007\(^{22}\). There were 38 responses to the consultation which were analysed to produce a consultation analysis report. The consultation analysis report\(^{23}\) and a separate Scottish Government response to the issues raised by respondents were published on 4 June 2008\(^{24}\). There was broad support for steps to be taken to encourage improvements in energy efficiency across Scotland. Recognition was given to the role that the public sector must play, encouraging others by leading by example. The responses to the consultation have been taken into account in determining what measures to improve energy efficiency in Scotland would be supported under the current spending period. These will be considered as part of the development of the action plan.

81. A Strategic Environmental Assessment of the draft strategy was also undertaken, and the environmental report was published on 30 March 2007 as part of the consultation process\(^{25}\).

Alternative approaches

82. There are limitations on the actions that are within the legislative competence of the Scottish Government for promoting energy efficiency. The Scottish Government considered developing an Energy Efficiency Strategy for Scotland; however it was decided that an Action Plan would be a more appropriate way of articulating all the actions being taken to improve energy efficiency in Scotland. It would provide a consistent way of recording targets and monitoring performance against these, including: energy savings; financial savings; and where possible the carbon savings which were a result of these measures. This would then allow the Scottish Government to report on how this is contributing to the overall target of this Bill.

Energy performance of existing non-domestic buildings

83. The aim of the provisions for improving the energy performance of existing non-domestic buildings is to raise the contribution that the existing non-domestic stock can make to mitigating climate change. Buildings account for over 40% of emissions and there is scope to reduce these levels. They are to be subject to an assessment of the emissions of greenhouse gases and energy performance, an enhanced form of energy performance certificate (EPC). The results of the ongoing consultation will inform the detailed route forward but could call on building owners or their delegated persons to draw up improvement action plans. These plans may include building work actions for owners to follow which lead to improved performance, and where appropriate could also include operational measures that building users may choose to act on. This would also apply to traditional and historic buildings, recognising that appropriate environmental improvements should be undertaken with due consideration to the historic character of the buildings in question.

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84. The EU Directive 2002/91/EC on the energy performance of buildings (EPBD) introduced a requirement for existing non-domestic buildings to have EPCs in certain circumstances. EPCs provide important information on the energy performance of buildings; however, the EPBD does not require any action to be taken following the EPC to improve energy performance. It relies instead on the operation of market forces and wider forces in society, such as growing awareness of the importance of climate change, to drive improvements. Building owners may consider that there is a market advantage in making energy performance improvements following an EPC, or they may wish to do so for environmental reasons, but there is no other encouragement for them to take action at present.

85. In addition, EPCs are only required at the points of sale or rental, and for large public buildings of over 1000m². There is potential scope to go beyond the regime already required by the EPBD. This cannot be done using the powers contained within the European Communities Act 1972.

86. EPCs have a lifespan of 10 years and, in Scotland, legislation requires that all EPCs be produced using an asset rating. An asset rating is a calculated rating based on standard weather data and building use. It is similar in principle to “typical use” consumption figures for cars and is useful when comparing two buildings with different users, i.e. provides like-for-like figures. This is not only useful for potential owners and occupiers of buildings, but also has the ability to drive those who invest in buildings, the building owners, to spend money on appropriate carbon emission reducing building fabric and services.

87. A Low Carbon Building Standards Strategy for Scotland (The Sullivan Report) includes the following recommendations for Scottish Government concerning existing non-domestic buildings and energy performance certificates. These recommendations have helped to develop the provisions:

- consideration of developing practical performance standards for existing buildings (aligned with the energy performance certificates);
- introduction of legislation to require all owners of non-domestic buildings to conduct a carbon and energy assessment and produce a programme for upgrading;
- empowerment of local authorities, or similar public bodies, to check such assessments;
- publication of guidance for different types of non-domestic buildings to assist in this process;
- consideration of ways to encourage owners to implement recommendations arising from the carbon and energy assessment; and
- primary legislation to allow the Scottish Ministers the opportunity to extend the provision and type of Energy Performance Certificates.

88. Subject to the results of the consultation the Bill provisions will allow for a range of options for improving the energy performance of existing buildings, in the following ways:

- extending the scope of energy performance certificates into enhanced EPCs to take account of operational ratings as well as asset ratings and also embodied energy/carbon when a robust methodology is available to address the issue of historic and traditional buildings. This includes varying the lifespan of such assessments/certificates;
- requiring owners or their delegated persons to obtain enhanced EPCs (even though they are not selling or renting out their buildings);
- requiring owners of non-domestic buildings to formulate action plans for building work arising from the advice on their enhanced EPCs and encouraging them to implement their action plans;
- developing appropriate standards for such building work e.g. energy efficient lighting, roof space insulation or sub-metering; and
- empowering local authorities, or similar public bodies, to check enhanced EPCs.

89. The provisions are enabling in nature and provide for regulations in a number of areas to be made in due course. This is particularly the case in relation to the content and form of assessment.

Consultation

90. A public consultation, Action on Climate Change: Proposals for Improving the Energy Performance of Existing Non-Domestic Buildings ran from 2 September to 25 November 2008. It set out proposals for measures to require the assessment of the energy performance of non-domestic buildings and the implementation of measures to reduce carbon emissions, including the costs and benefits of seven different scenarios, which could arise depending on the regulations which are developed from the provisions in this Bill. A total of 69 responses were received and were being analysed at the time this Bill was introduced to the Scottish Parliament. The responses to this consultation will inform the development of the regulations.

Policy objectives

91. The provisions in the Bill enable the Scottish Ministers to create regulations which could be used to place obligations on building owners, responsible authorities and other bodies for improving the energy performance of non-domestic buildings.

92. These regulations could require that the owners of non-domestic buildings, or persons delegated by those owners, obtain an enhanced Energy Performance Certificate of their building, even if they are not required to obtain Energy Performance Certificate under the Energy Performance of Buildings Directive. Following such an assessment, owners could simply be given guidance to encourage them to implement the recommendations; or they could be legally required to develop a programme of cost-effective improvements to reduce emissions and improve energy performance, and thereafter they can carry out any necessary improvements.

93. Enhanced EPCs will encourage adoption of improvement measures by building owners or their delegated persons, when they consider it to be the most appropriate solution to reducing carbon emissions. Improvement measures could include insulation, measures to reduce air infiltration, equipment efficiency and equipment controls, and low carbon equipment where these are cost-effective.

94. It is intended that owners, or their delegated persons, will be required to retain the assessment and keep a record of the improvements that are made. They would also be expected to obtain a further enhanced EPC after a further period of time and draw up a further programme of improvements. One criticism of the EPBD is that at 10 years, the lifespan of an EPC is too long and when such a certificate reaches 7-8 years, it may no longer reflect the energy performance of the building. The provisions therefore allow for the lifespan of EPCs to be varied.

95. The provisions also allow for the regulations to require operational ratings to be undertaken alongside asset-based ratings. An operational rating takes account of how the building is used and managed and is useful for energy managers of the building because it includes factors they control. This has the scope to encourage those who manage non-domestic buildings to deliver carbon savings from the equipment already installed. With the inclusion of operational ratings, as well as asset ratings, not only would improvements affecting comfort loads be incorporated, but also improvements that affect how the building is managed.

Assessment of historic and traditional buildings

96. In certain cases the characteristics of historic and traditional buildings will require that the enhanced EPC process be developed to ensure that historic and traditional buildings are treated appropriately.

97. For the assessment process, taking into account the needs of traditional and historic buildings would require determining appropriate measures to reduce carbon emissions with due consideration to the historic character of the building; including the embodied energy of existing materials and any replacement materials. Any improvement programme would be designed to ensure that environmental improvements are undertaken with due consideration.

Implementation

98. Implementation of such duties would be phased in gradually through regulations introduced in secondary legislation. One approach would be to start with the largest buildings then progress in a series of well publicised stages until all non-domestic buildings were covered. The provisions would apply to public buildings, including the Government estate. The Scottish Ministers would have the ability to relax the provisions where appropriate.

99. Assessments would be targeted at building owners who frequently have complex decisions to make relating to the management of their buildings. Building owners may be able to delegate their enhanced EPC responsibilities to others, for example the tenants of buildings in certain instances. With operational ratings adopted as well as asset ratings it is appropriate that the person who does the asset rating also completes the operational rating.
**Alternative approaches**

100. Consideration has been given to the possibility of taking no action to legislate further in this area. This would mean that the production of enhanced EPCs would be wholly related to the turnover of buildings for sale or rental and there would be no incentive to improve existing non-domestic buildings other than by market forces.

101. The Bill allows for regulations to be created which will enable various approaches to be taken to the extent to which the enhanced EPCs are applied to the existing non-domestic building stock.

102. The consultation on proposals for improving the energy performance of existing non-domestic buildings sought views on these scenarios. The responses to this consultation will inform the development of the regulations which the provisions in this Bill will enable the Scottish Ministers to create.

103. Seven scenarios are possible as follows:

- enhanced EPCs on sale or rent for all buildings and for larger public buildings frequently visited by the public with additional guidance to promote uptake of recommendations;
- enhanced EPCs on sale or rent for all buildings and all large buildings with additional guidance to promote uptake of recommendations and an increase in the frequency of certification;
- enhanced EPCs on sale or rent for all buildings and for larger public buildings frequently visited by the public with additional guidance, an increase in the frequency of certification, and compulsory uptake of recommendations;
- enhanced EPCs on sale or rent for all buildings and for all large buildings with additional guidance, an increase in the frequency of certification, and compulsory uptake of recommendations;
- enhanced EPCs on sale or rent for all buildings and for larger public buildings frequently visited by the public with additional guidance.
- enhanced EPCs and operational rating on sale or rent and for larger public buildings frequently visited by the public; and
- enhanced EPCs and operational rating on sale or rent and for larger public buildings frequently visited by the public with additional guidance.

**Renewable heat**

104. Part 5 Chapter 3 of the Bill also places a duty on the Scottish Ministers to take such steps as they consider appropriate to promote the use of heat from renewable sources.

105. The Scottish Ministers have devolved responsibility for the promotion of heat from renewable sources. Its policy aim is to build a commercially viable, diverse, renewable heat
industry in Scotland. Renewable heat take-up across the UK is very low (<1%) and making progress on renewable heat will be crucial if we are to meet the EU 2020 target of 20% of final consumption of energy from renewable sources (which is made up of individual targets for electricity, heat and transport).

Consultation

106. Between 6 October and 1 December 2008 the Scottish Government, in cooperation with the Forum for Renewable Energy Development in Scotland, consulted on a framework for the development and deployment of renewable energy in Scotland29. The consultation sought views on the Scottish Government’s target of 20% of total Scottish energy use from renewables by 2020. It sets out what the Scottish Government is doing and what more it considers requires to be done to achieve this target. The intention is that the framework should contribute to the Scottish element of the UK National Action Plan for renewable energy if and when the proposed EU directive on renewable heat comes into force. In terms of renewable heat the consultation recommended that Scotland will need to produce 11% of heat from renewable sources in order to meet the overall target of 20%.

107. This framework includes a Scottish Action Plan on renewable heat which sets out a range of actions the Scottish Government is pursing on renewable heat under devolved competence, details are:

- providing existing financial support to the renewable heat market through Scottish Community and Householder Renewables Initiative and Scottish Rural Development Programme;
- providing an additional round of the Scottish Biomass Support Scheme focusing on heat only projects by businesses and demonstrator district heating schemes;
- providing a consumer information pack and case studies on best practice;
- introducing a target by April 2009 of 11% heat demand to come from renewables sources by 2020;
- preparing a National Waste Management Plan considering banning waste biomass being sent to landfill therefore providing fuel source for renewable heat;
- funding pilot projects for biomass heating to combat fuel poverty in off-gas-grid areas, with recommendations from Scottish Fuel Poverty Forum to follow; and
- consultation on proposed changes to energy building standards.

108. A total of 63 responses to this consultation were received by the closure date of 1 December 2008. These were being analysed at the time this Bill was introduced to Parliament.

109. The Scottish Government considers that there is a clear role for an incentive mechanism to promote the use of renewable heat to help accelerate the growth of renewable heat take-up thereby ensuring that Scotland meets its target. The UK Government recently consulted on the

forms of a likely incentive as part of its Renewable Energy Strategy. The work to introduce a regulatory and financial incentive mechanism to increase the take-up of renewable heat is at an early stage. The use of such a mechanism is a new step and involves certain challenges given the nature of the heat market – decentralised deployment; variety of fuel sources; no heat unit source or traded sector. Such a broad mechanism will take time to phase in and could touch on reserved matters. The Scottish Government is working closely with the UK Government as this work develops.

Alternative approaches

110. An alternative to taking these powers would be to do nothing. However, that risks Scotland and the UK not being able to meet the heat component of the EU renewable energy targets by 2020 as it is unlikely that voluntary action will result in sufficient growth of the renewable heat sector. The provisions in this Part of the Bill will enable the Scottish Ministers to introduce measures deemed appropriate to incentivise the production of heat from renewable sources.

PART 5, CHAPTER 4: WASTE REDUCTION AND RECYCLING

Policy objectives

111. This Chapter of the Bill sets out measures aimed at improving waste and recycling. These will help Scotland move to a “zero waste” society. “Zero waste” is about reducing the unnecessary use of raw materials, sustainable design of products, preventing waste, and recovering value from products and materials when they reach the end of their lives through recycling, composting or energy recovery. “Zero waste” contributes to our work on combating climate change. Waste management alone contributes about 2.5% of Scottish greenhouse gas emissions. However, reducing these emissions is a very small part of what can be achieved in combating climate change by adopting a zero waste strategy. Preventing and reducing the unnecessary use and processing of raw materials, using recyclate and getting value from waste rather than just throwing it away can all contribute much more to tackling climate change.

112. The provisions in this Chapter of the Bill enable the Scottish Ministers to make regulations addressing issues of importance in moving towards a zero waste society, and securing a more sustainable use of resources, thereby limiting anthropogenic climate change. It is important to note that implementing the provisions in this Chapter of the Bill would require secondary legislation which would be developed following further consultation and also be scrutinised by the Scottish Parliament.

113. Part 5 Chapter 4 of the Bill gives powers to the Scottish Ministers to make regulations in the following areas:

- waste prevention and management plans;
- waste data;
- deposit of recyclable waste;

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This document relates to the Climate Change (Scotland) Bill (SP Bill 17) as introduced in the Scottish Parliament on 4 December 2008

- procurement of recyclate;
- reduction of packaging;
- deposit and return schemes;
- charges for carrier bags.

Consultation Paper on Potential Legislative Measures to Implement Zero Waste

114. The consultation paper summarised the Scottish Government’s proposals for legislative proposals on zero waste. The consultation was made available on the Scottish Government’s website, and a wide range of stakeholders were invited to respond to the consultation. The consultation period ran from 28 July to 6 October 2008.

115. Some 80 organisations and individuals responded to the consultation. Opinion on the proposals was relatively balanced, especially given the small nature of the sample. Non-governmental organisations and private individuals tended to favour legislation, whereas business bodies, particularly those in retail, tended to be more opposed. Support was greatest for waste prevention and management plans, and for mandatory waste data returns, and least for action on carrier bags.

Alternative approaches

116. Details of any possible alternative approaches are given in the consideration of the individual topics. In the case of all the proposals in this Chapter of the Bill, however, an alternative approach to taking these powers would have been not to take them. Adopting this approach would not change the short-term position. Whether or not powers are taken, they have no immediate effect until they are turned into regulations. It is possible that voluntary action will achieve some of the goals for such legislation, in which case further action will be unnecessary. If voluntary action does not achieve these goals, however, legislative action will be, in the Scottish Government’s view, necessary. Without the powers now being proposed, appropriate legislation would not be possible.

Waste prevention and management plans

117. Commercial and industrial waste makes up the vast majority of Scotland’s waste. Although there is guidance and advice available to businesses on reducing the amount of waste they generate, there is no legal obligation requiring them to plan formally for such a reduction. Scottish Government policy on waste management is to move away from landfill towards ensuring that waste is re-used, recycled or recovered where possible. This leads to more efficient use of resources and a need for fewer waste disposal facilities. In both cases, this helps tackle climate change. As with prevention, the commercial and industrial sectors have a large contribution to make to this.

118. Site waste management plans are encouraged by Scottish Planning Policy (SPP) 10\textsuperscript{32} and by voluntary work through bodies such as Envirowise. The Bill gives the Scottish Ministers a power to make regulations imposing a duty on prescribed persons to prepare waste prevention and management plans; as well as making plans compulsory, a wider range of activities would be aimed at than by SPP 10.

119. This proposal is for a power to place a duty on businesses and public bodies to prepare formal waste prevention and management plans. Ministers would prescribe in regulations the businesses and bodies required to prepare a plan (or plans), as well as the matters to be included in a plan. It is intended that the plans can be required for a range of different matters. For example, the eventual regulations might require a plan for an individual construction project. Alternatively, they might require a plan for waste generated by a business on an on-going, day-to-day basis (e.g., office waste). It is intended that these regulations would deal with measures to prevent as well as manage waste, and would not necessarily be restricted to individual projects.

120. Should the preparation of waste prevention and management plans be made compulsory by regulations under this Chapter of the Bill, a regime will need to be established to ensure that plans are drawn up, that they are sufficiently rigorous, and that they are followed. A body will need to be established, or nominated, to do this. The provisions of this Chapter of the Bill grant powers enabling such a regime to be set up.

121. The revised Waste Framework Directive which was adopted on 20 October 2008 states that by 2020 the preparing for re-use, recycling and other material recovery, including backfilling operations using waste to substitute other materials, of non-hazardous construction and demolition waste excluding naturally occurring material defined in category 17 05 04 in the European Waste Catalogue (EWC) shall be increased to a minimum of 70% by weight. These provisions would help meet that requirement.

Waste data returns

122. These provisions enable the Scottish Ministers, through the creation of regulations, to require businesses and public bodies to provide information to SEPA about the waste that they produce. It will be difficult to move to a zero waste society without much better information about waste arising and their management, treatment and disposal in Scotland. Good, reliable waste data informs policy-makers when they are developing new ways of reducing and managing waste. It informs the private sector when it is seeking to invest in waste infrastructure as part of the move away from landfill. Such information would also help to meet the obligations under the Waste Statistics Regulation (2150/2002/EC)\textsuperscript{33}. This establishes a framework for the production of Community statistics on the generation, recovery and disposal of waste. It requires Member States and the European Commission to produce Community statistics on the generation, recovery and disposal of waste.


123. There are other Community considerations. The Waste Framework Directive, as revised on revised on 17 June 2008 and adopted on 20 October 2008, states:

“In order to comply with the objectives of this Directive, and to move towards a European recycling society with a high level of resource efficiency, Member States shall take the necessary measures designed to achieve the following targets:

(a) by 2020 the preparing for re-use and the recycling of waste materials such as at least paper, metal, plastic and glass from households and possibly from other origins as far as these waste streams are similar to waste from households, shall be increased to a minimum of overall 50% by weight

(b) by 2020 the preparing for re-use, recycling and other material recovery, including backfilling operations using waste to substitute other materials, of non-hazardous construction and demolition waste excluding naturally occurring material defined in category 17 05 04 in the European Waste Catalogue (EWC) shall be increased to a minimum of 70% by weight.34.”

124. The Scottish Government and SEPA currently lack reliable data with which to assess compliance with (b).

125. Other means were considered for achieving better information on waste. For example, there is an obligation under section 34 of the Environment Protection Act 199035 to transfer a written description of waste at the time that waste is transferred. This obligation is set out in detail in the Environmental Protection (Duty of Care) Regulations 199136 (SI 1991/2839). Furthermore, use could be made of section 2(2) of the European Communities Act 197237 to make regulations dealing with waste information, on the basis of the Waste Statistics Regulation. However, the former does not cover non-controlled waste (gaseous effluents; radioactive waste; mineral waste; animal carcases, faecal matter etc; waste waters and decommissioned explosives). The latter excludes radioactive waste. To ensure that a full range of statistics is available for all wastes, new primary legislation is necessary.

126. A regime of enforcement would be necessary to ensure that the statistics required are actually returned, and are accurate. SEPA is mentioned in this context because it already collates waste statistics. There are enforcement powers attached to the 1991 Regulations, but these are not very efficient, since no body is given a specific duty to enforce them. Provision to address these matters is in this Chapter of the Bill.

Deposit of recyclable waste

127. The intention behind this provision is to encourage recycling by providing people with opportunities to deposit waste for recycling when they are not at home. This will contribute to a more efficient use of resources, cut the need for landfill, and help to combat littering and other improper waste disposal.

128. In recent years there has been a significant improvement in recycling and composting facilities provided by local authorities for householders which has led to increased recycling and composting rates for household waste. It is now intended to give people more opportunities to recycle their waste when they are at work or in some public places or attending certain public events. Although many employers provide recycling facilities for their staff there is no legal requirement for them to do so. Recycling facilities are also found in other places such as at airports, in the street and at various retail outlets (for example, plastic bag recycling facilities), but again there is currently no legal requirement to provide these facilities.

129. There are some statutory obligations on businesses to take back certain types of waste, for example retailers of electrical and electronic equipment must take back waste electrical and electronic equipment in certain circumstances. It is not intended that these provisions should affect these producer responsibility schemes, except to the extent that businesses under obligations to take back waste and send it for recycling or re-use (e.g., under the Producer Responsibility Obligations (Packaging Waste) Regulations 2007 (SI 2007/871)) should be able to use material collected in receptacles provided under these new duties to meet those obligations.

130. It is intended that the regulations may require receptacles to be provided for a broad range of types of waste. Without prejudicing detailed considerations, it is possible that, for example, supermarkets could provide recycling facilities at or near tills for packaging which customers could remove in situ. Offices could provide receptacles in which employees could recycle their own paper, as well as that of the workplace. This would not be a complete innovation: already such facilities are available in places. In practice, Ministers would only prescribe types of waste if there was capacity to recycle that waste and a market for the resulting recyclate.

131. It is intended that businesses or public bodies or event organisers which are under a duty to provide these facilities will also be under a duty to transfer the waste collected in them to a person with the correct environmental authorisations, specifically to be recycled or re-used, and that there may be a duty to ensure that it actually is recycled or re-used.

132. These provisions would also enable those who hold sporting or cultural events to be placed under a duty to provide receptacles in which those attending could leave materials such as plastic cups and programmes. These materials could also be recycled. Again, there are already examples of those who hold events giving their customers the opportunity to recycle.

133. Should duties to provide such facilities be established through regulations, it will be necessary for a monitoring and enforcement regime to be established to ensure that they are provided, and used and operate correctly. This Chapter of the Bill contains provisions allowing such a regime to be set up, and to establish or nominate a body to operate the regime.

134. These provisions are not intended to implement any specific European obligations, although they will contribute to the UK’s obligations under the Landfill Directive (1999/31/EC)\textsuperscript{39} to reduce the amount of waste being put to landfill. The revised Waste Framework Directive which was adopted on 20 October 2008 states that Member States shall take measures to promote high quality recycling and to this end they shall set up separate collection of waste where technically, environmentally and economically practicable and appropriate to meet the necessary quality standards for the relevant recycling sectors. These provisions would help meet that requirement.

Procurement of recyclate

135. These provisions give the Scottish Ministers powers to set binding requirements in regulations on businesses and public bodies requiring them to include a specification that a minimum percentage of materials used will be made from recyclate or re-used materials in certain procurement contracts. (Recylcate is material which has been reprocessed, whereas re-used materials are put to their new use without further processing.) This will encourage more efficient use of resources in itself and could help to generate a wider market for, and broader acceptance of, the use of recyclate and re-used materials.

136. Again, there is a possible alternative to statutory requirements. There are voluntary arrangements in place which set targets for recycled content in public sector procurement contracts in Scotland. In November 2006 the then Scottish Executive requested public bodies to set minimum levels of recycled content in certain procurement contracts.

137. These voluntary arrangements relate to construction projects and procurement of paper. They specify that at least 10% of the total value of materials used in construction projects over £1million should be derived from recycled or re-used content; there should be at least 50% recycled content products used in printing and writing paper contracts; and there should be 100% recycled content in products used in tissue paper contracts.

138. It is possible that voluntary action by public bodies and others could result in widespread use of recyclate and re-used materials. This is not yet the case, however, and the Scottish Ministers note that the voluntary arrangements described above apply only to public bodies, whereas the proposals in this Chapter of the Bill could apply to businesses as well.

139. It is likely that in very many cases the use of recyclate and re-used materials would cut the costs of contracts, for both public bodies and businesses, particularly as recycling markets improve. However, the Scottish Ministers are aware that there may be a reluctance to use former

wastes. Essentially, this is a kind of market failure which may be addressed by Government action.

140. Again, in the event of making the specification of recyclate and re-used materials compulsory through regulations, arrangements would be required to ensure that these materials were specified, and that the contractual obligations were observed. A body would have to be set up or nominated to do this. This Chapter of the Bill contains provisions allowing such a regime to be developed.

Reduction of packaging

141. The Bill gives the Scottish Ministers powers to set binding targets for overall reductions in packaging. The purpose of these targets is to reduce the amount of packaging that ends up as waste, thus reducing the use of resources and cutting the need for waste disposal facilities.

142. The Packaging and Packaging Waste Directive (94/62/EC) divides packaging into three types: sales packaging or primary packaging (packaging conceived so as to constitute a sales unit to the final user or consumer at the point of purchase); grouped packaging or secondary packaging (packaging conceived so as to constitute at the point of purchase a grouping of a certain number of sales units whether the latter is sold as such to the final user or consumer or whether it serves only as a means to replenish the shelves at the point of sale, it can be removed from the product without affecting its characteristics); and transport packaging or tertiary packaging (packaging conceived so as to facilitate handling and transport of a number of sales units or grouped packagings in order to prevent physical handling and transport damage).

143. It is intended that targets might be set either for all three types of packaging taken together, or in respect of each type individually.

144. The duty to meet the targets would fall primarily on retailers, but might also be placed on those who put packaging on the market in Scotland, i.e., those supplying packaged goods to retailers.

145. The targets would be set in regulations and could be either in absolute or relative terms. They might require a reduction in a certain weight or volume of packaging, or they might require a reduction of a certain percentage in the amount of packaging supplied by a particular retailer. Alternatively, they might be based on factors such as retail growth or market share. It is also possible that instead of requiring a reduction in the actual amount of packaging, the regulations might instead require a reduction in the potential amount of greenhouse gases generated by the packaging.

146. The reduction of the overall amount of packaging supplied to consumers could be met in a variety of different ways. It would be up to the retailers and suppliers to decide how to meet those targets. The intention is to encourage retailers and others to seek, for example, alternatives to traditional packaging and marketing techniques. For example, if a retailer was required to

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reduce the amount of packaging it provided to consumers by 5%, the retailer would be able to choose how to meet this target. Among the means it may use to do so could be one or more of the following:

- “light-weighting” the packaging used, such as reducing the weight of glass bottles (this has been a common practice in recent years);
- using different forms of packaging, such as greaseproof paper for meat, instead of plastic trays and sleeves;
- incentivising consumers to buy in bulk, or disincentivising purchases in small amounts using more packaging;
- encouraging refills;
- altering display arrangements to obviate the need for packaging;
- removing packaging altogether;
- supplying concentrated products which require less packaging; and
- removing layers of packaging.

147. Although retailers, suppliers and wholesalers are not directly responsible for packaging all goods supplied in shops, they may change the way in which some goods are packaged (e.g., own brands and loose goods provided in shops) and also feed these targets back up the supply chain to their suppliers by requiring them through ordinary contractual arrangements to provide different forms of packaging.

148. At present, it is difficult to disaggregate statistics about packaging for Scotland from those provided for the UK as a whole, and the methods used to do so may be inexact. This is because there is no obligation to provide Scottish statistics. As a first step, therefore, the regulations would contain provisions requiring those subject to them to supply information about the amount of packaging used in Scotland, which would then be used as a baseline measure for setting the targets.

149. Alternative means of meeting this objective are possible. The Courtauld Commitment is an agreement between WRAP (the Waste and Resources Action Programme) and major retailers to, first of all, halt the growth in packaging provided to consumers and then to reduce the overall amount of such packaging. Preliminary data suggests the first target may have been met. Real progress under this Commitment towards genuine reductions in packaging could obviate the need to make these reductions a statutory requirement; however, it is important to take the powers now so that measures may be taken if the Commitment fails to yield satisfactory results.

150. Should binding packaging reduction targets be set through regulations, provision will be needed to monitor and enforce these targets. Enforcement would include ensuring that returns were properly and correctly made. A body would have to be established or empowered to do this (it could, for example, be SEPA, which already has some responsibilities in relation to packaging). This Chapter of the Bill contains provisions allowing such a regime to be set up.
Deposit and return schemes

151. There are voluntary schemes in operation in Scotland whereby food packaging, particularly drinks bottles, may be returned to retailers against repayment of a deposit notionally included in the purchase price of the product. The retailer then returns the packaging to the producer and is reimbursed for payment of the deposit. There are some statutory deposit and return schemes in operation in other parts of the world, including within the EU, for example in Denmark, Sweden and Germany.

152. The Bill gives the Scottish Ministers powers to set up a statutory deposit and return scheme through regulations. This would require retailers to include a specified deposit as part of the price of the product when supplying certain types of packaging to purchasers. The deposit would then be repaid to the purchaser (or anyone else who brought it back) on return of the packaging (whether to the same retailer or another). The intention is that regulations would specify the types of packaging for which a deposit must be charged, and the amount of the deposit.

153. A deposit and return scheme would reduce the use of resources by ensuring that more packaging was recycled, since deposits would be paid against return of the actual packaging, which could then be recycled or re-used. At the same time, by taking packaging out of the general waste stream, it should reduce reliance on waste disposal (landfill and incineration) as well as reducing the amount of littering and fly-tipping.

154. Provision is also included regarding the administration of the system, obligations as between producers of packaging and retailers, and record-keeping and enforcement. A central administrative body is responsible for the operation of the Danish scheme, for example, and it may be felt necessary to establish an equivalent here. An approval mechanism of alternative bodies with which those under the obligation to operate deposit and return schemes might also be required.

155. An alternative to providing powers through this Chapter of the Bill would be to consider the use of sections 93 – 95 of the Environment Act 1995\textsuperscript{41} to set up a producer responsibility scheme, which might have deposit-and-return characteristics. However, such a scheme – like one set up under the provisions of this part of the Bill - would have to be carefully tailored both to meet the requirements of the Scottish situation, and Community requirements on the circulation of goods. The regulations would have to deal with the need for an organising body, its establishment, and its powers and duties. A great deal of flexibility is required, and the provisions in the 1995 Act do not appear to provide this, appearing in fact to be rather detailed and prescriptive and designed to provide the kind of producer responsibility scheme currently operated for packaging, waste electrical and electronic equipment, and end-of-life vehicles, rather than a deposit-and-return scheme.

Charges for carrier bags

156. The Scottish Ministers are given powers in this part of the Bill to make regulations about charging by sellers of goods for the supply of carrier bags. Carrier bags are given away freely in large numbers. Many goods are already packaged and carrier bags are often simply “add on”

packaging that has no essential purpose. The provisions in the Bill are designed to reduce the number of these bags in circulation. The objectives of doing so by means of a charge are to protect the environment both by the reduction in the number of carrier bags and by investing the charges raised in an appropriate manner, and to raise awareness of environmental issues such as recycling and litter.

157. These powers enable Ministers to prescribe in regulations which retailers are required to charge for carrier bags. This may be done by reference to the type of goods sold, the type of seller, turnover or other factors. The regulations would also define “carrier bags” and specify either the amount to be charged for each bag, or provide for how that amount is to be determined. The regulations would also be able to specify how the net proceeds are to be used, to ensure (if necessary) that the proceeds are applied to causes which operate in Scotland.

158. Records will need to be kept about matters such as the number, type and tonnage of carrier bags for which a seller has imposed the charge. The powers also extend to appointing a body or bodies to monitor the accuracy of these records, and also to enforce the regulations, including ensuring that the proceeds were actually spent on the required good causes and to impose sanctions for failure to comply with the regulations.

159. Alternative means of achieving these aims have been considered. The Scottish Government is actively working with retailers on voluntary measures aimed at reducing the number of carrier bags used by consumers. At a meeting between the Scottish Government and retailers on 15 May 2008, it was agreed to set up a Zero Waste Retailers Group which will consider various options to cut bag use on a voluntary basis. Retailers have recently announced that they will aim to cut carrier bag use by 50% by Spring 2009, using 2006 as a baseline. Some retailers have independently introduced a charge for such bags.

160. The Scottish Ministers want to continue working with retailers on a voluntary basis and see legislation in this area as the course of last resort. However, they wish to have powers available to them to require retailers to charge consumers for carrier bags in the event that voluntary measures are unsuccessful.

**EFFECTS ON EQUAL OPPORTUNITIES, HUMAN RIGHTS, ISLAND COMMUNITIES, LOCAL GOVERNMENT, AND SUSTAINABLE DEVELOPMENT**

**Equal opportunities**

161. The Climate Change (Scotland) Bill contains a broad framework which will enable the Scottish Government to tackle climate change, with a limited number of specific provisions, mostly in the form of powers enabling the creation of secondary legislation, to reduce emissions directly or adapt to the risks associated with climate change impacts. Rather than the framework created by the Bill, it is the specific policies which will need to be introduced at a later date to meet the targets in the Bill which may have an impact on equal opportunities, including age, disability and gender. These measures will be subject to appropriate assessment and consultation prior to implementation. A provision is included in the Bill to ensure that the Scottish Ministers and the advisory body take account of equal opportunities when carrying out their functions under this Bill.
162. An Equality Impact Assessment of the Climate Change (Scotland) Bill has been carried out and is published on the Scottish Government website.42

Human rights

163. Section 29 of the Scotland Act 1998 sets out the limits on the legislative competence of the Scottish Parliament. One of those limits is that the Bill must not include any provision which is incompatible with any of the rights granted by the European Convention on Human Rights (ECHR) which are listed in Schedule 1 to the Human Rights Act 1998 (known as “the Convention rights”). Ministers’ view is that none of the provisions in the Bill is incompatible with any of the Convention rights.

164. Part 1 of the Bill creates a framework of powers and duties setting a framework for the reduction of greenhouse gas emissions. Nothing in Part 1 of the Bill directly affects the rights or obligations of any person in such a way as to engage their Convention rights.

165. Part 2 of the Bill provides powers which would enable the Scottish Ministers to create a new, independent, non-departmental public body and confer functions on it. There are also powers to confer equivalent functions on a designated existing body. It also confers related duties upon the Scottish Ministers. Neither the powers to enable the creation of a public body nor the creation of any of the functions or duties in Part 2 has any direct effect on the rights or obligations of any person in such a way as to engage their Convention rights.

166. Part 3 of the Bill creates duties on the Scottish Ministers to make reports and provides for the Scottish Ministers to create additional reporting requirements. These provisions contain no elements which interfere with any person’s Convention rights.

167. Part 4 of the Bill creates powers which enable the Scottish Ministers to place duties on public bodies in relation to climate change and to give guidance to public bodies in relation to climate change. These enabling powers do not in themselves affect any person’s Convention rights and it is very unlikely that the exercise of the powers could affect any person’s human rights. Section 6 of the Human Rights Act 1998 also requires that a public authority, which includes the Scottish Ministers, must act in a way that is compatible with the Convention rights. Therefore no interference in the Convention rights is expected to result from the use of these powers.

168. Part 5 Chapter 1 of the Bill creates a power which enables the Scottish Ministers to vary by order the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change. This order-making power has the potential, upon exercise, to engage Protocol 1 Article 1 of the European Convention on Human Rights, which provides for the right to the peaceful enjoyment of one’s possessions. Restricting the times during which muirburn may be made on land may be considered to amount to a control of use of that land. However, this power is considered to be in the public interest, and therefore compliant with the Convention, as its exercise is dependant on the legitimate social and

42 Climate Change (Scotland) Bill Equality Impact Assessment, available from:
http://www.scotland.gov.uk/Topics/Environment/Climate-Change/16327/Climate-Change-Bill
environmental aim of adapting to climate change. The power is also considered to comprise a proportionate legislative response to changing climatic conditions.

169. *Part 5 Chapter 2* of the Bill creates powers for the Scottish Ministers to modify the functions of the Forestry Commissioners by regulations where it is necessary or expedient to do so in relation to climate change. These enabling powers do not in themselves affect any person’s Convention rights; it is only in the exercise of the power that a person’s rights may be engaged. However, as detailed above, section 6 of the Human Rights Act 1998 requires that a public authority, which includes the Scottish Ministers, must act in a way that is compatible with the Convention rights. Therefore no interference in the Convention rights is expected result from the use of these powers.

170. The requirement in *Part 5 Chapter 3* for the Scottish Ministers to produce an energy efficiency action plan contains no elements which could interfere with any person’s Convention rights.

171. *Part 5 Chapter 3* of the Bill also contains provisions for improving the energy performance of existing non-domestic buildings. These provisions, upon exercise, have the potential to engage Protocol 1 Article 1 of the European Convention on Human Rights, which provides for the right to the peaceful enjoyment of one’s possessions. Placing requirements on building owners or their delegates to certify or improve the energy performance of their buildings may be considered to amount to a control of use of that property. However, this power is considered to be in the public interest, and therefore compliant with the Convention, as its exercise is dependant on the legitimate social and environmental aim of acting to reduce greenhouse gas emissions and mitigate against the effects of climate change. Any powers which may be given to local authorities to check enhanced EPCs would have the potential to engage Article 8, the right to respect for private and family life, home and correspondence, by gathering and holding information in that process. However, local authorities will be bound by the Data Protection Act 1998 to prevent the disclosure of personal information.

172. The final set of provisions in *Part 5 Chapter 3* of the Bill contains a duty on the Scottish Ministers to promote the use of heat produced from renewable sources. These powers in themselves are not considered likely to affect a person’s human rights. However, the Scottish Ministers actions in establishing a grant scheme may engage Article 8 the right to respect for private and family life, home and correspondence, by gathering and holding information in that process. The Scottish Ministers will be bound by the Data Protection Act 1998 to prevent the disclosure of personal information. The Scottish Ministers are also required to put in place measures to protect people who might be unduly disadvantaged by the introduction of such a scheme.

173. *Part 5 Chapter 4* of the Bill contains measures aimed at reducing waste and increasing recycling. This Chapter of the Bill has no immediate effect on any rights granted by the Convention. Any effect would be experienced only if the powers to make regulations it sets out were actually to be exercised by the Scottish Ministers, and the effect would then depend on the form that those regulations might take. Proposals for such regulations would be subject to detailed consultation with interested parties in accordance with normal practice, and in each
instance Ministers would be subject to the need, established by section 54(2)(a) of the Scotland Act 1998, not to contravene any of the rights granted by the Convention.

**Island communities**

174. The Climate Change (Scotland) Bill contains provision which requires that the Scottish Ministers take account of those living in remote and rural communities, such as island communities, when setting the annual emissions reduction targets. The relevance of this is that these targets will drive the policies put in place over the decades to 2050 and it is those policies which may potentially have an effect on those living in remote communities such as the Scottish islands.

175. The Scottish Ministers are committed to ensuring that every policy which is designed to reduce emissions directly will be subject to the appropriate level of assessment and consultation prior to implementation. If any of the measures developed under the provisions within this Bill were to present a risk of an undesirable impact, it could be possible to adapt the measures in order to avoid that impact. For example, if measures on packaging reduction were thought likely to have an undesirable effect on the transport of goods to or from island communities, it could be possible to exempt those communities from the legislation. This would be considered as part of the Regulatory Impact Assessment for any secondary legislation brought forward.

**Local government**

176. Certain provisions within the Bill allow for the creation of regulations which may impact on local government. Part 4 provides the Scottish Ministers with the ability to impose, by regulations, duties on bodies with functions of a public nature, which could include local authorities. This Part also provides the Scottish Ministers with the ability to give guidance to bodies with functions of a public nature in relation to these duties and to report upon their compliance with climate change duties. The effects will vary greatly, depending on a range of factors including whether the regulations are introduced and the nature of the duties or guidance created. A provision is included in the Bill to ensure that the Scottish Ministers consult with such associations of local authorities as are appropriate when creating duties under Part 4 of the Bill.

177. *Part 5 Chapter 3* of the Bill contains provisions for improving the energy performance of existing non-domestic buildings. Local authorities will have interests in these provisions both as building owners and as enforcement bodies through the menu of Bill provisions, subject to the results of the ongoing consultation, as follows:

- extending the scope of energy performance certificates into enhanced EPCs to take account of operational ratings as well as asset ratings and also embodied energy/carbon when a robust methodology is available to address the issue of historic and traditional buildings. Varying the lifespan of such assessments/certificates;
- requiring owners or their delegated persons to obtain enhanced EPCs (even though they are not selling or renting out their buildings);
• requiring owners of non-domestic buildings to formulate action plans for building work arising from the advice on their enhanced EPCs and encouraging them to implement their action plan;
• developing appropriate standards for such building work e.g. energy efficient lighting, roof space insulation or sub-metering; and
• empowering local authorities, or similar public bodies, to check enhanced EPCs.

178. Part 5 Chapter 4 of the Bill includes provisions on waste reduction and recycling. These provisions may result in savings, such as from the costs of using a landfill service, including landfill tax, or from the reduced need for litter collection. The provisions may result in modest increases in administrative costs. More detail on the financial implications is available in the Financial Memorandum.

Sustainable development

179. The goal of sustainable development is to enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life without compromising the quality of life of future generations. This lies at the core of the Scottish Government’s aim to reduce emissions of Scottish greenhouse gases by 80% by 2050, which represents a major step in making Scotland more sustainable.

180. Climate change is a global issue which, ultimately, requires a global response. However, by taking action, Scotland can demonstrate leadership and do its part in addressing some of the problems which would otherwise be expected to arise from climate change, such as the impact on communities of increased flooding and chaotic weather; and the economic damage, estimated by the Stern Review as costing the world economy between 5% and 20% of GDP each year.

181. It is intended that the framework introduced by this Bill will drive government policies over the coming decades which will in turn mainstream activities to reduce emissions. The Scottish Government wants to be able to create an environment in Scotland which will help position Scottish businesses to take advantage of new markets for low-carbon technologies, estimated by the Stern Review as being worth at least $500 billion globally by 2050.

182. The muirburn provisions in Part 5 Chapter 1 of the Bill have potential benefits for the sustainability of the rural economy, upland habitats and species. If land managers cannot continue muirburn in a manner which takes account of changing climate, there could be an increased risk of reduced grazing for livestock in rural areas across Scotland, including those on the Scottish islands. This could compound the effects of any economic downturn in hill farming. There could also be an increased risk of land abandonment, which would impact on the viability and sustainability of rural communities including the loss of land used to help supply local sustainable food sources. Muirburn has the potential to support the continued sustainability and diversity of upland habitats and the species these habitats support, through well managed burning proving regeneration, habitat mosaics, botanical diversity and vegetation structures.

183. The shooting and stalking industry, which relies on actively managed moors, is worth £240 million to the Scottish economy. Heather requires active land management to encourage its
regeneration and seeding through a range of activities including muirburn. The exact value of Scottish heather to the economy is not known, but it is known that 78% of UK visitors and 89% of international visitors explore the Scottish scenery. All of these elements have the potential to adversely impact on economic sustainability, particularly in more rural areas.

184. The forestry provisions in Part 5 Chapter 2 of the Bill allow the role played by the Forestry Commission in tackling climate change to be extended through increased woodland creation and renewable energy developments. Many types of woodland creation can contribute cost-effectively towards net emissions reduction through the resulting photosynthesis potential of the trees and plants. Woodland creation also has strong potential benefits to the sustainability of both rural and urban areas, creating sustainable wood fibre and renewable fuel resources, sustaining employment in forestry, supporting development of forest habitat networks, extending the role of woodlands in natural flood and water management, supporting urban regeneration, and increasing opportunities for recreation, access, outdoor learning and community participation in woodlands.

185. Part 5 Chapter 3 concerns energy efficiency, energy performance of non-domestic buildings and renewable heat. As well as supporting the reduction of greenhouse gas emissions these provisions should also have the additional benefit of driving forward more efficient use of resources and improving the security of Scotland’s energy supply.

186. Energy – its generation and usage – are key areas from which emission reductions will be sought. The Review of Fuel Poverty in Scotland, published on 22 May 2008, indicates that around half of pensioner households in private homes were estimated to be fuel poor in 2005-06. Increases in fuel costs may affect those in pensioner households and those with a disability/long-term illness proportionately more in a negative way. However, measures in the Bill, such as the duty on the Scottish Ministers to prepare and publish an action plan for the promotion of energy efficiency, may result in greater energy efficiency measures which may affect these households more positively.

187. By providing for regulations to be made designed to improve the energy performance of non-domestic buildings, the Bill could enable steps to be taken which would help the owners of these buildings, including many Scottish businesses, to reduce over the long-term the amount of energy they consume, helping to control their costs and therefore improve economic viability. In the Scottish public sector, making more efficient use of resources in this way could result in significant improvements to the social benefit of public spending.

188. The waste management and recycling provisions in Part 5 Chapter 4 of the Bill will help to reduce the local and global environmental impact of our consumption and production through a more efficient use of resources and the generation of less waste, and a concomitant reduction in the amount of greenhouse gases generated by its management. This Chapter of the Bill will also

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help protect the natural environment is for future generations, by minimising the land set aside for waste disposal facilities.
This document relates to the Climate Change (Scotland) Bill (SP Bill 17) as introduced in the Scottish Parliament on 4 December 2008

CLIMATE CHANGE (SCOTLAND) BILL

DELEGATED POWERS MEMORANDUM

PURPOSE

1. This memorandum has been prepared by the Scottish Government in accordance with Rule 9.4A of the Parliament’s Standing Orders, in relation to the Climate Change (Scotland) Bill. It describes the purpose of each of the subordinate legislation provisions in the Bill and outlines the reasons for seeking the proposed powers. This memorandum should be read in conjunction with the Explanatory Notes and Policy Memorandum for the Bill.

2. The contents of this Memorandum are entirely the responsibility of the Scottish Government and have not been endorsed by the Scottish Parliament.

Outline of Bill provisions

3. The Bill contains provisions aimed at providing a framework to ensure that the Scottish Government takes immediate and sustained action to reduce Scotland’s greenhouse gas emissions by 80% from 1990/1995 levels by the year 2050. It also contains a number of measures to help Scotland reduce its emissions and adapt to climate change.

4. The Bill has six parts:

- **Part 1** creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050. To help ensure the delivery of these targets, this Part of the Bill also requires that Scottish Ministers set annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050.

- **Part 2** contains provisions relating to advice. Among other things, this Part allows the Scottish Ministers to establish a Scottish Committee on Climate Change, or to designate an existing body, to exercise advisory functions.

- **Part 3** places duties on the Scottish Ministers requiring that they report regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill.

- **Part 4** contains powers to allow the Scottish Ministers, by order, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating
This document relates to the Climate Change (Scotland) Bill (SP Bill 17) as introduced in the Scottish Parliament on 4 December 2008

to their climate change duties and to require that they report upon the discharge of those duties.

- **Part 5** contains a number of provisions to reduce emissions and adapt to climate change and is divided into the four chapters—
  - Chapter 1 requires Scottish Ministers to lay a programme for adaptation to climate change before the Scottish Parliament, and allows for the ability to vary the permitted times for making muirburn.
  - Chapter 2 allows the Scottish Ministers to modify the functions of the Forestry Commissioners in or as regards Scotland but only if it is necessary for climate change purposes.
  - Chapter 3 allows of the Scottish Ministers to make regulations for the assessment of the carbon and energy performance of non-domestic buildings, places a duty on the Scottish Ministers to promote energy efficiency, and places a duty on the Scottish Ministers to promote renewable heat.
  - Chapter 4 allows the Scottish Ministers to make regulations in relation to waste reduction and recycling.

- **Part 6** contains general and miscellaneous provisions.

5. Further information about the Bill’s provisions is contained in the Explanatory Notes and Financial Memorandum published separately as SP Bill [17-EN], and in the Policy Memorandum published separately as SP Bill [17-PM].

**Rationale for subordinate legislation**

6. The Bill contains a number of delegated powers provisions which are explained in more detail below. In deciding whether these provisions should be specified on the face of the Bill or left to subordinate legislation, the Scottish Government has carefully considered the importance of each matter against the need to—

- ensure that future measures needed for the purposes of reducing emissions or adapting to the effects of climate change are flexible and can be introduced, if required, quickly in the light of experience without the need for primary legislation; and
- allow detailed administrative arrangements to be kept up to date within the basic structures and principles set out in the primary legislation.

**General subordinate legislation provision**

7. Section 64 (subordinate legislation) contains the Bill’s general subordinate legislation provision. Subsection (1) provides that any power conferred on the Scottish Ministers to make orders or regulations is exercisable by statutory instrument. Subsection (2) allows different provision to be made for different purposes and permits the powers to be used to make consequential, incidental, supplementary, transitory, transitional or saving provision. Subsection
This document relates to the Climate Change (Scotland) Bill (SP Bill 17) as introduced in the Scottish Parliament on 4 December 2008.

(3) enables secondary legislation made under this Bill to amend the Bill and any other piece of legislation.

8. Subsection (4) provides that the procedure applicable to the making of secondary legislation under this Bill is generally affirmative resolution procedure. Subsections (6) to (8) set out the exceptions to this, which attract negative resolution procedure.

9. All of the delegated powers provisions in the Climate Change (Scotland) Bill are listed in this Memorandum, with a short explanation of what each power allows, why the power has been taken in the Bill and why the form of Parliamentary procedure selected is considered appropriate.

DELEGATED POWERS

PART 1 – EMISSIONS REDUCTION TARGETS

Section 4 - Setting annual targets

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision

10. Section 4 imposes a requirement on the Scottish Ministers to set annual targets by order. Subsection (2) states for which years the targets must be set. The Scottish Ministers intend to set targets in batches; the first batch will be for 13 years (2010-2022), with subsequent targets set in batches of five years until the last batch, which will be three years in length (2048-2050). The dates by which each batch of targets must be set are also given. The annual targets must be set in accordance with provisions in section 3. Section 4(3) requires that, in setting annual targets, the Scottish Ministers must have regard to the targets for 2030 and 2050. Subsection (4) requires that, in setting annual targets, the Scottish Ministers must have regard to a range of matters. Section 5 further requires the Scottish Ministers to seek advice from the advisory body before laying a statutory instrument under section 4 and to publish a statement after the instrument is laid.

Reason for taking power

11. The rationale behind having targets set in advance is to provide certainty for the public and private sectors so that they can take them into account when making investment decisions, providing sufficient incentive to invest and innovate. Some technologies or changes in plant need a long lead in time and some behaviours take time to change. Setting targets in batches recognises that it is not possible now to accurately forecast up until 2050 the range of factors which need to be taken into account regarding reducing Scotland’s greenhouse gas emissions.

Choice of procedure

12. The annual targets will set the future trajectory of Scotland’s emissions and the amount of emissions over this time. The impact of this trajectory on the economy and people’s lives is as significant as a target for a specific point in time, the interim target in 2030 and the final target in
2050. The affirmative resolution procedure is considered appropriate due to the socio-economic impacts the targets will have on Scotland.

Section 6 - Modifying annual targets

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision

13. Section 6 allows the Scottish Ministers to modify various parts of sections 3 and 4 by order. Subsection (1)(a) enables the Scottish Ministers to modify the percentage figure by which annual targets must reduce year-on-year from 2020. Subsection (2) restricts this power so that the percentage may be modified only if the Scottish Ministers consider that it is no longer necessary to set the targets by reference to that percentage. Subsection (5) further states that the percentage may not be changed to a figure less than zero.

14. Subsection (1)(b) allows the Scottish Ministers to modify an annual target once it has been set by order under section 4. Subsection (3) restricts this power so that an annual target may be changed only as a result of significant changes to the basis on which the annual target was first set.

15. Subsection (1)(c) enables the Scottish Ministers to modify any of the dates set out in section 4 (the dates of the batches of annual targets) and subsection (1)(d) allows modification of the criteria to which the Scottish Ministers must have regard when setting annual targets. Subsection (4) sets out that the Scottish Ministers may only exercise these powers if they consider it appropriate to do so.

16. Subsection (6) allows the Scottish Ministers to exercise the power to modify annual targets set by order only before the beginning of the year to which the target relates. This power may not be used to allow the target to exceed that set for the previous year.

17. Section 7 requires that all of these powers may only be exercised once the Scottish Ministers have requested advice from the relevant body defined in section 5(5) and the Scottish Ministers must publish a statement if the order differs from the recommendation of the relevant body.

Reason for taking power

18. The annual targets will be set in advance and are based on a range of criteria. Between the date when an annual target is set and the year to which it relates, circumstances may change significantly which require a re-evaluation of the annual target level. Subsections (1)(a) and (1)(b) allow this re-evaluation to occur. Over time, it may become apparent that annual targets need to be set further, or not as far, in advance. Subsection (1)(c) allows the date by which the annual targets are set to be changed. It is not possible to foresee the full range of criteria which need to be taken into account up until 2050. Additional criteria may become as important as the current list. Subsection (1)(d) allows the criteria to change.
Choice of procedure

19. As subsection (1)(a) allows an important percentage set in primary legislation to be modified, it is considered appropriate that affirmative resolution should apply. Subsection (1)(b) allows a change to a previous instrument subject to affirmative resolution, it is therefore considered appropriate that affirmative resolution should apply. As subsections (1)(c) and (1)(d) allow a change in primary legislation, it is considered appropriate that affirmative resolution should apply.

Section 9 - Greenhouse gases

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision

20. Subsection (2) enables the Scottish Ministers to add gases to the list of greenhouse gases, for the purposes of the Bill, and to modify the description of gases. Subsection (3) places a restriction on the Scottish Ministers in so far as they may only modify subsection (1) to add a gas if it appears that an agreement or arrangement at European or international level recognises that such a gas contributes to climate change. Subsection (4) requires the Scottish Ministers to consult with the relevant body defined in section 5(5) before laying such an order.

Reason for taking power

21. As climate change science is an evolving science, it may become necessary in the future to add new gases to the list of those covered by the targets in the Climate Change (Scotland) Bill. Future European or international agreements may include these gases. It may also be the case in the future that such agreements describe existing greenhouse gases in different ways than they do currently. For example, hydrofluorocarbons and perfluorocarbons are families of gases, it is accepted practice to refer to them collectively but it may be appropriate in the future to describe individual gases within those families. Subsection (2) enables the Scottish Ministers to respond to these kinds of changes.

Choice of procedure

22. As this provision will enable the amendment of a core provision of the Bill, the greater degree of Parliamentary scrutiny provided by the affirmative resolution procedure is considered appropriate.
Section 11 – Baseline for additional greenhouse gases

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision

23. Section 11 enables the Scottish Ministers to make provision as to how to determine the baseline year for an additional greenhouse gas added under section 9. In particular, they may designate a baseline year and provide that the amount of net Scottish emissions of that gas for that year is to be treated as the amount for that baseline year.

Reason for taking power

24. If a new greenhouse gas is added under section 9, a baseline year will need to be designated, alongside the quantity of emissions for that year in order for it to be added to the net emissions account for the purposes of targets for the Bill. Until it is known which gases will be added under section 9, it is not possible to designate baseline years or quantities of emissions for those gases on the face of the Bill.

Choice of procedure

25. As the baseline year and level of net Scottish emissions counted as having occurred in that year of any gas added under section 9 will have an important effect on the total amount of net Scottish emissions and, therefore, on efforts to reduce Scottish emissions in order to meet the Bill’s statutory targets affirmative resolution procedure is considered appropriate for orders made under section 11.

Section 12 - The net Scottish emissions account

Power conferred on: Scottish Ministers
Power exercisable by: regulations made by statutory instrument
Parliamentary procedure: On the first occasion, affirmative resolution of the Scottish Parliament. The second and subsequent regulations will be subject to negative resolution provided the amendments made are simply technical in nature. More detail is provided below.

Provision

26. Subsection (2) of section 12 enables the Scottish Ministers to make provision by regulations about how and in what circumstances carbon units are credited to and debited from the net Scottish emissions account.

Reason for taking power

27. Certain businesses in Scotland participate in the European Union Emissions Trading Scheme. It is possible that firms in Scotland may participate in other such trading schemes in the future. If the net Scottish emissions account is to take account of the units traded within such schemes, it will be necessary to define the terms by which this occurs. This power will also
This document relates to the Climate Change (Scotland) Bill (SP Bill 17) as introduced in the Scottish Parliament on 4 December 2008

enable the Scottish Ministers to create regulations covering the use of carbon units purchased or sold by Ministers themselves outside of specific trading schemes – for example, units generated by the Clean Development and Joint Implementation Mechanisms established under the Kyoto Protocol.

Choice of procedure

28. The initial regulations will set out how and in what circumstances carbon units are credited to and debited from the net Scottish emissions account which will be a key component of the operation of that account. Affirmative resolution procedure is therefore considered appropriate for the initial regulations. Subsequent regulations will likely involve technical amendments which are unlikely to be significant and, therefore, will usually merit negative resolution procedure. If, however, the second or subsequent regulations make provision to alter the amount by which a carbon unit reduces or increases the net Scottish emissions account, affirmative resolution will be required because of the significant effect this could have on the account.

Section 14 - Scottish share of emissions from international aviation and international shipping

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision

29. International aviation and international shipping emissions are generally not directly emitted in a specific country. Subsections (1) and (2) allow the Scottish Ministers to specify by order how certain emissions from international aviation and international shipping are to be regarded as “Scottish emissions”. Subsection (3) requires the Scottish Ministers to seek advice from the relevant body defined in section 5(5) prior to making an order. Subsection (4) requires the Scottish Ministers to publish a statement if the advice of the relevant body is not followed.

Reason for taking power

30. As international aviation and international shipping emissions are generally not directly emitted in a specific country, it is necessary to specify how certain amounts of these emissions will be allocated to the Scottish emissions account. This allocation may also need to change over time, particularly if a European or international agreement makes such a change necessary in the future. There is no current international agreement on how to allocate these emissions to states.

Choice of procedure

31. As this is an issue of high interest and could significantly alter the calculation of “Scottish emissions”, and thereby the calculation of the net Scottish emissions account and future annual targets, affirmative resolution procedure is considered appropriate.
Section 15 - Scottish emissions and removals

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision
32. Subsection (2) allows the Scottish Ministers to modify the definition of Scottish removals set out in subsection (1).

Reason for taking power
33. Scottish removals is defined in the Bill as removals of a greenhouse gas from the atmosphere due to land use, land-use change or forestry activities in Scotland. These are the current internationally-recognised methods of removing greenhouse gas emissions from the atmosphere. It is not possible to forecast the full range of possible methods of removals which may develop up until 2050. Subsection (2) enables these changing circumstances to be taken account of in the future.

Choice of procedure
34. As this is an issue which could significantly alter the calculation of “net Scottish emissions”, future annual targets, and act as a driver for significant methods of reducing emissions, affirmative resolution procedure is considered appropriate for any change.

Section 17 – International carbon reporting practice

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: negative resolution of the Scottish Parliament

Provision
35. Paragraph (b) of section 17 enables the Scottish Ministers to expand the definition of “international carbon reporting practice” for the purposes of this Bill.

Reason for taking power
36. This will enable the Scottish Ministers to add future European and international agreements and arrangements relating to climate change to the meaning of “international carbon reporting practice” which must be taken into account when acting under the provisions of the Climate Change (Scotland) Bill.

Choice of procedure
37. Any decision to change the definition of “international carbon reporting practice” from being the protocols of the United Nations Framework Convention on Climate Change (as specified in section 17(a)) would likely be taken as a result of one or more international agreements to use alternative carbon reporting practices. As the provision in section 17(b) is
simply intended to ensure that the definition of “international carbon reporting practice” used in the Bill can be kept up to date, negative resolution procedure is considered appropriate.

Section 18 - Carbon units and carbon accounting

**Power conferred on:** Scottish Ministers  
**Power exercisable by:** regulations made by statutory instrument  
**Parliamentary procedure:** On the first occasion, affirmative resolution of the Scottish Parliament. The second and subsequent regulations will be subject to negative resolution provided the amendments made are simply technical in nature. More detail is provided below.

**Provision**

38. Subsection (1) allows Scottish Ministers to create a scheme for the purpose of monitoring the use of carbon units, including registering them and keeping track of them. Subsection (2) allows existing schemes, which may or may not be established by the Scottish Ministers, to be adapted for the purposes set out in subsection (1). Subsection (3) allows the functions which may need to be carried out for the purposes of such a scheme to be conferred on persons or bodies and for powers to be conferred on the Scottish Ministers in relation to the operation of such a scheme.

**Reason for taking power**

39. It may be necessary to create a scheme to monitor the use of carbon units. The trading of units across borders can be complicated and it is not yet known whether such a scheme is necessary. However, if it does become necessary, these provisions allow such a scheme to be created.

**Choice of procedure**

40. The initial regulations will create schemes regulating the use of carbon units and will confer new functions on persons or bodies. Affirmative resolution procedure is therefore considered appropriate for the initial regulations. Second and subsequent regulations could involve amendments which may not be significant and, therefore, merit negative resolution procedure. If, however, the second or subsequent regulations make provision to specify a carbon unit of a kind not previously specified, affirmative resolution will be required because of the significant affect this could have on the net Scottish emissions account.
PART 2 – ADVISORY FUNCTIONS

Section 19 – Meaning of advisory body

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision

41. Section 19(1) enables the Scottish Ministers to designate, by order, a body or person to carry out the advisory functions set out in the Bill. (In the absence of an order made under section 19(1), the Scottish Ministers will seek advice from the UK Committee on Climate Change established by the UK Climate Change Act 2008 (as set out in section 5(5) of this Bill).) Section 19(3) specifies what the advisory functions are and clarifies that these may include further advisory functions conferred under subsection (4). Subsection (4) also sets out certain conditions which the Scottish Ministers may place on the advisory body with regard to the advice it is to provide. There is a related provision in section 21 which provides that when an order made under section 19(1) comes into force, subsection (3) of section 8 ceases to have effect. This will remove the duty on Scottish Ministers to lay in the Scottish Parliament a response to the relevant body’s report on progress under section 8. Section 21(1)(b) also operates in conjunction with section 19 to ensure that, when the functions contained in sections 22 to 27 are conferred on the advisory body designated under section 19, the order made under section 19 may provide for these functions to be conferred in stages.

Reason for taking power

42. This power allows for flexibility in the future as to which body or person carries out advisory functions under this Bill, particularly as the Bill framework is designed to last for at least 40 years. It will enable the functions to be carried out by an appropriate Scottish body, either an existing body or the Scottish Committee on Climate Change established under section 20 of the Bill. The related provision in section 21 is intended both to enable the phased conferral of new functions on the body and to remove the duplication of a reporting duty placed on the Scottish Ministers in section 8 to respond to the relevant body’s report on progress. This latter provision is necessary because once section 24 comes into force an equivalent duty is placed on the Scottish Ministers in relation to the advisory body’s reports on progress.

Choice of procedure

43. As this section provides for orders to be made conferring further climate change functions on the advisory body and specifying additional requirements on the provision of advice by the body, the level of Parliamentary scrutiny afforded by affirmative resolution procedure is considered appropriate.
Section 20 - Scottish Committee on Climate Change

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision
44. Section 20 enables the Scottish Ministers to establish a Scottish Committee on Climate Change for the purpose of exercising the advisory functions set out in the Bill.

Reason for taking power
45. Section 19 of the Bill allows flexibility in designating the person or body that will provide the statutory advisory functions. This allows the Scottish Ministers to determine where such functions best lie. The Scottish Ministers currently intend to utilise the UK Committee on Climate Change established by the UK Climate Change Act 2008. However, if, in the future, this is no longer considered to be an adequate arrangement, the Scottish Ministers may decide to use the powers in section 19 to confer these functions on an existing Scottish public body, an example being the Scottish Environment Protection Agency. Alternatively, if that is not considered the most appropriate solution, section 20 enables the Scottish Ministers to establish a Scottish Committee on Climate Change.

Choice of procedure
46. As this provision allows for the creation of a new public body, affirmative resolution procedure is considered appropriate.

Section 23 – Reporting on progress towards targets

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision
47. Section 23(2) enables the Scottish Ministers to specify the first year for which the advisory body must prepare reports on the progress being made towards the targets established under the Bill. Section 23(4) specifies when the advisory body must lay this report before the Scottish Parliament but also enables the Scottish Ministers to amend this deadline to a later date.

Reason for taking power
48. The first year for which there will be an annual target will be 2010. However, the Scottish Ministers intend to seek progress reports from the UK Committee on Climate Change in the initial years for which annual targets will be set. This arrangement will be reviewed in the future and, if it is considered that the UK Committee on Climate Change is not providing advice and scrutiny suitable for Scotland’s unique requirements, the Scottish Ministers will be able to create or designate another person or body to carry out these functions. Even if this does turn out to be necessary, the timescales involved cannot be known at the time the Bill is introduced to the
Scottish Parliament. The power in section 23(2) therefore allows the Scottish Ministers to specify the first year for which the advisory body must prepare progress reports as and when the relevant timescales are known. The advisory body will be required to prepare reports for the first specified year and each year thereafter. The power to amend the reporting deadline to a later date is intended to provide flexibility should there be a delay, for whatever reason, in the availability and/ or reporting of the information (such as the disaggregated Scottish emissions data, for example) upon which the advisory body is required to comment.

Choice of procedure

49. Affirmative resolution procedure demonstrates the significance of the reporting and scrutiny framework established by this Bill.

Section 24 – Scottish Ministers’ response to reports on progress

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision

50. Section 24(1) requires that the Scottish Ministers respond to the report prepared by the advisory body under section 23. Section 24(2) specifies the date by which this response is to be laid in the Scottish Parliament but also enables the Scottish Ministers to amend this deadline to a later date.

Reason for taking power

51. The power enabling the Scottish Ministers to amend the response deadline to a later date is intended to provide flexibility should the advisory body’s report under section 23 be delayed.

Choice of procedure

52. Affirmative resolution procedure demonstrates the significance of the reporting and scrutiny framework established by this Bill.

PART 3 – REPORTING DUTIES

Section 35 - Further provision about reporting duties

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision

53. Section 35 allows further provision to be made imposing further reporting duties on the Scottish Ministers to report to the Scottish Parliament. Subsection (2)(a) enables additional information to be required in the statutory reports which Ministers must make; subsection (2)(b)
enables the period to be set in relation to which that information is to be provided; and subsection (2)(c) enables the period to be set within which that information is to be provided.

Reason for taking power

54. It is not possible to foresee all possible climate change reporting duties which may become necessary up until 2050 to ensure the Scottish Ministers are held accountable. The Scottish Ministers may, of course, report information on a non-statutory basis. However certain information may in the future be considered important enough for Scottish Ministers to be bound to report it rather than have discretion as to whether or not to do so. Section 35 allows additional reporting duties to be created.

Choice of procedure

55. As this will allow for an increased scope of requirements placed in primary legislation, affirmative resolution procedure is considered appropriate.

PART 4 – DUTIES OF PUBLIC BODIES RELATING TO CLIMATE CHANGE

Section 36 - Duties of public bodies relating to climate change

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision

56. Section 36 enables the Scottish Ministers to impose duties relating to climate change, by order, on bodies or persons exercising functions of a public nature, referred to as “public bodies” for the purposes of this Bill. Subsection (3) allows the regulations to impose different duties on different public bodies. Subsections (4) and (5) state that the Scottish Ministers must consult with such associations of local authorities and such other persons as they consider appropriate before imposing a duty. Subsection (6) states that the Scottish Ministers must co-operate with the relevant public bodies to help them comply with duties imposed under this section.

Reason for taking power

57. Section 36 allows for flexibility in the future to help ensure bodies with functions of a public nature take action on climate change, including reducing emissions or adapting to the effects of climate change.

Choice of procedure

58. As this provision could place a burden on bodies or persons exercising functions of a public nature, affirmative resolution procedure is considered appropriate.
Section 38 – Reporting on climate change duties

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: negative resolution of the Scottish Parliament

Provision

59. Section 38 enables the Scottish Ministers, by order, to require relevant public bodies to report on how they are complying with climate change duties created under section 36. It also enables the Scottish Ministers to set out what reports must include, what format they must take and the time by which they must be submitted.

Reason for taking power

60. The power to require public bodies to report on compliance with climate change duties is intended to ensure that such duties are carried out in an open and transparent fashion.

Choice of procedure

61. Requiring public bodies to report upon climate change duties which they are required to carry out is not considered as significant a burden as the requirement to perform such duties in the first place. Negative resolution procedure is therefore considered appropriate.

Section 39 - Appointment of monitoring body

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision

62. Section 39 allows the Scottish Ministers to designate persons or bodies to monitor whether relevant public bodies are complying with climate change duties created under section 36 of this Bill, or having regard to guidance given under section 37 of this Bill.

Reason for taking power

63. A wide range of bodies may be affected by the creation of new climate change-related duties under section 36 and guidance under section 37. It may be deemed appropriate with certain types of duties for monitoring arrangements to be established but this cannot be known until such duties or guidance are created. Until such time, it is not possible to determine the appropriate monitoring framework, including which body should be designated to carry out such functions.

Choice of procedure

64. As this provision enables the creation of a monitoring body which will have investigatory powers, the use of which could place a burden on a body or person exercising functions of a public nature, affirmative resolution procedure is considered appropriate.
PART 5 – OTHER CLIMATE CHANGE PROVISIONS

Chapter 1 - Adaptation

Section 46 - Variation of permitted times for making muirburn

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: negative resolution of the Scottish Parliament

Provision

65. Section 46 inserts a new section 23A into the Hill Farming Act 1946 (“the 1946 Act”). Subsection (1) of new section 23A of the 1946 Act provides the Scottish Ministers with an order-making power to specify dates before which, and after which, it is lawful to make muirburn in any year. Subsection (2) of the new section 23A of the 1946 Act clarifies the effect of an order made under the new subsection (1). The effect of such an order is to substitute for any of the dates specified in section 23(1) to (3) of the 1946 Act, the dates specified in the order. Subsection (3) stipulates that the Scottish Ministers may make an order under subsection (1) only if they consider it necessary or expedient to do so in relation to climate change.

Reason for taking power

66. The permitted times for making muirburn in Scotland have not changed since the 1946 Act came into force. Climate change in Scotland has altered our seasonal weather patterns. Future climate change scenarios suggest that annual temperatures will rise, winters may become wetter and summers generally drier. These climatic changes have impacted, and are likely to continue to impact, on the ability to successfully undertake muirburn. Where effective muirburn cannot be carried out, there is an increased risk of wildfire from dry or dead vegetation, which can result in the loss of valuable habitats and carbon stored in peat underlying the lands upon which this vegetation is found. The power to vary the permitted muirburn season will enable muirburn, and those engaged in that activity, to adapt to the effects of climate change by permitting the activity at times of the year which reflect optimal climatic conditions.

Choice of procedure

67. Subsection (5) of the new section 23A of the 1946 Act provides that an order made under subsection (1) of that section is subject to annulment in pursuance of a resolution of the Scottish Parliament. This power secures the continued effectiveness of an established activity already provided for in primary legislation. The order-making power can only be exercised where the Scottish Ministers are satisfied it is necessary or expedient to do so in relation to climate change, and the negative resolution procedure is considered to offer an appropriate balance between flexibility and the need for scrutiny for a provision of this nature.
Chapter 2 - Forestry

Section 47 - Power to modify functions of Forestry Commissioners

Power conferred on:  Scottish Ministers
Power exercisable by:  order made by statutory instrument
Parliamentary procedure:  affirmative resolution of the Scottish Parliament

Provision

68. Section 47 confers on the Scottish Ministers the power to modify the functions of the Forestry Commissioners in or as regards Scotland. Subsection (2) provides that this power may be exercised by the Scottish Ministers only where they consider it to be necessary or expedient to do so to comply with their duties under sections 1, 2 or 3(1)(b) of the Bill, or otherwise in relation to climate change. Subsection (3) provides that an order under this section could enable the Forestry Commissioners to form or participate in corporate bodies or trusts. Subsection (4) contains provisions orders to provide for allowing the Forestry Commissioners to delegate their functions to other persons.

Reason for taking power

69. The Forestry Commissioners have the general duty to promote the interests of forestry, the development of afforestation and the production and supply of timber and other forest products. In addition, the Forestry Commissioners have the function of managing land comprising the national forest estate. These functions have benefits in relation to the development of programmes, such as afforestation, which will assist with mitigation of climate change. The effects of climate change will continue to develop in the future. This power will ensure that the Forestry Commissioners can establish, participate in, or facilitate programmes to mitigate climate change without being prevented from doing so because of the limits set out in their current functions and duties which do not allow for them to form or participate in corporate bodies or trusts. The power will allow for flexibility to ensure that the Forestry Commissioners functions and duties can continue to be modified in future to meet the challenges posed by the continuing effects of climate change.

Choice of procedure

70. The affirmative resolution procedure is considered appropriate because of the breadth of the power and the fact that it may involve modification of primary legislation.
Chapter 3 – Energy Efficiency

Section 50 – Non-domestic buildings: assessment of energy performance and emissions

Power conferred on: Scottish Ministers
Power exercisable by: regulations made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament other than where the regulations only make provision relating to recovery of costs incurred by an enforcement authority in which case the procedure is negative resolution of the Scottish Parliament.

Provision

71. Section 50 enables the Scottish Ministers to make regulations relating to the assessment of the energy performance of and the emission of greenhouse gases from non-domestic buildings. Subsection (1)(b) provides that the regulations may extend not only to the greenhouse gases emitted by non-domestic buildings themselves but also to greenhouse gases otherwise associated with such buildings and with the activities carried out in these buildings. Subsection (2) lists certain things which the regulations may, in particular, provide about. Subsection (3) states that the enforcement authority provided for in the regulations is to be a local authority or such other person or body as the Scottish Ministers consider appropriate. Subsection (4) enables the enforcement authority to levy charges to recover the reasonable costs incurred in exercising its functions under the regulations.

Reason for taking power

72. The aim of the provisions for improving the energy performance of existing non-domestic buildings is to raise the contribution that the existing non-domestic stock can make to mitigating climate change. Buildings account for over 40% of emissions and there is scope to reduce these levels. They are to be subject to an assessment of the emissions of greenhouse gases and energy performance, an enhanced form of energy performance certificate (EPC). The enabling powers in section 50 will allow the creation of the framework necessary for this.

Choice of procedure

73. As this provision may be used to create regulations which could place a significant burden on the owners of non-domestic buildings, affirmative resolution procedure is considered appropriate. However, where regulations are made only to make provision relating to the recovery of costs it is considered that such regulations would be needed to keep such provisions up to date and would involve technical amendments which are unlikely to be significant and, therefore, would merit negative resolution procedure.
Chapter 4 – Waste Reduction and Recycling

Section 52 - Waste prevention and management plans

Power conferred on: Scottish Ministers
Power exercisable by: regulations made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision

74. Section 52 enables the Scottish Ministers, by regulations, to place a duty on specified persons to prepare waste prevention and management plans. The Scottish Ministers would prescribe in regulations the persons required to prepare a plan (or plans), as well as the matters to be included in a plan. It is intended that the plans can be required for a range of different matters. For example, the regulations might require a plan for an individual construction project. Alternatively, they might require a plan for waste generated by a business on an on-going, day-to-day basis (e.g. office waste). It is intended that these regulations would deal with measures to prevent as well as manage waste.

75. Should the preparation of waste prevention and management plans be made compulsory by regulations under this section of the Bill, a regime will need to be established to ensure that plans are drawn up, that they are sufficiently rigorous, and that they are followed. A body will need to be established, or nominated, to do this. Subsection (2)(e) to (h) and section 60 of the Bill grants powers enabling such a regime to be set up and to establish or nominate a body to operate the regime.

Reason for taking power

76. Minimisation of waste, better use of resources, and careful management of such waste as does arise all impact on climate change. They are also important for other environmental goals, such as landfill reduction and preservation of amenity. Avoidance of waste can also generate savings for businesses. In view of this range of gains, many businesses already plan for prevention and management of waste. Powers would be taken to ensure that performance across the economy met best standards, and that up-to-date approaches and techniques be adopted.

77. The range of activities encompassed by the plans, and the kind of waste with which they will need to deal, will be strongly influenced by economic activities and market conditions prevailing in future. All of these may change over time. Taking these powers allows a flexible response to prevailing conditions.

Choice of procedure

78. Regulations will provide the detail of any scheme which is to be enforced. It is therefore appropriate, for proper Parliamentary scrutiny, that affirmative procedure be adopted. This is particularly desirable given that regulations are likely to create new offences. The exception would be regulations dealing only with charges by the monitoring and enforcement body (see section 60(4)) which, in terms of section 64(5) and (7)(e), would be made by negative resolution.
Section 53 - Information on waste

Power conferred on: Scottish Ministers
Power exercisable by: regulations made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision

79. Subsection 53(1) enables the Scottish Ministers, by regulations, to require specified persons to provide information to SEPA about the waste that they produce. Subsection (2) lists certain things which the regulations may, in particular, provide about, including the enforcement of duties imposed by the regulations and related offences for failing to comply with the requirements of the regulations.

Reason for taking power

80. It will be difficult to move to a zero waste society without much better information about the circumstances in which waste arises and its management, treatment and disposal in Scotland. Good, reliable waste data informs policy-makers when they are developing new ways of reducing and managing waste. It informs the private sector when it is seeking to invest in waste infrastructure as part of the move away from landfill, and also when looking to minimise waste, and thus costs. Such information would also help to meet the obligations of the Scottish Ministers under the Waste Statistics Regulation (2150/2002/EC)\(^1\). This establishes a framework for the production of Community statistics on the generation, recovery and disposal of waste. It requires Member States and the European Commission to produce Community statistics on the generation, recovery and disposal of waste. SEPA already collates waste statistics which are used to meet Scotland’s obligations under the EU Regulation. However, statistics on commercial and industrial waste are based on surveys for which the return rate is low.

81. Taking powers would enable the kind of statistics collected to be determined by developing needs. As an example, and without prejudicing any eventual use of the power, in future it may become possible and desirable to keep statistics relating to the greenhouse-gas-generating potential of waste.

Choice of procedure

82. Regulations will provide the detail of any scheme which is to be enforced. It is therefore appropriate, for proper Parliamentary scrutiny, that affirmative procedure be adopted. This is particularly desirable given that regulations are likely to create new offences.

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\(^1\) OJ No L 332, 9.12.2002, p1
Section 54 - Recyclable waste: facilities for deposit etc.

Power conferred on: Scottish Ministers
Power exercisable by: regulations made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision

83. Section 54 enables the Scottish Ministers to make regulations which may require receptacles to be provided by persons of the kinds specified for a broad range of types of waste. It is possible that, for example, supermarkets could be required to provide recycling facilities at or near tills for packaging which customers could use. Offices could be required to provide receptacles in which employees could recycle their own paper, as well as that of the workplace. This would not be a complete innovation: such facilities are already available in places. In practice, the Scottish Ministers would only prescribe types of waste if there was capacity to recycle that waste and a market for the resulting recyclate.

84. Regulations may also be used to require persons with the correct environmental authorisation to collect waste deposited in such facilities and to ensure so far as reasonably practicable that such waste is recycled. Charges payable to such authorised persons may be specified.

85. A monitoring and enforcement regime may be established to ensure that the facilities are provided, and used and operated correctly. Subsection (2)(f) to (i) and section 60 of the Bill grants powers enabling such a regime to be set up and to establish or nominate a body to operate the regime.

Reason for taking power

86. Improved provision of recycling facilities reduces the use of landfill and can also help to mitigate climate change. To improve recycling rates the producers of waste have to be given better opportunities to recycle, rather than dispose of the waste they produce; and waste has to be separated and kept uncontaminated to make recycling easier, or even physically possible. The provision of receptacles at convenient places, and which keep waste streams separate, achieves both these conditions.

87. The kinds of waste for which receptacles are provided are likely to change over time as recycling markets change or new products are developed. This will in turn affect judgements about the persons who should be required to provide and enabled to use these facilities. For this reason requirements are likely to need to be modified; and this power will permit this to be done.

Choice of procedure

88. Regulations will provide the detail of any scheme which is to be enforced. It is therefore appropriate, for proper Parliamentary scrutiny, that affirmative procedure be adopted. This is particularly desirable given that regulations are likely to create new offences. The exception would be regulations dealing only with charges by the monitoring and enforcement body which, in terms of section 64(5) and (7)(e), would be made by negative resolution.
Section 55 - Recyclable waste: facilities for deposit at events etc.

Power conferred on: Scottish Ministers
Power exercisable by: regulations made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament (negative procedure for regulations dealing only with charging by enforcement authority)

Provision

89. Whereas section 54 is most likely to be used to require the provision of receptacles at more-or-less permanent locations, section 55 enables the Scottish Ministers to make regulations which confer power on local authorities to issue notices requiring receptacles to be provided for a broad range of types of waste at various events. The receptacles would be needed only for the duration of the event. This would not be a complete innovation: such facilities have already been made available at particular events. In practice, the Scottish Ministers would only prescribe types of waste if there was capacity to recycle that waste and a market for the resulting recyclate.

90. Those who hold sporting or cultural events could be placed under a duty to provide receptacles in which those attending could leave a range of waste – relevant examples could be plastic cups and programmes. The materials so collected could then be recycled. Regulations may also be used to enable local authorities to require persons with the correct environmental authorisation to collect such waste and to ensure so far as reasonably practicable that waste deposited in such facilities is recycled. Regulations may specify charges payable to such authorised persons.

91. A monitoring and enforcement regime may be established to ensure that facilities are provided, used and operated correctly. Subsections (2)(k) to (n) and section 60 of the Bill grant powers enabling such a regime to be set up and to establish or nominate a body to operate the regime.

Reason for taking power

92. As with the kind of receptacles in permanent locations envisaged by section 54, the aim here is to encourage recycling and thus the more efficient use of resources. The conditions for higher recycling rates are to be established by maximising collection and by keeping different types of waste separate for easy recycling. An additional benefit which may be achieved by the provision of recycling facilities at events is a reduction in littering.

93. The kinds of waste for which receptacles are provided are likely to change over time as recycling markets change or new products are developed. This may in turn affect judgements about which events should be potentially subject to notices. For this reason, requirements are likely to need to be modified; and this power will permit this to be done.

Choice of procedure

94. Regulations will provide the detail of any scheme which is to be enforced. It is therefore appropriate, for proper Parliamentary scrutiny, that affirmative procedure be adopted. This is particularly desirable given that regulations are likely to create new offences. The exception
would be regulations dealing only with charges by the monitoring and enforcement body which, in terms of section 64(5) and (7)(e), would be made by negative resolution.

Section 56 - Procurement of recyclate

Power conferred on: Scottish Ministers
Power exercisable by: regulations made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament (negative procedure for regulations dealing only with charging by enforcement authority)

Provision

95. Section 56 gives the Scottish Ministers powers to require specified persons to ensure that particular things procured or constructed by them contain or include a certain proportion of recyclate.

96. Arrangements would be required to ensure that these obligations were observed. A body would have to be set up or nominated to do this. Section 56(3)(f), subject to section 60, contains provisions allowing such a regime to be developed.

Reason for taking power

97. A great deal of recyclate is already procured by a wide range of businesses and public bodies, which promotes resource efficiency, reduces the use of landfill and helps mitigate climate change. It is likely, however, that markets for recyclate, and with them economic activity in the waste processing sector, could be increased if such procurement were made compulsory. It would also help to counter the effects of what may be perceived as a stigma attached to recycled products.

98. The kind of recycled materials which should be procured would, however, depend on market conditions prevailing at the time, as would the type of organisation at which the powers would be aimed. Care would also have to be taken, for example, that any materials stipulated should be sufficiently widely available and readily traded to avoid market distortions. Powers therefore need to be flexible enough to allow modification, as envisaged in this section.

Choice of procedure

99. Regulations will provide the detail of any scheme which is to be enforced. It is therefore appropriate, for proper Parliamentary scrutiny, that affirmative procedure be adopted. This is particularly desirable given that regulations are likely to create new offences. The exception would be regulations dealing only with charges by the monitoring and enforcement body which, in terms of section 64(5) and (7)(e), would be made by negative resolution.
Section 57 – Targets for reduction of packaging etc.

Power conferred on: Scottish Ministers
Power exercisable by: regulations made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament (negative procedure for regulations dealing only with charging by enforcement authority)

Provision

100. Section 57 enables the Scottish Ministers, by regulations, to set targets to reduce the amount of packaging used and to require specified persons to comply with those targets. Without prejudicing detailed provisions, it would allow Ministers to obtain information about a baseline volume of packaging on the market in Scotland and then set targets on retailers, for example, to reduce that amount year on year. The reduction might be expressed in ways other than absolute amounts: for example, targets could be set with reference to the relationship between volume of packaging put on the market by a retailer and its turnover. The forms of packaging for which targets might be set would be a matter for the regulations and could, obviously, be altered by further regulations.

101. A monitoring and enforcement regime may be established to ensure that information is properly collated and targets met. Subsection (2)(e) to (h) and section 60 of the Bill grants powers enabling such a regime to be set up and to establish or nominate a body to operate the regime.

Reason for taking power

102. There is already legislation regarding packaging, in the form of the Packaging (Essential Requirements) Regulations 2003 and the Producer Responsibility Obligations (Packaging Waste) Regulations 2007. These respectively set out the required specifications of packaging, and place responsibility on producers to recycle a proportion of waste packaging put on the market by them. Neither of these sets of regulations actually requires that the overall amount of packaging used should be reduced. The proposal in this Bill would complement existing legislation. Baseline information about packaging in circulation is needed before targets can be set, and the system is likely to require future revision in light of changing market conditions.

Choice of procedure

103. Regulations will provide the detail of any targets, to whom they apply, and how they should be enforced. It is therefore appropriate, for proper Parliamentary scrutiny, that affirmative procedure be adopted. This is particularly desirable given that regulations are likely to create new offences. The exception would be regulations dealing only with charges by the monitoring and enforcement body which, in terms of section 64(5) and (7)(e), would be made by negative resolution.

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2 SI 2003/1941
3 SI 2007/871
Section 58 – Deposit and return schemes

Power conferred on: Scottish Ministers
Power exercisable by: regulations made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament other than where the regulations only make provision relating to one or more of: charging by the enforcement authority, amount of deposits, form and content of notices or registration fees, in which case the procedure is negative resolution of the Scottish Parliament

Provision

104. Section 58 allows the Scottish Ministers to establish a deposit and return schemes, which are defined in terms of attaching a returnable element, called a “deposit” to the sale price of an article, which would be payable to the person returning the packaging associated with that item. The section allows the items which would be included in the scheme, and the persons involved, as well as the amount of any deposit, to be defined in regulations.

105. The section would permit a range of schemes to be developed, within that basic structure. At its simplest a scheme could merely require Scottish producers to establish their own deposit and return schemes. At the other end of the scale it could require the establishment of a “clearing house” system similar to that operating in Denmark and Norway, whereby relevant items are identified by the clearing house against payment of a fee by whomever puts them on the market. These fees are used to refund those who return the materials. The clearing-house can also take responsibility for recycling the materials collected: this is allowed for by the section.

106. A monitoring and enforcement regime may be established to ensure that materials subject to the requirements have a deposit attached to the sale price of the relevant items and this is properly refunded to those returning them. Monitoring and enforcement powers would be required. Subsection (7)(i) to (l) and section 60 of the Bill grants powers enabling such a regime to be set up and to establish or nominate a body to operate the regime. Section 58(5) contains provisions to set up a clearing house of the type described above.

Reason for taking power

107. While the 2007 Regulations described above do require the recycling of certain amounts of packaging this tends to be “back of store”. A deposit and return scheme could increase the return and the recycling of packaging which reaches consumers’ hands. Section 58(6) provides that Ministers may only make regulations where they consider this to be necessary or expedient in order to promote or secure an increase in the recycling of materials. Furthermore, by attaching a monetary value to items of packaging it could discourage the careless discarding of these materials – littering and fly-tipping – and reduce the concomitant amenity, and health and safety, problems.

108. A scheme could also encourage manufacturers to develop reusable forms of packaging. Those who operate existing deposit and return schemes do so to encourage reuse of packaging and thus keep their own costs down. It is likely that the types of product which are suitable for deposit and return schemes will develop along with markets and technology. The level of detail
required to establish properly functioning schemes is likely to be best left to subordinate legislation.

Choice of procedure

109. Regulations will provide the detail of any deposit and return schemes. It is therefore appropriate, for proper Parliamentary scrutiny, that affirmative procedure be adopted. This is particularly desirable given that regulations are likely to create new offences. The exceptions would be regulations dealing only with charges by the monitoring and enforcement body, the amount of the deposits, form and content of information notices for customers, and registration fees which, in terms of section 64(5) and (7)(d) and (e), would be made by negative resolution.

Section 59 - Charges for supply of carrier bags

Power conferred on: Scottish Ministers
Power exercisable by: regulations made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament (negative procedure for regulations dealing only with charging by enforcement authority)

Provision

110. Section 59 will enable the Scottish Ministers to require suppliers of goods to charge for carrier bags. This may be done by reference to the type of goods sold, the type of supplier, turnover or other factors. The regulations would also define the carrier bags to which the charge applied and specify either the amount to be charged for each bag, or provide for how that amount is to be determined. The regulations would also be able to specify how the net proceeds are to be used, for example to ensure (if necessary) that the proceeds are applied to environmental causes which operate in Scotland.

111. Records will need to be kept about matters such as the number, type and tonnage of carrier bags for which a seller has imposed the charge. Section 59(2)(g) to (l), subject to section 60, enable the Scottish Ministers to appoint a body or bodies to monitor the accuracy of these records, and also to enforce the regulations, including ensuring that the proceeds were actually spent on the required good causes and to impose sanctions for failure to comply with the regulations.

Reason for taking power

112. Voluntary action has already significantly reduced the issue of carrier bags. However, reducing carrier bag use to a minimum may well require the imposition of a charge. Exactly what bags should be subject to such a charge, however, is likely not only to be a matter of detailed exposition, but also to be subject to variables, depending on – for example – life cycle analyses of various kinds of bag at any given time. Changes in the plastic reprocessing market, for example, could significantly affect the assessment of the environmental costs of plastic bags. Consumer shopping habits may change, and be reflected in the pattern of bag use associated with supermarkets on the one hand and boutiques on the other. It is therefore necessary for the power to set charges to be capable of modifying a range of details.
Choice of procedure

113. Regulations will provide the detail of any scheme which is to be enforced. It is therefore appropriate, for proper Parliamentary scrutiny, that affirmative procedure be adopted. This is particularly desirable given that regulations are likely to create new offences. The exception would be regulations dealing only with charges by the enforcement body, which, in terms of section 64(5) and (7)(e), would be made by negative resolution.

Section 67 – Commencement

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: no Parliamentary procedure

Provision

114. This section provides that the provisions of the Bill come into force on a day or days set by the Scottish Ministers by order. The exceptions to this are: section 67 itself and section 64 (which contains provisions governing the making of subordinate legislation). Those sections come into force on Royal Assent. Sections 22 to 27 (which relate to powers and duties in connection with the advisory body which may be designated under section 19) come into force in accordance with section 21.

Reason for taking power

115. This section addresses the administrative requirements necessary for commencing the Bill.

Choice of procedure

116. The decision on commencement is a matter for the Scottish Ministers, and as is usual, the Scottish Government considers that the commencement powers should not be subject to any Parliamentary procedure.

Schedule 1, paragraph 2(2) – The Scottish Committee on Climate Change

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: negative resolution of the Scottish Parliament

Provision

117. Paragraph 2(2) of schedule 1 provides that the Scottish Ministers may by order alter the number of members of the Scottish Committee on Climate Change.

Reason for taking power

118. Paragraph 2(1) of schedule 1 specifies that the Scottish Committee on Climate Change is to consist of a person as Chair with five to eight other members. These numbers are intended to ensure that the Committee’s membership is of sufficient size to ensure it contains an appropriate
range of expertise and experience but is not so large as to become unwieldy. Paragraph 2(2) is intended to ensure flexibility in the future should it become apparent that the Committee should operate with fewer than five or more than eight members, in addition to the Chair.

Choice of procedure

119. Changing the number of other members of the Scottish Committee on Climate Change is considered to be an administrative amendment. It is therefore appropriate that negative resolution be used for an order made under this section of the Bill.
Transport, Infrastructure and Climate Change Committee

2nd Report, 2009 (Session 3)

Stage 1 report on the Climate Change (Scotland) Bill

Published by the Scottish Parliament on 24 April 2009
INTRODUCTION

This report is the first stage report on the Climate Change (Scotland) Bill, which aims to set a legally binding 2050 target for Scotland to reduce its greenhouse gas emissions to a level at least 80% lower than 1990 levels. The Bill also sets interim targets for 2010-2020 and 2021-2030, and includes provisions for the governance of climate change and emissions targets.

The Committee has reviewed the Bill and made several recommendations to improve its effectiveness and alignment with Scottish Government strategies. These include:

- Recommendations for clarifying the roles and responsibilities of the Scottish Government, local authorities, and other public bodies.
- Suggestions for improving the visibility and transparency of progress towards meeting the targets.
- Advice on the need for greater emphasis on adaptation to climate change.
- Recommendations for enhancing the role of the Scottish Parliament in monitoring and scrutinizing climate change policies.

In conclusion, the Committee believes that the Bill is a significant step forward in Scotland’s efforts to combat climate change, but recommends further improvements to ensure its effectiveness and alignment with other key policies and strategies.
3 March (8th Meeting, 2009 (Session 3))
10 March (9th Meeting, 2009 (Session 3))
31 March (10th Meeting, 2009 (Session 3))
21 April (11th Meeting, 2009 (Session 3))

VOLUME 2

ANNEXE B: REPORTS FROM OTHER COMMITTEES
- Report from the Economy, Energy and Tourism Committee
- Report from the Finance Committee
- Report from the Rural Affairs and Environment Committee
- Report from the Subordinate Legislation Committee

ANNEXE C: ORAL EVIDENCE AND ASSOCIATED WRITTEN EVIDENCE

20 January (3rd Meeting, 2009 (Session 3))

Oral Evidence
- Philip Wright, Deputy Director Climate Change, Fiona Page, Head of Scottish Climate Change Bill Team, Andrew Henderson, Policy Officer Scottish Climate Change Bill Team, and Cameron Maxwell, Climate Change Policy Team, Scottish Government.

Written Evidence
- Scottish Climate Change Bill Team

Supplementary Written Evidence
- Scottish Climate Change Bill Team

27 January (4th Meeting, 2009 (Session 3))

Oral Evidence
- Professor John Mitchell, Director of Climate Science, Met Office;
- Professor Peter Smith, Professor of Soils and Global Change, University of Aberdeen;
- Phil Matthews, Senior Policy Advisor, Sustainable Development Commission Scotland;
- Dr Andy Kerr, Assistant Director of Scottish Alliance for Geoscience, Environment and Society, University of Edinburgh;
- David Kennedy, Chief Executive, and Katherine White, Economic Adviser, Committee on Climate Change.

Supplementary Written Evidence
- Met Office
3 February (5th Meeting, 2009 (Session 3))

**Oral Evidence**
- Richard Dixon, Director, WWF Scotland;
- Duncan McLaren, Chief Executive, Friends of the Earth Scotland;
- Dave Watson, Scottish Organiser, UNISON;
- Chris Hegarty, Advocacy Manager, SCIAF;
- Gavin McLellan, Head of Christian Aid Scotland, Christian Aid Scotland;
- Judith Robertson, Head of Oxfam in Scotland, Oxfam.

**Written Evidence**
- Friends of the Earth Scotland

**Supplementary Written Evidence**
- Stop Climate Chaos Scotland

10 February (6th Meeting, 2009 (Session 3))

**Oral Evidence**
- Chris Austin, Head of Public Affairs, Association of Train Operating Companies;
- Marjory Rodger, Director of Government Relations in Scotland, Confederation of Passenger Transport UK;
- Derek Halden, Director, DH Consultancy;
- Gordon Dewar, Managing Director, Edinburgh Airport, BAA Scotland;
- Robert Ashdown, Head of Technical Division, Chamber of Shipping;
- Gordon Wilmsmeier, Senior Research Fellow, Transport Research Institute, Napier University;
- Dr Alice Bows, Core Researcher, Tyndall Centre Manchester;
- Paul Tetlaw, Chair, Transform Scotland;
- Jeff Gazzard, Coordinator, GreenSkies Campaign;
- John Lauder, National Director for Scotland, Sustrans.

**Written Evidence**
- Association of Train Operating Companies
- BAA Scotland
- Confederation of Passenger Transport
- Chamber of Shipping
- Transform Scotland

**Supplementary Written Evidence**
- BAA Scotland:
  - Covering letter
  - Sustainable aviation CO2 roadmap
  - Non CO2 climate change effects of aviation emissions
  - Car parking additional information
  - Public transport additional information
- GreenSkies Campaign
- Derek Halden
24 February (7th Meeting, 2009 (Session 3))

Oral Evidence
Ken Gibb, Chair, Sustainable Scotland Network;
Councillor Alison Hay, Spokesperson for Regeneration and Sustainable Development, and Anil Gupta, Team Leader for Environment and Regeneration, COSLA;
John Stocks, Manager, Scotland, Carbon Trust;
Mike Thornton, Director, Scotland, Energy Saving Trust;
Chas Booth, Senior Press and Parliamentary Officer, Association for the Conservation of Energy;
Stephen Boyd, Assistant Secretary, STUC;
Anne Douglas, National Secretary, Prospect.

Written Evidence
COSLA and Sustainable Scotland Network
STUC

Supplementary Written Evidence
Prospect [Not reproduced, available on request from the Clerk]

3 March (8th Meeting, 2009 (Session 3))

Oral Evidence
Matthew Farrow, Head of Environment Group, CBI;
Brendan Dick, and Grant Hodges, Climate Change Business Delivery Group;
Jason Ormiston, Chief Executive, Scottish Renewables;
Colin Galbraith, Director, Policy and Advice, and Clive Mitchell, Strategy and Communications Manager, Scottish Natural Heritage;
Dr Chris Spray, Director of Environmental Science, and David Gorman, Head of Environmental Strategy, SEPA;
Geoff Aitkenhead, Asset Management Director, and Mark Williams, Business Strategy and Climate Change Manager, Scottish Water.

Written Evidence/Submissions to call for views
Climate Change Business Delivery Group
Scottish Renewables
Scottish Natural Heritage
SEPA
Scottish Water

10 March (9th Meeting, 2009 (Session 3))

Oral Evidence
Stewart Stevenson MSP, Minister for Transport, Infrastructure, and Climate Change, Philip Wright, Deputy Director, Climate Change, Fiona Page, Head of Scottish Climate Change Bill Team, Cameron Maxwell, Climate Change Policy Team, Madeleine Cusack, Climate Change Policy Team, and Kevin Philpott, Waste Regulation Senior Policy
Officer, Scottish Government; David Henderson-Howat, Policy Adviser, Forestry Commission Scotland.

Supplementary Written Evidence
Minister for Transport, Infrastructure and Climate Change

ANNEXE D: LIST OF OTHER WRITTEN SUBMISSIONS IN RESPONSE TO CALL FOR VIEWS FROM TRANSPORT INFRASTRUCTURE AND CLIMATE CHANGE COMMITTEE AND RURAL AFFAIRS AND ENVIRONMENT COMMITTEE

Transport, Infrastructure and Climate Change Committee

Remit and membership

Remit:

To consider and report on matters relating to transport, infrastructure and climate change falling within the remit of the Cabinet Secretary for Finance and Sustainable Growth.

Membership:

Rob Gibson
Charlie Gordon
Patrick Harvie (Convener)
Alex Johnstone
Alison McInnes
Des McNulty
Cathy Peattie (Deputy Convener)
Shirley-Anne Somerville

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INTRODUCTION

1. The Climate Change (Scotland) Bill sets targets for reducing greenhouse gas emissions in Scotland and introduces a framework for advice and reporting on climate change.

Aim of the Bill

2. The Policy Memorandum\(^1\) states that the key objective of the Bill is to create a statutory framework for greenhouse gas emissions reductions in Scotland by setting a reduction target of at least 80% by 2050.

3. The Policy Memorandum goes on to state that to help ensure the delivery of this target, the Bill requires that Scottish Ministers set annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050, as well as an interim target of a 50% reduction in emissions by 2030.

4. A briefing from the Scottish Parliament Information Centre was published on 15 January 2009 which provides further information on the provisions in the Bill.\(^2\)

The Committee’s approach

5. This report will first consider the proposal for an emissions reduction target of at least 80% by 2050. Second, the report will consider the methodology proposed for the measurement and assessment of emissions reduction targets in the Bill. Third, the report will examine the nature of the targets set by Scottish Ministers between 2010 and 2019 and the proposed 2030 interim target in the Bill.

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\(^1\) Climate Change (Scotland) Bill. Policy Memorandum. Available at: [http://www.scottish.parliament.uk/s3/bills/17-ClimateChange/b17s3-introd-pm.pdf](http://www.scottish.parliament.uk/s3/bills/17-ClimateChange/b17s3-introd-pm.pdf)

Importantly, the report will then discuss the actions needed in order for the climate change targets in the Bill to be met and the process to be properly monitored.

6. The report will then discuss the framework in the Bill for advice and reporting on climate change. Finally, the report will conclude by discussing the other climate change provisions contained in Part 5 of the Bill.

CONCLUSION AND SUMMARY OF RECOMMENDATIONS

7. The Climate Change (Scotland) Bill is claimed to be one of the most important pieces of legislation to be introduced in the Scottish Parliament. It will establish a framework for reductions in greenhouse gas emissions which will last until 2050, and which will have major implications for all aspects of Scotland’s economy and the way we live our lives. The Committee recognises that this is an ambitious target. This report fully endorses the objective of tackling climate change and believes it is right that Scotland should set challenging targets for reductions in greenhouse gas emissions as its contribution to international efforts to tackle global climate change.

8. The Committee has therefore agreed to support the general principles of the Bill and the policy intention underpinning the legislation. However, in its scrutiny of the Bill at Stage 1, the Committee has been keen to ensure that the legislative framework for the emissions reductions targets is as robust and effective as possible. It is of vital importance that this very significant piece of legislation delivers an effective framework for addressing climate change. In this report, the Committee will highlight, in particular, two important areas where it believes that changes are needed for the Bill to meet the challenge.

9. First, the Committee has noted the scientific evidence that strong early action is needed in order to deliver the necessary reductions in greenhouse gas emissions. The Committee believes that the framework for emissions reductions targets set down for the period between 2010 and 2019 needs to be more robust. The Committee wishes to see the interim target brought forward from 2030 to 2020, in line with changes proposed by the UK Government in advance of international discussions due to take place in Copenhagen later in 2009.

10. Second, the Committee is concerned about delivery of the targets. The Bill will not, in itself, deliver reductions in greenhouse gas emissions. The Committee believes that we cannot wait for comprehensive plans to provide specific details of how emissions reductions will be secured or for perfect monitoring tools to be devised. Early action to change policies and shift resources is needed, together with strong and committed leadership to deliver the radical measures to make the required emissions reductions and persuade citizens of the need for action. The Committee calls on the Scottish Government to put before the Parliament at the earliest possible date a comprehensive strategy document outlining how it intends to achieve the targets set out in the Bill.

11. This report will discuss these key points in more detail, and will also make a number of other recommendations. The report will also highlight the significant dissatisfaction with the way the consultations on proposals in Part 5 of the Bill were carried out.
BACKGROUND

Pre-legislative scrutiny

12. The Committee began familiarising itself with the issues relevant to the Bill well in advance of its introduction. In February 2008, the Committee undertook fact finding visits to London and Brussels. The policy debate on climate change at both UK and EU level provided a variety of opportunities to develop the Committee’s awareness of legislative and policy developments in advance of the introduction of legislation in Scotland. The Committee met with MPs, MEPs, local authorities, and relevant non-governmental organisations.

13. In addition, in advance of the Bill’s introduction, the Committee organised a number of seminars with stakeholders on the Greenhouse Gas Regional Inventory Project, which is an energy emissions scenario tool that allows an operator to assess the carbon implications of different energy futures. The tool illustrated the nature and extent of mitigation measures that might need to be applied across the various sectors to achieve the significant reduction in emissions required to reach proposed government targets.

Introduction of the Bill

14. The Climate Change (Scotland) Bill was introduced by the Cabinet Secretary for Finance and Sustainable Growth, John Swinney MSP, on 4 December 2008.3 The Bill was accompanied by a Policy Memorandum and a Financial Memorandum.4 The Parliament at its meeting on 10 December 2008 agreed that the Transport, Infrastructure and Climate Change Committee be designated as the lead committee, and that the Bill should also be referred to the Rural Affairs and Environment Committee as secondary committee. The Economy Energy and Tourism Committee also took evidence on Part 5, Chapter 3 of the Bill.

15. This Committee agreed its approach to Stage 1 consideration at its meeting on 16 December 2008 and issued a call for views on the general principles of the Bill on 19 December 2008. The Rural Affairs and Environment Committee also issued a call for views on the Bill, specifically on section 47 on the role of the Forestry Commission.

Evidence

16. This Committee received 359 responses to its call for views on the Bill. In total, 69 organisations responded and 290 responses came from individuals. These responses are attached at Annexe D.

17. The Committee took oral evidence on the Bill from witnesses at its meetings of 20 January 2009, 27 January 2009, 3 February 2009, 10 February 2009, 24 February 2009, 3 March 2009 and 10 March 2009. The minutes of these meetings (which include details of the witnesses who gave evidence) are attached at

3 Climate Change (Scotland) Bill. Available at: http://www.scottish.parliament.uk/s3/bills/17-ClimateChange/index.htm
Annexe A. Extracts from the Official Reports of those meetings, together with associated written and supplementary evidence comprise Annexe C.

18. In addition to the written and oral evidence received as part of its consideration of the Bill, the Committee hosted a high-profile climate change event in the Chamber on 27 March 2009 which examined the international impact of climate change and Scotland’s role in reducing emissions in relation to the Bill. A transcript from this event is attached at Annexe E. The Committee would like to thank all those who provided written and oral evidence on the Bill.

Reports by other committees

Reports by the Rural Affairs and Environment Committee and the Economy, Energy and Tourism Committee

19. The Rural Affairs and Environment Committee reported to this Committee on Chapters 1, 2 and 4 of Part 5 of the Bill. The Economy, Energy and Tourism Committee reported to the Parliament and this Committee on Chapter 3 of Part 5 on energy efficiency. The issues raised by these committees are discussed later in this report. The reports of these committees are included at Annexe B.

Financial Memorandum

20. The Committee will discuss the Financial Memorandum accompanying the Bill when it considers the Finance Committee’s report later in this report. This report is included at Annexe B.

Report by the Subordinate Legislation Committee

21. The Committee notes the report of the Subordinate Legislation Committee, which considered the delegated powers provisions of the Bill and is included at Annexe B. This is considered further by the Committee later in this report.

Policy Memorandum

22. The Committee is satisfied that the Policy Memorandum factually describes the contents of the Bill. The Committee will comment in detail on the issues highlighted in the Policy Memorandum later in this report.

Equalities issues

23. The Committee has considered the section of the Policy Memorandum addressing the effects of the Bill on Equal Opportunities and notes its contents. The Committee ensured that it included within its call for views a question inviting comments on equalities issues arising from the Bill. The Committee also targeted its call for views at specific organisations with an interest in equalities issues such as the Equality and Human Rights Commission. No concerns with regard to equalities were raised with the Committee. The Committee notes that whilst the specific provisions in the Bill may not have immediate equalities implications, the future implementation of specific measures to help meet the targets for emissions reductions could potentially raise a number of equalities issues which the Scottish Government must consider. The Committee discusses later in this report the importance of engaging with members of the public and with all sections of the community when the Scottish Government is taking forward policy measures.
necessary to reduce emissions. It would, however, emphasise the importance of ensuring that equalities issues are fully integrated into the development phase of such policies.

Consultation

24. The Policy Memorandum outlines the consultation which took place on the provisions in the Bill. This process included a public consultation which principally covered Parts 1 to 4 of the Bill, which took place between 29 January and 23 April 2008 and which generated a total of 21,046 responses.


26. There appeared to be a general satisfaction among witnesses with the way this consultation had been carried out. Professor Peter Smith of the University of Aberdeen commented—

‘The Government has taken the necessary advice and has contacted the main players. As far as I am aware, no one in the scientific community has felt excluded from that process.’

27. Mike Thornton of the Energy Saving Trust called the consultation ‘helpful and informative’ and Richard Dixon of WWF Scotland and Stop Climate Chaos Scotland told the Committee that ‘our reading of the process is that, as a standard consultation, it was fairly well done’. Other largely positive comments were received from organisations including COSLA, the Confederation of Passenger Transport UK, Scottish Natural Heritage, SEPA and Scottish Water.

28. There was, however, significant dissatisfaction with the way that consultation on key provisions in Part 5 of the Bill was conducted. The Committee notes, for example, the comments of the Rural Affairs and Environment Committee in relation to the forestry positions on the Bill. The RAE Committee reported that—

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‘Introducing a Bill in advance of the conclusion of consultations on its contents is not appropriate. Parliamentary committees should be afforded the right to undertake scrutiny of legislation with all of the relevant information at their disposal.’

29. The Committee will address these concerns in more detail later in this report.

THE 2050 TARGET

30. This report will first consider the appropriateness of the 2050 target. The Policy Memorandum accompanying the Bill explains the basis for the reduction target of at least 80%, indicating that—

‘This is commensurate with the Scottish Ministers’ desire to achieve close to the top end of the 50 to 85% reduction in greenhouse gas emissions as Scotland’s share of the reductions that the IPCC states in its Fourth Assessment Report is necessary, globally, by 2050 to limit average temperature rises to 2.0-2.4°C.’

31. A number of witnesses felt that the target of an 80% reduction in emissions was appropriate because it appeared to be based on current scientific advice. Matthew Farrow of the CBI indicated that—

‘The CBI's view was that we should consider what the Committee on Climate Change said: if its analysis of the science suggested a target of 70, 80 or 90 per cent, that would be what the target should be. From that point of view, the 80 per cent target for the Scottish bill mirrors the UK target, which seems appropriate.’

32. Chas Booth of the Association for the Conservation of Energy told the Committee that—

‘We think that a target of at least 80 per cent by 2050 is right for Scotland. That is in line with what the Intergovernmental Panel on Climate Change recommends.’

33. A number of witnesses commented that the 2050 target appeared to be ambitious. Professor Peter Smith of the University of Aberdeen told the Committee—

‘There are no more ambitious targets anywhere else in the world, although some other countries are also aiming for an 80 per cent reduction in
emissions by 2050. The targets are brave, bold and world leading in that respect.'

34. Jeff Gazzard of GreenSkies commented that ‘the bill is innovative and ambitious.’ Councillor Alison Hay, representing COSLA, expressed the view that the 2050 target in the Bill was ‘ambitious enough’ and commented ‘if we take into account what the United Kingdom Committee on Climate Change has suggested, 80 per cent is quite a tight target.’

35. Duncan McLaren of Friends of the Earth Scotland and Stop Climate Chaos Scotland felt, however, that Scotland may need to meet the 80% emissions reduction target in advance of 2050—

‘We have called for a reduction of at least 80 per cent. My reading of the climate science as it is moving—in particular, the advice that concentrations will need to be lower—suggests that 80 per cent will be only a staging point in a longer-term transition. The target might need to be achieved earlier than 2050.’

36. The City of Edinburgh Council expressed the view in written evidence that a target of 90% might be more appropriate. The Royal Society of Chemistry argued that some flexibility should be built into the legislation to allow the level of the 2050 to be amended if required, stating in written evidence—

“If an authoritative body, such as the Committee on Climate Change, concludes that there is a need for the GHG [greenhouse gas] emission reduction target of 80% to be amended then this should be possible within this proposed system.”

37. The Committee questioned witnesses on whether the 2050 reduction target was achievable, given the many challenges associated with securing such a large cut in emissions. John Stocks of the Carbon Trust responded—

‘I could not be certain yet. I am not sure that I can stack up the sums to say, "Yes—I can see an 80 per cent reduction being achievable." However, I see some very significant measures that together can start to produce very deep reductions.’

38. Stephen Boyd of the STUC told the Committee that he considered the targets to be ‘challenging, but achievable.’ This was also the general view of Professor

Colin Galbraith representing Scottish Natural Heritage. Mark Williams of Scottish Water commented—

‘Scottish Water believes that the targets are achievable, but we need a lot more clarity about the road map for achieving our aims. We need to understand exactly where we can most effectively spend our money in order to achieve the desired outcomes. However, that clarity is not there yet.’

39. The Committee firstly affirms its support for the proposal that six key greenhouse gases, and not just carbon dioxide, should be included within the scope of the emissions reductions targets in the Bill, and recognises that in time other gases may come to be of sufficient concern to be included in the targets. The Committee agrees with the general balance of opinion that the 80% emissions reduction target for 2050 is the minimum which is necessary. The Committee also notes the arguments in favour of Scotland and the UK adopting the same 2050 target, particularly one that is based on the scientific advice of the UK Committee on Climate Change. The Committee believes that it will be important that Scotland makes a substantial contribution to the meeting of the UK 80% target. Some witnesses suggested in fact that Scotland might be able to contribute a greater share due to its substantial natural resources and other geographic and economic factors.

40. The Committee agrees with the comments of Mark Williams from Scottish Water which highlight an important point in relation to the delivery of policies to address climate change. Although this Bill establishes a framework for the targets, the Committee believes that it is essential that effective policies are developed and implemented by government in order to meet the targets, and that these policies are supported by an appropriate level of investment. This is a major theme of this report and is something the Committee will return to later.

TARGETS – METHODOLOGY

41. It is essential that the targets in the Bill are constructed in such a way that they will be a useful and accurate tool for measuring whether Scotland has reduced its greenhouse gas emissions. In this section of the report the Committee will discuss the methodology used for the emissions reductions targets contained in the Bill. The Committee will then go on to discuss the specific targets in the Bill themselves.

Measurement of emissions

Time delay in obtaining emissions data

42. The Committee believes it is essential that reliable data is available on which to base the setting of emissions reductions targets, otherwise the main purpose of the Bill could be compromised. The Committee heard in evidence that there is currently up to a 20 month delay in emissions being emitted and then being reported in the Scottish greenhouse gas inventory.

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43. Dr Andy Kerr of the University of Edinburgh highlighted the potential significance of this delay—

‘If Scotland does not achieve its 3 per cent cut by 2021, we will find that out only in 2023. By the time that we have done anything about that, it will be 2025 so, yes, you bet it makes a difference. Such delays create all sorts of problems with the whole principle of having annual targets as opposed to carbon budgets.’\(^{22}\)

44. Professor Peter Smith of the University of Aberdeen explained to the Committee the scientific reasons for the delay in obtaining accurate figures,\(^{23}\) and cautioned that although the delay could potentially be reduced from 20 months, a reduction to 12 months would be the maximum that could be achieved even if there was an instantaneous evaluation.\(^{24}\)

45. In a contribution during the Committee’s climate change event on 27 March 2009, Paul McAleavey of the European Environment Agency raised the possibility that data from the EU emission trading scheme could deliver faster, though less reliable, information—

‘A faster mechanism is available through the market. The emission trading scheme that has been established sends much quicker signals on emissions and the carbon price. We report on official data 18 months behind, but the market and some of the market institutions that deal with carbon trading make estimates that are, I would say, slightly less reliable but based on more recent market data. There might be scope for considering the way in which those two processes operate together.’\(^{25}\)

46. In giving evidence to the Committee, John Stocks of the Carbon Trust raised a further concern about procedures for gathering emissions data, commenting—

‘I see little detail of the reporting and data-gathering mechanisms and calculation methods that will be used. I am uncomfortable about saying that we know that they are sufficiently robust. I am particularly concerned about data gathering, an issue with which our clients routinely have difficulties.’\(^{26}\)

47. On the other hand, Ken Gibb of the Sustainable Scotland Network suggested that local authorities currently possess—

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‘A fairly well-established system for and track record of recording, monitoring and, if necessary, reporting on our own emissions, so I am content that that aspect will not cause us any difficulties.’

48. The Committee understands that this is true with regard to electricity and gas consumption within council buildings. However work on reporting emissions from transport and waste management is at a much earlier stage of development amongst most Scottish local authorities. For example, Ken Gibb from the Sustainable Scotland Network told the Committee—

‘A number of authorities are struggling to get to grips with local authority transport fleet management and business mileage. We have recognised for some time that we need to get involved with that agenda.’

49. The Committee notes the evidence from Dr Chris Spray of SEPA who indicated that SEPA had expertise in this area—

‘We are keen to develop ideas on the science, the data from monitoring, regulatory aspects in which we can help, advice to business and communication.’

50. Another witness from SEPA, Dave Gorman, elaborated further, commenting—

‘Trying to understand the assumptions that should be made in complicated processes such as those at Grangemouth is meat and drink for certain of my expert colleagues, whose aim is to piece together the actual picture. We have expertise both in that work and in gathering and publishing data. We hinted in our evidence that SEPA might be one candidate for taking on more of that activity because we understand it.’

51. In evidence to the Committee, the Minister for Transport, Infrastructure and Climate Change explained—

‘There has not yet been any substantial progress in accelerating the timescale for annual reporting...It would certainly be possible for us to get information earlier, but it is more likely that that information would be subject to revision. We have to make a judgment about getting the balance right; it is not an absolute science. We are considering how we can accelerate the process, which at the moment takes about 18 to 20 months.’

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52. The Committee is concerned that if data on emissions is almost two years old it could significantly compromise the framework by which the Scottish Government reports to the Parliament on its progress in meeting the annual targets. Potentially, by the time it is apparent that action is needed to address a missed target, the situation may have deteriorated even further. This could make the task of getting the trajectory of emissions reductions back on track even more difficult. The issue of obtaining accurate information is therefore of central importance to the success of the Bill. The Committee notes the written evidence of the Royal Society of Edinburgh which states that ‘unless this can be improved, annual setting of targets will be flawed and the assessment of the trajectory of change will be uncertain’.32

53. The Committee recommends that the Scottish Government increases its efforts to identify the means by which the 18 to 20 month reporting time can be reduced and keeps this Committee up to date with its progress in meeting this objective. The Committee notes the potential expertise offered by SEPA in the field of emissions monitoring and recommends that the Scottish Government considers how this could best be employed to support the Bill framework.

54. The Committee notes that it may be possible to obtain estimated emissions data quicker than the current 18 month timescale for the availability of final figures. The Committee therefore recommends that the Scottish Government investigates whether this preliminary data could be useful in informing Scottish Government policy on climate change in advance of the availability of the official figures. The Committee further recommends that the Scottish Government clarifies what emissions data it intends to place in the public domain in order to allow the Parliament and other interested parties to scrutinise its performance in meeting its targets.

55. The Committee believes that the Scottish Government should lead by example in conducting a prior assessment of the carbon impacts of its policies and programmes, an area of work which has most unfortunately been subject to delay. The most recent Scottish Government budget was not, for example, subject to any systematic evaluation as to its carbon impacts. This has been an area of interest to the Committee and was the subject of a recent committee report to the Finance Committee.33

56. In its report to the Finance Committee, the Committee recommended that a robust, credible and transparent system of carbon accountability is in place at the latest in time for the Draft Budget 2010-11 and Spending Review 2010. The Committee noted in its report that there will never be a single, perfect carbon assessment tool that will prescribe policy, but that there is a pressing need to adopt an evolutionary approach to developing a tool that is fully integrated with

31 The Royal Society of Edinburgh. Written submission to the Transport, Infrastructure and Climate Change Committee.

policy making. Incremental progress is needed in adopting carbon assessment so that all the main actors become familiar with assessing the carbon implications of policies and programmes as quickly as possible. The Committee also noted in its report that there may be merit in the Finance Committee considering how carbon assessment could form a statutory part of the Parliament’s consideration of other major expenditure projects.

57. The Committee recommended in its report to the Finance Committee that the Scottish Government provides the Committee with regular written updates on the progress of the development of its carbon assessment tool. The Committee welcomes the recent offer made by the Cabinet Secretary for Finance and Sustainable Growth to provide a briefing to the Committee on progress made so far on the development of the tool. This is an issue that the Committee will wish to return to during its scrutiny of future Scottish Government budgets. Especially in view of the time delay in obtaining emissions data, it is vitally important that assessment of the carbon impact of policies and programmes is incorporated, particularly at the policy planning and resource allocation stages. In the context of this Bill and its objectives, the Committee believes that the importance of developing a robust and effective carbon assessment mechanism to assist in policy development and implementation is absolutely crucial. We will return to this point later in the report.

Production versus consumption targets

58. The Committee notes that there has been some debate over whether targets should focus on those emissions produced in the geographical area of Scotland (‘production targets’), or whether all emissions associated with activity in Scotland should be included (‘consumption targets’). The targets in the Bill are production targets.

59. Phil Matthews of the Sustainable Development Commission Scotland voiced support for the approach taken in the Bill of using source-based emissions, but indicated that it would be useful to have an insight into Scotland’s wider carbon footprint.34 Professor Andy Kerr of the University of Edinburgh told the Committee ‘it would be great if such reporting could be done, but it will take a while before the standards of reporting around the world are appropriate.’35

60. Richard Dixon of WWF Scotland and Stop Climate Chaos Scotland told the Committee that he would like the Bill to contain provisions on parallel reporting of the impact of consumption. He explained his proposed approach further—

‘The reporting of consumption would not have a target, unlike the reporting of production, but every year the minister would tell you not only how many

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emissions Scotland had produced directly a year or two ago but how many Scotland had been responsible for around the world.  

61. A representative of the Energy Saving Trust, Mike Thornton, also supported the idea of parallel reporting on consumption-based emissions, telling the Committee that—

‘The Welsh Assembly Government is proposing to report separately on Wales’s total consumption emissions. We float the idea that doing the same here might add to the picture that the Scottish Government gets of Scotland’s overall carbon footprint.’

62. The Minister for Transport, Infrastructure and Climate Change voiced concerns at the potential confusion which might arise from adopting a consumption-based approach, telling the Committee that ‘focusing on two measures simultaneously can lead to a real danger: confusing and conflicting messages can result.’ He went on to say that—

‘Figures on our consumption will deviate from figures on our net emissions. What we propose to do conforms to international practice, in particular to the United Nations Framework Convention on Climate Change. That is appropriate; that should be our focus. We have to focus on the things that we do in Scotland that are responsible for CO2 emissions.’

63. The Committee received a letter from the Scottish Government Bill Team on 13 February 2009 on the subject of Scotland’s ecological footprint. It stated that—

‘The Scottish Government is committed to measuring Scotland’s ecological footprint, with work currently underway investigating the development of Scottish economic-environmental accounts to improve the quality and transparency of footprint calculations. The output from this work will include a carbon footprint for Scotland which we expect to be available in 2010…

The Scottish Government is also considering the frequency for producing the ecological footprint indicator and, given the complexities of the indicator and the frequency of the data available to feed into the model, we anticipate recalculating Scotland’s ecological footprint every two or four years.

The frequency of reporting on the ecological and carbon footprint does not prevent the Scottish Government from reporting the latest position on the carbon footprint as part of the Scottish Ministers’ annual report on production-

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based emissions performance required by the current Climate Change (Scotland) Bill provisions. 40

64. The Committee believes that the emissions reductions targets in the Bill should be based on those emissions generated in Scotland. The purpose of the Bill is to encourage Scotland to address its own domestic emissions and focus its policies on reducing emissions in Scotland. The Committee therefore believes that it is right that the targets in the Bill are production-based. However the Committee also considers that it is important that Scotland understands the volume of emissions it is responsible for around the world. The Committee recommends that a mechanism for reporting on consumption should be established which is in addition to, but separate from, the framework of targets set out in the Bill. One option is that this could form part of the reporting duties of Scottish Ministers set out in Part 3 of the Bill, to be developed as international agreements make consumption reporting easier to manage.

65. The Committee recommends that the arrangements for reporting on consumption should be flexible enough to take account of developing international understanding of the methodology for consumption reporting. In this context, the Committee is encouraged by the remarks of the Bill team that work is underway to assess Scotland’s ecological footprint and believes that this could form the basis of consumption reporting.

Reporting on cumulative emissions

66. The emissions reduction targets in the Bill are ‘point in time’ targets, which state that a particular percentage reduction in emissions has to take place by a certain date. An alternative approach would be to record the total cumulative amount of emissions in the atmosphere. This information is of significance because the level of cumulative emissions present in the atmosphere at any one time will impact directly on climate change. The level of cumulative emissions will either increase or decrease depending on the emissions reductions trajectory taken towards a final point in time target.

67. A number of witnesses indicated that it would be relatively straightforward to calculate Scotland’s level of cumulative emissions. 41 The Minister himself told the Committee that ‘reporting on what is happening will enable us to see how that is affecting cumulative emissions.’ 42

68. Duncan McLaren of Friends of the Earth Scotland and Stop Climate Chaos Scotland expressed the view that the setting of the point in time targets should take place in the context of the level of cumulative amount of emissions in the atmosphere—

‘Our suggestion is that, at a practical level, the cumulative budget approach can reinforce an annual-targets approach. A minimum target of at least 3 per cent a year would be set, targets would continue to be set in batches, and the advice from the advisory body and the duties placed on ministers in formulating the targets would have regard to the cumulative budget.’

69. The Minister told the Committee that ‘our focus is implicitly on cumulative emissions. I say that because we will set annual budgets, which will enable us to see what will be in the bank from Scotland’s carbon reductions’. He went on to say—

‘If people thought that we could be helpful by adding up all the numbers across the reports, and if people felt that such a total would better inform parliamentarians and wider Scotland, it would not be difficult for us to include it in our reporting. We would certainly be open to doing that.’

70. The Committee notes the significance of cumulative emissions in the atmosphere as a cause of climate change. The Committee also notes that the best way of reducing cumulative emissions is to take strong early action in order to cut emissions. The Committee discusses this key objective in more detail later in this report.

71. In relation to the framework for the Bill, the Committee notes, however, that a point in time target is likely to focus policy direction and efforts to reduce emissions in a way that targets based on cumulative emissions targets might not. The Committee therefore believes that the point in time approach in the Bill is the correct one in relation to the setting of targets in the Bill.

72. However, the Committee notes that data on cumulative emissions could readily be calculated and included within the Scottish Government’s annual reports to the Parliament on emissions. The Committee is attracted to a suggested approach in which data on cumulative emissions should form part of the reporting regime associated with the Bill, but be treated separately from the monitoring of progress on meeting the annual targets. The Committee recommends that the Scottish Government responds to this suggestion ahead of the start of Stage 2 of the Bill.

Flexibility of annual targets

Annual targets in Scottish Bill versus multi-year emissions budgets in UK Act
73. The Bill requires annual emissions reductions targets to be set for each calendar year from 2010 to 2050. These annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive. Subsequent batches will include five annual targets: 2023 to 2027, 2028 to 2032 and so on.

This approach differs from the approach in the UK Climate Change Act 2008 which introduced a system of carbon budgeting which constrains the total amount of emissions in a given time period. The carbon budget periods set out in the UK Act will last five years, beginning with the period 2008-2012, and must be set three periods ahead. In this context, carbon budgeting refers to the ‘budget’ for emissions over a certain number of years (ie the amount of emissions permitted within that period) rather than the financial process of allocating expenditure in the government’s budget to policy measures designed to reduce emissions.

The Royal Society of Edinburgh said in written evidence that—

‘There is much to be said for smoothing the assessment of emissions trends by making running mean estimates of emissions rather than using the last year’s data as the gauge of progress. Our principal concern should be to see trends rather than be over-influenced by strong annual fluctuations. A 3-year running mean might be most appropriate, which also argues for the timely release of emissions data’

David Kennedy, chief executive of the UK Committee on Climate Change, set out the arguments which were made at a UK level in favour of multi-year emissions budgets in the UK Act as opposed to a framework based on annual targets—

‘[The UK Act] does not include annual targets because they might not provide adequate flexibility, given the year-on-year changes in emissions because of the weather, for example—emissions rise in a cold winter because people use more heating and we must burn more coal in our power stations. Such factors can mean that reductions go off track from year to year, although they are not off track in the five-year context.’

The Committee received evidence from bodies such as Stop Climate Chaos Scotland arguing in favour of the provision in the Bill for annual targets, although Stop Climate Chaos Scotland argued in favour of 3% annual emissions reductions from 2010. This issue is discussed later in the report.

Some witnesses raised concerns about the lack of flexibility in the use of annual targets. Anil Gupta of COSLA, for example, explained—

‘Councils are concerned that unforeseen factors might result in our not being able to achieve reductions. For example, climate issues, such as a particularly cold winter, might cause problems. That is a reason for proposing a five-year rolling target. Councils would report every year, but the longer timeframe would enable the inevitable ups and downs to be averaged out.’

Matthew Farrow of the CBI argued that—

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46 The Royal Society of Edinburgh. Written submission to the Transport, Infrastructure and Climate Change Committee.
‘I am not a big fan of annual targets because it is difficult to guarantee year-on-year falls. The yearly figure can bounce around and particular factors can affect it...The short-term trend is what matters—I think we all agree that we need early cuts...Our view is that the UK 2008 act takes a good approach.’

80. These concerns were, however, not shared by Jason Ormiston from Scottish Renewables who argued that ‘it would be a big mistake to use weather patterns as a justification for missing a target’. Chas Booth of the Association for the Conservation of Energy also told the Committee—

‘...We do not believe that that argument holds water because the variability that a cold winter would bring would not be sufficient to knock us out of the 3 per cent threshold. If the Government misses its 3 per cent target, it has to come back to Parliament and explain how that happened and how it will ensure that it gets back on track.’

81. The Scottish Government’s position on this issue was set out in the Policy Memorandum accompanying the Bill—

‘Multi-year emissions budgets would provide flexibility within the long-term emissions reduction trajectory. However, annual targets provide greater certainty as to the magnitude of emissions reductions that need to be made at any given time. A large number of the responses to the Bill consultation expressed a preference for annual targets.’

Banking and borrowing

82. Some witnesses suggested that the concept of banking and borrowing from previous or upcoming carbon budgets (or, in the case of the Scottish Bill, batches of annual targets, or year on year annual targets) might provide some flexibility in relation to the meeting of targets. The Committee notes that this concept of banking and borrowing is, however, absent from the Bill.

83. The Policy Memorandum explains the Scottish Government’s alternative position to banking and borrowing—

‘Where the net Scottish emissions account exceeds an emissions target, the Scottish Ministers are...required lay a report setting out the proposals and policies by which they intend to compensate for the excess emissions.’

84. This position was supported by Duncan McLaren of Friends of the Earth Scotland and Stop Climate Chaos Scotland who argued—

[References provided at the end of the text]
‘Banking and borrowing are not necessary. We support the proposal that the Scottish ministers should produce a remedial action plan and that, in the event of failure, the plan should involve new and additional measures.’\(^{54}\)

85. On the other hand, David Kennedy, chief executive of the UK Committee on Climate Change, suggested that banking and borrowing might bring useful flexibility to the Scottish framework—

‘Is it appropriate not to have banking and borrowing in Scotland? If Scotland has year-on-year targets, some flexibility is probably wanted to allow for such events. The committee might want seriously to consider allowing a little borrowing from future years.’\(^{55}\)

86. The Minister explained his views on banking and borrowing in evidence to the Committee—

‘Banking and borrowing is simply about the budgets; it is not necessarily about the action that is required to address the problem. Ministers would have an overdraft, in carbon terms, and it is not terribly easy to deal with that when you are working on an annual reporting cycle. Our approach is intended to be quite a challenging one for ministers and their teams to deal with, as it forces an immediate response.’\(^{56}\)

87. It is clear to the Committee that the UK and Scottish Governments have decided to take different approaches in relation to the flexibility built into their respective targets framework. The Committee notes that the Bill’s use of annual targets for emissions reductions rather than the multi-year emissions budgets proposed in the UK Act, and the absence of banking and borrowing arrangements, means that the regime adopted in Scotland will be more rigid that that in place elsewhere in the UK.

88. Whilst many witnesses have welcomed the Scottish Government’s adoption of this challenging approach in the Bill, others – including the chief executive of the UK Committee on Climate Change – have raised questions as to whether the proposals in the Bill allowed for sufficient flexibility. The Committee is satisfied with the approach in the Bill but recommends that the Scottish Government keeps its system of operation of annual targets under review.

**International credits**

89. The Bill as introduced allows for international credits gained from emissions trading to be counted towards Scottish targets, with no limits prescribed on this practice.

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90. This is a different approach from that taken in the UK Climate Change Act 2008 where the legislation places a duty on the Secretary of State to set a limit on the 'net amount of carbon units' that can be credited to the net UK carbon account in each budgetary period. The UK Act also provides for the Secretary of State to take into account the advice of UK Committee on Climate Change before setting the limit.

91. Dr Andy Kerr from the University of Edinburgh commented—

‘If the committee wants to create a trajectory that guarantees that emissions from Scotland through to 2050 are below the curve and that cumulative emissions are at a set amount, it must impose limits.’\(^{57}\)

92. Dr Kerr suggested, however, that setting a limit on the face of the Bill might be counterproductive—

‘I have no doubt that once a figure is put in statute it will be used. There might be an argument for leaving things slightly more ambiguous, while ensuring that there will be a credibility gap for the Government if it has to buy credits. That might be a more powerful tool.’\(^{58}\)

93. Duncan McLaren of Friends of the Earth Scotland set out the views of Stop Climate Chaos Scotland on this issue—

‘Stop Climate Chaos Scotland would like a fairly tough limit to be placed on the amount of credits that can be purchased from international sources. By placing no limits, the account sets no standards for what sort of credits can be used. That is of grave concern.’\(^{59}\)

94. He went on to argue that an advantage of having a set limit is that it would ensure that investment would be encouraged in those technologies and sectors that could help make emissions reductions domestically, which would mean that Scotland could be one of the countries that could sell those technologies and that expertise, rather than one that subsequently had to import them.\(^{60}\)

95. Gavin McLellan of Christian Aid Scotland highlighted this issue as being of central importance if the Bill is to succeed. He suggested a 20% cap on emissions trading and commented—

‘We could make the bill a world leader in many respects. At present, it is potentially world leading: it is important that we make it so and that we give


international leadership by ensuring that we achieve 80 per cent of our reductions through domestic effort.\textsuperscript{61}

96. Brendan Dick of the Climate Change Business Delivery Group appeared to agree broadly with this line of argument, stating—

‘Although using credits might be in the mix on the journey, at the key staging points of 2030 and 2050, the ambition for the country ought to be genuinely to hit the 80 per cent target, not to hit 70 per cent and have bought 10 per cent. That is important, but it is going to be pretty challenging.’\textsuperscript{62}

97. In written evidence, the Scottish Association for Public Transport argued that without a limit on carbon credits ‘there is a risk that political factors and low prices for carbon will dilute the incentives for the steeper cuts in greenhouse gas emissions required in all countries’.\textsuperscript{63}

98. In relation to a potential approach to limiting international credits, Professor Peter Smith of the University of Aberdeen suggested a possible arrangement ‘to make the cap more stringent as time goes on—as will happen with the annual targets.’\textsuperscript{64}

99. In evidence to the Committee, the Minister confirmed that—

‘We cannot, as a matter of principle, discount the use of credits as part of the process of ensuring that we make our overall contribution. However...we must make actual reductions in greenhouse gas emissions if we are to play our proper part in achieving the 2050 target for the containment of the increase in the world’s temperature.’\textsuperscript{65}

100. The Committee notes the clear evidence which emerged during the course of its Stage 1 scrutiny in favour of setting a limit on the use of international credits on the face of the Bill. The Committee therefore welcomes an indication that the Scottish Government is planning to revisit this issue. A letter dated 18 March 2009 from the Minister states—

‘As it has always been Scottish Ministers’ intention to prioritise domestic emissions reductions, options are being considered for limiting the amount of carbon units which may be used to credit the net Scottish emissions account for any given period including when such limits may be introduced. This would restrict the amount of emissions which Scottish Ministers may offset, thereby placing greater emphasis in achieving emissions reductions within Scotland.’


\textsuperscript{63} Scottish Association for Public Transport. Written submission to the Transport, Infrastructure and Climate Change Committee.


Scottish Ministers are aware that this is a complex area, and that any limit on carbon unit use must be drafted in such a way that it does not interfere with the operation of trading schemes such as the EU Emissions Trading Scheme.\(^{66}\)

101. After considering the evidence it has received on this matter, the Committee is concerned that if the Bill does not provide for a limit to be placed on the level of international credits or specify a minimum proportion of emissions reductions to be achieved by domestic effort, the credibility of the Scottish Government’s performance in reducing emissions could potentially be diminished. Given also concerns about the robustness of methodologies that might be used in other jurisdictions to measure carbon saving, the Committee recommends that appropriate provisions are included on the face of the Bill to require a limit to be set by Ministers subject to the approval of Parliament.

102. The Committee notes the model which is applied in the UK Act which places a duty on the Secretary of State to prescribe a limit taking into account advice from the UK Committee on Climate Change. It envisages an approach being taken in Scotland which is broadly in line with the UK Act. The Committee welcomes the Scottish Government’s commitment to examine this issue further and looks forward to seeing developed proposals being brought forward at Stage 2 of the Bill scrutiny process.

### Sectoral targets

103. The Committee took evidence on whether there would be merit in the framework set out in the Bill setting specific targets for emissions reductions for different sectors of the economy.

104. Professor Peter Smith of the University of Aberdeen argued against this idea—

'It is useful to maintain the flexibility of not having sectoral targets at the outset because that allows the Government to choose the policy instruments that it feels are appropriate for each sector's prevailing economic situation.'\(^{67}\)

105. On the other hand, Duncan McLaren of Friends of the Earth Scotland and Stop Climate Chaos Scotland felt that a sectoral approach did have some merit—

'We are not arguing that there should be highly detailed, specified sector targets—that is not the general position of SCCS—but no one at this end of the table would disagree that all sectors must play their role and that the bill must include measures, targets, duties or other enabled powers to ensure

\(^{66}\) Scottish Government. Letter from the Minister for Transport, Infrastructure and Climate Change to the Convener of the Transport, Infrastructure and Climate Change Committee dated 18 March 2009.

that that happens. The bill includes such powers for the waste and energy efficiency sectors but not for the transport sector.  

106. The Royal Society of Edinburgh suggested that sectoral action plans should be considered and gave an illustration of what could be achieved in the area of energy efficiency stating—

‘It is important...that a suitable array of Action Plans is developed by the Scottish Government on a sector-by-sector basis for strategy implementation and that this is done in an integrated fashion to ensure convergence of purpose....

...There are early gains to be made in reducing emissions and it would be sensible and natural to pick off the “low hanging fruit” first. There should be increased focus on those immediate and cost-effective ways of reducing emissions, such as energy efficiency. Major energy efficiency measures for buildings must be the major priority if we are to maximise our chances of reducing carbon emissions rapidly.’

107. The Minister commented on this issue—

‘The setting of sectoral targets will become more possible over time....There is not information that would support the development of sectoral targets. The important point is that no one should think that they have been let off the hook and that they need not do everything they can just because another sector must make huge reductions.’

108. The Committee notes that the framework in the Bill does not provide for targets to be set for the expected contribution of each sector of the economy in meeting the emissions reductions targets. The Committee notes the view that if individual targets were rigidly defined in the Bill for every sector there would be methodological problems in capturing the contribution of each sector and a risk that the Bill might be unnecessarily rigid. However, the Committee believes that more must be done to drive forward emissions reductions in four key sectors: land use, energy generation, energy efficiency and transport. The Committee therefore recommends that the Scottish Government should be required, in setting out its approach to the meeting of the targets, to define and quantify how each of these four sectors is expected to contribute to overall emissions reductions. The Committee discusses this process in more detail later in this report.

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69 The Royal Society of Edinburgh. Written submission to the Transport, Infrastructure and Climate Change Committee.
Aviation and shipping

109. The stated policy intention of the Scottish Government is to include the Scottish share of emissions of greenhouse gases from international aviation and international shipping in overall emissions reduction targets.71

110. The Committee notes, however, that this is not explicitly provided for on the face of the Bill. Instead, the Bill states that Scottish Ministers may make provision, by order, for a proportion of emissions from international aviation and shipping to be attributed to Scotland. The Committee questioned the Scottish Government Bill Team on the reason for this approach. An official explained—

‘The reason why we are suggesting that we bring those areas into the targets through regulations is simply to provide us with a flexible mechanism to adapt to international agreement in the future. Scottish ministers are obviously keen for other countries to follow their lead and take on board the need to tackle emissions from international aviation and shipping. We need a mechanism that we can use in the short term until we have an internationally agreed protocol.’72

111. This reassurance was welcomed by Richard Dixon of WWF Scotland and Stop Climate Chaos Scotland, and the proposal attracted support from organisations such as COSLA and the Sustainable Scotland Network. Richard Dixon argued, however, that the provisions should be included on the face of the Bill rather than in a separate order.

112. In a letter to the Committee of 18 March 2009, the Minister indicated that he was aware that concerns had been expressed that section 14(1) of the Bill does not, as drafted, commit Scottish Ministers to include greenhouse gas emissions from international aviation and international shipping. The letter went on to state that—

‘Scottish Ministers will therefore seek to amend the Bill at Stage 2 to remove any ambiguity that an order will be brought forward in this regard; and introduce a deadline by which the Scottish Ministers must lay the first order under section 14(1).’

Implications of including aviation and shipping in scope of the Bill

113. In evidence to the Committee, Gordon Dewar of BAA Scotland commented that ‘we certainly understand and welcome the leadership and commitment that the Scottish Government has shown in pursuing this critical [climate change] agenda’.73 However, he also highlighted his concerns about limiting aviation emissions in Scotland—

‘The unintended consequences that we are concerned about would make Scotland uncompetitive. Any measures that try to limit aviation or, indeed, to impose costs on aviation are likely only to move emissions from Scotland to somewhere else rather than reduce them overall.’

114. Gordon Dewar of BAA Scotland expressed particular concern about the implications for the tourism industry, and suggested that there was a risk that tourists would travel elsewhere if either costs or barriers to travelling to Scotland became higher than other destinations.

115. He went on to suggest that one way of managing emissions from aviation would be through participation in the EU emission trading scheme. He told the Committee—

‘By 2012, we will be in the European emission trading scheme. That will allow us to recognise in an efficient way the fact that our emissions are growing. To allow that to happen, we must fund research and the buying of credits from other people. We will therefore give all the other industries incentives to invest in the new technology that will start to drive down emissions overall, which is the point of the scheme.’

116. Robert Ashdown, representing the Chamber of Shipping, commented that including shipping emissions within the scope of the Bill ‘is not a question of desirability but of practicality’. He went on to argue—

‘It would of course be good if the Climate Change (Scotland) Bill was entirely holistic and dealt with every aspect of every sector. The problem is how that could be done. How can Scottish shipping be defined, and how can Scotland’s contribution to global international shipping emissions be taken into account?’

117. Robert Ashdown also urged caution over the degree to which shipping emissions could realistically improve in the short term due to the timelag in new shipping technology being rolled out.

118. Some witnesses took issue with the idea that aviation and shipping might be allowed to make less substantial cuts in emissions than other sectors as a result of emissions trading arrangements. Paul Tetlaw of Transform Scotland argued—

‘I am afraid that if we listen to the special pleadings from certain sectors in transport and there is business as usual, all of our emissions and more will be taken up by transport alone. Therefore, emissions in every other area of

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society will have to be sacrificed so that there can be business as usual in transport. That is clearly untenable.\textsuperscript{79}

119. An accusation of ‘special pleading’ was also levelled against the aviation and shipping sectors by Chas Booth from the Association for the Conservation of Energy.\textsuperscript{80}

120. The Minister acknowledged that ‘if aviation does not play its part, everyone else has to pick up the slack’.\textsuperscript{81}

**Methodology for accounting for aviation and shipping**

121. Some witnesses highlighted the potential methodological difficulties in accounting for Scotland’s share of aviation and shipping. Professor Peter Smith of the University of Aberdeen explained—

‘It is difficult to attribute emissions from those sectors to individual countries...That is simply to do with the fact that ships sail all round the world and can be owned in one country and registered in another. There are issues to do with bunker fuels in shipping. Aviation raises similar issues, although they are perhaps slightly less intractable.’\textsuperscript{82}

122. Several witnesses highlighted the need for any methodology which accounts for aviation emissions to take account of the multiplier effect for radiative forcing which means that emissions at higher altitude are more damaging to the atmosphere. This impact was described by Richard Dixon of WWF Scotland and Stop Climate Chaos Scotland when he told the Committee—

‘Although aviation is a reasonably small contributor to our emissions today—about 3.5 per cent of emissions from Scotland come from international aviation—we are underestimating it if we do not use a multiplier to reflect the extra impact of forming clouds and producing gases at high level.’\textsuperscript{83}

123. In relation to shipping, Professor Peter Smith cautioned that work on allocating emissions ‘should probably be done at international level—at UNFCCC [United Nations Framework on Climate Change] level. We cannot take action unilaterally.’\textsuperscript{84}


124. Robert Ashdown from the Chamber of Shipping told the Committee ‘we have several ways of measuring emissions from shipping but, unfortunately, they are all inaccurate.’

125. David Kennedy, the chief executive of the UK Committee on Climate Change, drew a distinction between the allocation of emissions from aviation and shipping. Although allocating emissions from aviation would be challenging, he indicated that ‘there are methodologies that we are comfortable with.’ In relation to shipping, however, he suggested that the task was more problematic—

‘We were not satisfied that we could get a handle on the UK share of international shipping emissions...Although we have methodologies to apportion emissions, we were not comfortable that they actually represent our share of shipping emissions. That led us to conclude that we cannot tackle shipping emissions at national level, and that the only way to tackle it is at global level, with global agreement.’

126. David Kennedy went on to explain—

‘With that in mind, we are watching what the International Maritime Organization proposes to the United Nations Framework Convention on Climate Change by way of a global agreement later this year. That will be the key as far as shipping is concerned. It is difficult, however, to arrive at a meaningful number for shipping at UK level.’

127. Gordon Wilmsmeier from Napier University, however, cautioned that even intervention by the International Maritime Organization (IMO) might not offer a solution—

‘It is important to bear in mind that the IMO regulation might solve certain problems that we have in Europe, but many countries have not signed the IMO agreement, so we might just be pushing problems towards other regions of the world, which is not a solution.’

128. Some witnesses responded to these concerns by arguing that it would be better to proceed with an imperfect system for allocating shipping emissions than to do nothing. Chas Booth from the Association for the Conservation of Energy commented that the ‘measurement process might not be perfect, but it is better to have an imperfect process than no process’

129. The Minister responded to the concerns regarding the allocation of emissions from shipping in evidence to the Committee—

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‘...We need internationally to understand how we measure the emissions. We have numbers that help to inform us, but they are simply bunkering numbers. For exactly the reasons that I mentioned in relation to aviation, there are difficulties.

The European Union is pressing the International Maritime Organization to address emissions from shipping and to develop a mechanism by which we can get sensible estimates. Of all the transport areas, shipping is probably the one in which least progress has been made.’

130. The Scottish Government also indicated in a letter to the Committee of 18 March 2009 that it proposes to lodge an amendment at Stage 2 of the Bill ‘to require the power to make subsequent orders under section 14(1) to allow the methodology for Scotland to be changed in line with any future international agreements on the apportionment of emissions from international aviation and international shipping.’

Conclusion on aviation and shipping

131. The Committee welcomes the Minister’s commitment to strengthen the wording of the Bill in relation to aviation and shipping and looks forward to amendments being brought forward to that effect at Stage 2. The Committee notes the potential methodological problems which have been identified in accounting for Scotland’s share of aviation and shipping emissions. In relation to aviation, it appears to the Committee that these problems, whilst challenging, can be overcome.

132. The Committee therefore recommends, as a first step, that the Scottish Government considers how the multiplier effect for radiative forcing can be incorporated into the data on aviation emissions, so that additional damage to the atmosphere that occurs when emissions take place at high altitude is taken into account. The Committee suggests that the Scottish Government requests advice from the UK Committee on Climate Change on how best to measure and incorporate these effects.

133. In relation to shipping, it is clear from the evidence that different methodological problems exist in relation to including Scotland’s share of emissions from international shipping within overall emissions reduction targets. The Committee is aware that some data has been published by the UK Air Quality Archive which may provide a starting point for the necessary calculations to be made, but the Committee has not received any firm reassurances from the Minister as to when production of accurate and meaningful data would be possible.

134. The Committee therefore requests clarification on the approach which the Scottish Government intends to take in relation to shipping emissions in advance of bringing forward an order under section 14 of the Bill. The Committee is keen

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that any methodological problems in relation to shipping emissions do not delay the introduction of the provisions.

135. **The Committee recommends that there should be separate provisions covering aviation and shipping emissions in the Bill.** The Scottish Government has indicated its intention that the Scottish share of both aviation and shipping emissions should be included in overall emissions targets. The Committee suggests, however, that the means of doing this may need to vary because of the different methodological challenges involved and the need for international agreements in relation to shipping.

**THE INTERIM TARGET AND TARGETS TO 2019**

**The need for early action**

136. The Committee notes the importance of taking early action to address climate change. The *Stern Review: The Economics of Climate Change* argued that the sooner action is taken to reduce greenhouse gas emissions, the more likely it will be that a more sustainable track towards reducing global emissions can be reached.

137. The shape of the emissions reduction curve is of crucial significance in determining whether the 2050 target can be met. The steepness of the decline in emissions will determine the cumulative amount of greenhouse gases in the atmosphere, which is directly related to predicted temperature increases. A slow decline, followed by a rush to meet the 2050 target, will have a more damaging climate change impact than a sharp initial fall in emissions. In a graph showing emissions reductions over time, cumulative emissions are in the so-called ‘area under the curve’. Richard Dixon of WWF Scotland and Stop Climate Chaos Scotland argued—

‘The area under the curve that describes Scotland’s emissions will tell us about the total contribution that Scotland is making to the climate change problem around the world. It is important to think about that total amount, which is why it is important to define the shape of that curve tightly…’

138. The Committee notes that early action to cut emissions will reduce the level of cumulative emissions in the atmosphere and allow Scotland to get on the right trajectory to meet the 2050 reduction target. Dr Alice Bows of the Tyndall Centre for Climate Change Research explained that—

‘The important thing is the emission pathway that you travel down to get to your aspiration in the future—the 2050 target. The target is likely to change depending on how much emissions increase in the short term. If they increase more now than you think they will, the 2050 target has to drop.’

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139. The Committee discusses the importance of putting policies in place to achieve early action to cut emissions later in this report.

**Approach in the Climate Change (Scotland) Bill (as introduced)**

140. One of the main provisions in the Bill to encourage early action on emissions reduction is the 2030 interim target. The Policy Memorandum accompanying the Bill states—

‘The Bill creates an interim target which requires that the Scottish Ministers ensure that the net Scottish emissions account for the year 2030 is at least 50% lower than the baseline. The 2030 interim target is intended to act as a milestone on the path to 2050, strengthening the requirement for early emissions reductions to be delivered in the run up to 2050.’

141. The Policy Memorandum also states—

‘From the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Like the mid-point 2030 target, this is designed to ensure early action is taken to reduce Scottish emissions. Prior to 2020, the Scottish Ministers will be expected to set annual targets which build towards delivering emissions reductions of at least 3% each year.’

**Approach in the UK Climate Change Act 2008**

142. The approach in the Climate Change (Scotland) Bill differs from the approach in the UK Climate Change Act 2008. The UK Act provides for reductions in greenhouse gases through action in the UK and abroad of at least 80% by 2050. It contains an interim target of a reduction in the UK carbon budget of at least 26% by 2020. The Climate Change Act 2008 establishes the principle of carbon budgets which place legally binding ceilings on the level of allowed UK emissions over five year periods.

143. The 2020 interim target was subsequently reviewed by the UK Committee on Climate Change to reflect the inclusion in the Act of all greenhouse gases and the increase in the 2050 target to 80% during the passage of the legislation. The outcome of this review was the publication of advice from the UK Committee on Climate Change on the level of carbon budgets for 2008-2012, 2013-2017, and 2018-2022 for the UK.

144. In proposing the level of carbon budgets, the UK Committee on Climate Change produced two sets of budgets: the Intended Budget, which should apply following a global deal on climate change anticipated to be reached in Copenhagen later in 2009, and the Interim Budget, to apply before a global deal is reached.

145. The Intended Budgets require an emissions reduction of 42% in 2020 relative to 1990. The Interim Budgets require an emissions reduction of 34% in 2020

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94 Climate Change (Scotland) Bill. Policy Memorandum, paragraph 29. Available at: [http://www.scottish.parliament.uk/s3/bills/17-ClimateChange/b17s3-introd-pm.pdf](http://www.scottish.parliament.uk/s3/bills/17-ClimateChange/b17s3-introd-pm.pdf)

95 Climate Change (Scotland) Bill. Policy Memorandum, paragraph 31. Available at: [http://www.scottish.parliament.uk/s3/bills/17-ClimateChange/b17s3-introd-pm.pdf](http://www.scottish.parliament.uk/s3/bills/17-ClimateChange/b17s3-introd-pm.pdf)
relative to 1990. Both sets of budgets apply to all greenhouse gases rather than just CO₂.

146. On 22 April 2009, the UK Government announced in the 2009 Budget that the UK’s first three carbon budgets will be set at levels leading to a 34% reduction in greenhouse gas emissions with respect to 1990 levels by 2020.

2030 interim target in the Climate Change (Scotland) Bill (as introduced)

147. The Committee notes that there are two key questions in relation to the interim target in the Climate Change (Scotland) Bill. First, is the 2030 interim target an appropriate staging post, or would a 2020 interim target (as applies in the UK) be more suitable? Second, if a 2020 target is adopted in Scotland, what level of emissions reductions should be required by that date?

148. A number of witnesses suggested that the interim target for Scotland should be moved to 2020 and the level of emissions reduction should be the same as (or even more challenging than) the upper limit proposed by the UK Committee on Climate Change for the UK (ie 42%).

149. The Royal Society of Edinburgh, in written evidence, told this Committee that—

‘The Bill implicitly assumes, as do many other approaches to this issue, that early emissions reductions will be small and later ones large. We believe that it would be more appropriate to reverse these relationships by targeting early, strong reductions that start as early as possible…..

…the first part, of slow change, represents the time taken for policy instruments to come on-stream. The second part, of the fastest rate of emissions reduction, as one where we pick the “low hanging fruit”, with the final stage being one of relatively slow rate of reduction.

The endpoint target of an 80% reduction by 2050 is an irrelevance unless there are appropriate intervening milestones. The key target must be to minimise the aggregate emissions between now and 2050; in other words, to minimise the area under the emissions curve.

We strongly advocate that an interim strategy target should be defined for 2020. It should be a challenging target that encourages early action, and one that, because of its imminence, perennially impinges on Government perspectives no matter which party is in power.’

150. Phil Matthews of the Sustainable Development Commission Scotland told the Committee—

‘The cut that the Committee on Climate Change recommended as a potential target by 2020, which could be a cut of up to 42 per cent from 1990 levels, is a more ambitious target than what we have in Scotland. Obviously, Scotland

96 The Royal Society of Edinburgh. Written submission to the Transport, Infrastructure and Climate Change Committee.
151. Richard Dixon of WWF Scotland and Stop Climate Chaos Scotland argued that—

‘…The UK Government expects Scotland to do more, the aspiration of ministers appeared to be for Scotland to do more and, because of our natural resources—we have lots of renewables—we have the ability to do more. That is why a 50 per cent reduction by 2020 looks like the target that we should set.’

152. Grant Hodges, representing the Climate Change Business Delivery Group, indicated he was ‘very much in favour of a 2020 target.’ Support for an earlier interim target was also given by the Association for the Conservation of Energy, and by the Sustainable Scotland Network, whose representative told the Committee that ‘the bill sets an interim target for 2030, but we should probably think about setting a target for 2020, in line with existing legislation and international obligations.’

153. The chief executive of the UK Committee on Climate Change, David Kennedy, offered his perspective on the ambition of the Scottish proposals—

‘We have thought a little about the interim target and have some questions about how ambitious that is. We are not saying that it is not ambitious enough, but there is more thinking to be done about it and its implications for what must be done now.’

154. Other witnesses cautioned that achieving major early reductions in emissions will be challenging, because of the time required to put in place the necessary social, economic, and infrastructure changes. Dr Andy Kerr of the University of Edinburgh explained that because of the momentum in economies—

‘Emissions reduction will almost always take the form of an S-shape; almost all economies will reduce slowly to begin with, sharpen up in the middle and slow down again when they have to deal with the really challenging stuff at the end.’

155. This view was confirmed by Professor Peter Smith of the University of Aberdeen, who highlighted the need to—

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‘Strike the right balance between taking the quick and easy options that we can identify and implement relatively quickly and tackling the inertia that we encounter in the system as we try to change things. Some of the changes that are required involve large changes to infrastructure.’

**Conclusion on the date of the interim target**

156. The Committee endorses the view which emerged during its evidence taking that an earlier, more challenging interim target is required in the Bill in order to encourage more immediate reductions in emissions. The Committee questioned the Minister on this point. He told the Committee in its final evidence-taking session on the Bill that—

‘It now appears that 2020 would be a more appropriate date for an interim target, so on that we are very likely to amend the bill. The 2020 target that we are likely to end up with on the basis of scientific advice—we have not yet come up with an exact figure—is likely to be more challenging than the 2030 target that we put as a minimum in the bill.’

157. When questioned on whether Scotland could be in a position to match any potential UK reduction in greenhouse gases of 42% by 2020, the Minister told the Committee—

‘It is not yet clear from the scientific advice exactly what steps would need to be taken to deliver a reduction in emissions of 42 per cent by 2020...We await further advice on the subject. If it can be demonstrated based on scientific advice that such a figure is right for Scotland, we will take account of that, but we cannot discount the European trading schemes and the effects of those schemes that will be superimposed on the UK and Scotland.’

158. The Minister confirmed in a letter to the Committee on 18 March 2009 that he intends to bring forward amendments to the Bill at Stage 2 to replace the 2030 target with a 2020 target. This letter indicated that Ministers are currently considering the level at which the 2020 target should be set. This work will be informed by advice from the UK Committee on Climate Change, the approach of the UK Government, and current and future international agreements on emissions reductions and the prospect of the EU adopting a 30% emissions reduction target for 2020 in the event of an international agreement being reached at Copenhagen.

159. The Committee welcomes the indication by the Scottish Government that it will bring forward the date of the interim target from 2030 to 2020. In particular it

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welcomes the early response by Ministers to the views expressed in evidence to the Committee, as well as to the decision of the UK Government to bring forward its interim target in the context of international discussions due to take place at Copenhagen later in 2009.

160. The Committee supports in principle the general consensus that new interim targets should be brought forward to 2020 and made more challenging than previously. It welcomes the Minister’s statement that this is the Scottish Government’s intention. However there are likely to be significant resource implications involved in bringing this target forward and the Committee will wish to be given very specific details by Ministers which show that the adjustment has been properly considered in policy terms and that the government will make resource provision for it.

161. The Committee notes the recommendations provided by the UK Committee on Climate Change which provide for either an interim 34% or an intended 42% reduction in emissions by 2020 at a UK level, depending on international agreements. The Committee believes that these figures may be taken as the starting point for the debate about a suitable interim target for Scotland. The Committee discusses this further in the next section of the report.

Targets in the period to 2019

162. The SNP manifesto commitment was ‘to introduce a Climate Change Bill with mandatory carbon reduction targets of 3% per annum and also set a long term target of cutting emissions by a minimum of 80% by 2050’. Had the 3% commitment been introduced as promised in the manifesto, it would in theory have led to a 45% reduction in emissions by 2020. The Scottish Government’s intention now is that the introduction of the 3% targets will be delayed until 2020. As currently drafted, the Bill provides for—

- The annual target for the year 2010 being an amount which is less than the estimated net Scottish emissions account for 2009
- The emissions reduction targets for each year in the period 2011-2019 being an amount which is less than the target amount for the previous year
- In the period 2020-2050, the annual percentage rate of reduction in greenhouse gas emissions being driven by targets which must be at least 3% lower than the target for the previous year.

163. The Scottish Government has been willing to set precise quantified targets for the period 2020-2050 but reluctant to quantify targets in the period 2010-2019. Scientific evidence is clear that early reductions have the greatest benefit in reducing climate change and it is considered that the Scottish Government must have much more information on which to base projections on the expected effectiveness of initiatives to tackle climate change in the next ten years than it has for the three decades thereafter.

164. The first question to consider is what annual emissions reductions will be required between 2010 and 2019 in order to hit the new 2020 target. The answer
to this question will obviously depend on the reduction figure chosen for the 2020 target.

165. The second question to consider is whether the specific emissions reductions targets required between 2010 and 2019 should be set out in more detail on the face of the Bill than is currently the case, perhaps in a manner similar to the targets for the period 2020 to 2050 or whether bringing forward the introduction of the 3% target from 2020 to the earliest achievable date would be the most appropriate way of making progress towards the interim 2020 target.

Views provided to the Committee

166. Chas Booth of the Association for the Conservation of Energy argued that statutory annual targets of at least 3% ‘should be delivered from the very start’.107 Glasgow City Council argued in written evidence that the Bill ‘must establish year-on-year reduction targets of at least 3% from the start’.108 Duncan McLaren of Friends of the Earth Scotland explained the position of Stop Climate Chaos Scotland on this issue—

‘We want the statute to establish that there should be emissions reductions of at least 3 per cent year on year from the beginning, not from 2020. We think that such reductions are necessary to meet the requirement for early action and that they are entirely possible.’109

167. Other organisations felt that it was important that Scotland should be ambitious between 2010 and 2020, but were less clear on whether statutory action was required. Phil Matthews of the Sustainable Development Commission Scotland argued—

‘I still think that we can do more between now and 2020 than just move on from the business-as-usual case that we have at present, with cuts in emissions of about 1.25 per cent per annum. I do not know how it could be included in the bill, but it would be good to move more quickly than the bill suggests towards annual cuts of 3 per cent by 2020.’110

168. John Stocks of the Carbon Trust told the Committee—

‘There will be a time lapse before we get onto a trajectory of 3 per cent annual reductions, but I doubt that it needs to take until 2020 for us to get there.’111

169. This view was supported in written evidence from Tearfund which suggested that statutory minimum reductions of 3% could be established after 2012. The

108 Glasgow City Council. Written Submission to the Transport, Infrastructure and Climate Change Committee.
Royal Society of Edinburgh suggested in evidence that 3% year-on-year emissions reductions could be introduced earlier, for example from 2011.

170. The chief executive of the UK Committee on Climate Change, David Kennedy, explained—

‘Up to 2020, Scotland will be looking for reductions of at least 2 per cent, moving towards 3 per cent, to be consistent with the UK as a whole.’\footnote{Scottish Parliament Transport, Infrastructure and Climate Change Committee. \textit{Official Report}, 27 January 2009, Col 1397.}

171. In evidence, the Minister told the Committee—

‘We will set our annual targets based on auditable scientific advice from the UK Committee on Climate Change, which will be based on information that is available to us all. Our targets will balance science and achievability: they must be credible and deliverable, and we want to make the fastest possible progress. Our drawing forward of the 2030 target to 2020, and the implication that that will be more challenging than the 2030 target that we are setting, is evidence that our approach to targets and use of annual targets will drive early change.’\footnote{Scottish Parliament Transport, Infrastructure and Climate Change Committee. \textit{Official Report}, 10 March 2009, Col 1658.}

**Additional information provided by the Scottish Government**

172. Throughout its scrutiny of the Bill, the Committee has been keen to understand the scientific basis behind the Scottish Government’s decision not to proceed with statutory 3% annual reductions in emissions from 2010 to 2019. In a letter dated 18 March 2009, the Scottish Government provided information on the potential implications of 3% annual reductions to 2019 being included on the face of the Bill. The Committee welcomes this additional information as a helpful insight into Scottish Government thinking, but notes that it would have been even more helpful if this had been made available at the start of the Stage 1 process. It is also clear that additional work is required to develop these figures further.

173. The letter sets out the action which might be required if Scotland wanted to mirror either the UK Committee on Climate Change’s 34% interim 2020 target or its 42% intended target. The letter notes that a trajectory based on a 3% annual reduction in Scotland’s emissions from 2010 equates, roughly, to a 43% reduction in 2020 against 1990 levels. The Committee notes that this would have the effect of marginally exceeding the UK Climate Change Committee’s intended ‘optimistic’ UK target. The letter makes the point, however, that—

‘Given that emission reductions from the traded sector are, in effect, pre-defined at the level of the Interim Target (34%), for Scotland to achieve 3% annual reductions between 2010 and 2019 would require the bulk of the savings to come from the non-traded sector, by which we mean very
significant carbon savings from energy use in heating buildings, from transport, waste, agriculture or forestry.\textsuperscript{114}

174. The letter suggests that ‘emissions in the non-traded sector would need to be reduced by 4-5% each year, with emissions in 2020 needing to be around 12 MtCO\textsubscript{2e} [metric tons carbon dioxide equivalent] lower than in 2009’.\textsuperscript{115} The letter indicates that ‘much more radical measures in the non-traded sector’ would be needed with the potential for significant upfront costs and the likelihood remaining of a significant shortfall remaining in order to meet the targets. The letter states in relation to the supply side—

‘In most, if not all, carbon savings measures, there is the need to increase the capacity of the supply chain to deliver. This cannot happen overnight and it would be unreasonable to expect it to. There is little point in having targets that we fail in year one. An acceleration of effort is required but we need time to ramp up our efforts.’\textsuperscript{115}

175. In relation to the way forward for the setting of targets in the period to 2019, the letter from the Scottish Government states—

‘The CCC [UK Committee on Climate Change] recommended that, if there is an international agreement at Copenhagen later this year, then the UK should move to the Intended Target of 42%. The Scottish Government will review its position in light of any new international circumstances and advice that it receives.’\textsuperscript{116}

176. It is not clear to the Committee when it is intended that the level of the Scottish 2020 interim target will be set. It appears possible that the figure may not emerge until the outcome of the United Nations Climate Change Conference in Copenhagen in December 2009. It remains to be seen, therefore, how this position will be reflected in the amendment to the Bill at Stage 2 which sets the date of 2020 for the interim target; an amendment which will be discussed by the Committee before the outcome of the summit is known.

177. The Committee notes, for example, that in relation to the UK Act, a relatively low figure of a 26% reduction in CO\textsubscript{2} was included on the face of the Bill, with the prospect of it being revised upwards at a later date depending on scientific advice. As has been discussed above, it now appears that this figure will be in the order of 34% to 42%, and cover all greenhouse gases. This is potentially 16% above the interim target set out on the face of the UK Bill.

\textsuperscript{114} Scottish Government. Letter from the Minister for Transport, Infrastructure and Climate Change to the Convener of the Transport, Infrastructure and Climate Change Committee dated 18 March 2009.
\textsuperscript{115} Scottish Government. Letter from the Minister for Transport, Infrastructure and Climate Change to the Convener of the Transport, Infrastructure and Climate Change Committee dated 18 March 2009.
\textsuperscript{116} Scottish Government. Letter from the Minister for Transport, Infrastructure and Climate Change to the Convener of the Transport, Infrastructure and Climate Change Committee dated 18 March 2009.
178. In relation to the way forward for the setting of targets in the period to 2020, the letter from the Scottish Government concludes—

‘The Bill requires that we set our annual targets following receipt of advice from the “relevant body” which in the first instance is to be the Committee on Climate Change. This advice will be in the context of the 2020 interim target to be inserted into the Bill. The CCC has already shown that it will not shirk from recommending demanding targets. Crucially, though, their advice will be based on expert and independent analysis of real emissions abatement potential, and that seems the sensible way to go forward.’\(^{117}\)

**Conclusion on the level of the interim target and annual targets to 2019**

179. The Committee has heard a great deal of expert evidence emphasising the importance of taking early actions in order to reduce the overall level of cumulative emissions in the atmosphere and to increase the chances that the 2050 target will be met. **It is clearly vital that early progress is made in order to secure significant emissions reduction.** The Committee has received many representations suggesting that annual emissions reductions of 3% should be a new statutory requirement between 2010 and 2019 in order to promote early action. The Committee notes the estimates provided by the Scottish Government, which suggest that a 3% annual reduction in emissions would roughly equate to a 43% reduction in emissions by 2020. The Committee also notes that the approach of the UK Committee on Climate Change is based on two targets, a lower target of 34% if international and EU agreements cannot be arrived at and a higher 42% UK target deemed feasible in the context of international co-operation.

180. The targets in the initial 10 years covered by the Scottish Bill will have to be flexible enough to take account of international developments, which – as is acknowledged by the UK Committee on Climate Change – may significantly impact on our ability to deliver emissions reductions. If the government is now willing to set a challenging interim target for 2020, it must buttress that approach either by specifying percentage annual targets between 2010 and 2020 or by bringing significantly forward the date by which it expects Scotland to be on track with a 3% annual reduction in emissions.

181. The Committee’s view is the interim target must be challenging but feasible and its delivery must be properly planned for with milestones set along the way. As noted above, the Bill as introduced provides only that emissions should fall each year between 2010 and 2019. **The Committee therefore recommends that the Scottish Government should introduce more challenging provisions into the Bill for the period 2010 to 2019 in order to promote early action to reduce emissions.** A framework of targets linked to the proposed 2020 interim target in one or other of the formats set out above should be developed and incorporated into the Bill.

182. **There are a number of important unanswered questions in relation to the Scottish Government’s approach to the setting of the level of the interim**

\(^{117}\) Scottish Government. Letter from the Minister for Transport, Infrastructure and Climate Change to the Convener of the Transport, Infrastructure and Climate Change Committee dated 18 March 2009.
target and early annual targets. The Committee has identified the following key issues on which there is currently a lack of clarity—

- The process the Scottish Government intends to use to set the 2020 interim target.

- The specific emissions reduction level that will be set for 2020.

- The dates by which this decision will be taken by the Scottish Government and communicated to this Committee. The Committee recommends that the Scottish Government announces its proposed 2020 interim target, in the form of a percentage emissions reduction, in its response to this Stage 1 Committee report on the Climate Change (Scotland) Bill.

- Whether the Scottish Government intends to specify a figure for the interim target on the face of the Bill (as with the current 50% reduction by 2030 target in the Scottish Bill) or whether a figure will be specified on the face of the Bill of “at least XX%” with a more challenging target to be decided later (as appeared to be the case in respect of the UK Act).

- The relationship between the interim target which will be set by the Scottish Government and the targets for the period to 2010 to 2019 (specifically, any reductions which will be required during this period). If the Scottish Government decides the level of the interim target during the passage of the Bill, the Committee will expect this to be accompanied by an indication of the trajectory of annual emissions reductions required between 2010 and 2019.

- The scientific and policy advice which the Scottish Government is basing all these decisions on, the extent to which it has calculated the financial implications of the decisions and a robust appraisal of any impact on jobs.

183. The Committee therefore recommends that the Scottish Government provides specific further information in response to each of these points as a matter of urgency in advance of Stage 2 proceedings. As discussed above, the Committee supports a strengthening of the provisions in the Bill in relation to the 2010 to 2019 targets, and anticipates that the details of how this could be achieved will be outlined by the Government before Stage 2. The Committee would expect that consideration of these issues will be informed by the provision of the additional information sought from the Scottish Government in the points discussed above.
ACHIEVING THE TARGETS

Need for action to accompany target-setting

184. The Committee notes that the mere act of setting targets for emissions cuts will not in itself deliver the necessary reductions. David Kennedy, chief executive of the UK Committee on Climate Change, made the point that—

‘We have a good track record at UK level of adopting ambitious targets, but a less good track record of meeting those targets. The challenge will be to set the targets, but the bigger challenge will be to come up with the strategies, and to implement them across all the sectors to achieve big social transformation, such as changes in the way that we think about business or corporate culture.’\(^{118}\)

185. David Kennedy stressed that action was needed now, arguing that—

‘The next five, 10 and 15 years are key. We must take our lead from what we have to do in the longer term—that has implications for what we do now—but we must act now. We must take opportunities and put in place the necessary policies. If we do not, we will miss the boat on reducing the risk of dangerous climate change.’\(^{119}\)

186. Dr Andy Kerr of the University of Edinburgh agreed, arguing that ‘one of the key issues is delivery rather than the use of science to set targets in the first place’.\(^{120}\) Dr Kerr emphasised—

‘…The fact that radical changes will be needed in the next few years in the production and use of energy and the use of land. Whatever the trajectory is over the next 10 years, the key is to put in place the processes and policies that will deliver the cuts of 3 per cent and more that are required thereafter.’\(^{121}\)

187. The Royal Society of Edinburgh, in written evidence, suggested that—

‘As the trends of climate change and its actual and imminent impacts become clearer, the imperative to move towards a low carbon economy is becoming stronger. It is recognised that those countries able to develop and implement low carbon technologies and limit the use of carbon-derived energy will be well positioned economically to exploit a developing global trend…

188. Some witnesses were cautiously optimistic that the necessary technologies and policy initiatives to reduce emissions were available, and it was now a case of harnessing them to deliver change. Duncan McLaren of Friends of the Earth Scotland and Stop Climate Chaos Scotland told the Committee that—

“We are already between 10 and 20 years into the flat bit at the top of the S shape. Industry has explored solutions and scientists have done the research, so the technologies and solutions that are necessary to move us on to the fast descent part of the curve are generally available or are very nearly available.”

189. Mike Thornton of the Energy Saving Trust agreed, telling the Committee—

“In respect of saving carbon and reaching the targets in the bill, we do not need magic bullets: we need to apply consistently techniques, approaches and technologies that are already here, over the period for which the bill sets targets. If we do that we can achieve them.”

190. The Committee notes that the targets in the Bill are simply a starting point for Scotland’s efforts to reduce emissions. The Committee also notes that setting emissions reduction targets is a comparatively straightforward task: the real challenge is to meet them. In many cases it will not be possible simply to legislate to make this happen. Yet this non-legislative action will determine whether or not the targets in the Bill can actually be met, and so it is of crucial significance.

191. The Committee considers that more progress could have been made on the development of strategies to mitigate climate change, which do not require legislative change. The Committee has heard little evidence that climate considerations are driving policy choices in areas such as energy efficiency and transport where much more could have been done without waiting for climate change legislation. The recent announcement on the timings of the Scottish Government’s energy efficiency plan mean that it may not be published until 2010 and the similar delay in the transport carbon balance sheet which it was promised would be published in 2008 are all worrying signs that tackling climate change has not been addressed with sufficient urgency by successive administrations.

Engagement with the public

192. The Committee notes that there are several key challenges which must be overcome if Scotland is to have a chance of meeting its climate change targets. These include winning the support of the public to make the required lifestyle adjustments and to endorse the climate change agenda. This is the process of

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122 The Royal Society of Edinburgh. Written submission to the Transport, Infrastructure and Climate Change Committee.
‘winning hearts and minds’. Many witnesses suggested that although this was an important objective, it was not yet happening.\(^{125}\)

193. Dave Watson of UNISON and Stop Climate Chaos Scotland argued—

‘We have not yet got people to come on board; we have not yet achieved the public engagement that was achieved on the issues of drink driving and the smoking ban. The bill will be important in that regard, but only if it drills down that engagement to the local level.’\(^{126}\)

194. Mike Thornton of the Energy Saving Trust emphasised—

‘Engagement is key. Public awareness of climate change and the need to do something about it by cutting carbon emissions is high, but engagement as a result of that awareness is relatively low.’\(^{127}\)

195. Dave Watson of UNISON and Stop Climate Chaos Scotland explained that it was difficult to legislate to promote public engagement in the Bill, because engagement would only come about if the public was genuinely interested in the climate change agenda. He argued—

‘I am more in favour of energising local communities and essentially getting them to set the targets for local politicians and other public bodies. If we get them interested, there will be no limit to the amount of public engagement that will follow.’\(^{128}\)

196. On the other hand, written evidence from the Church of Scotland highlighted the importance of personal responsibility and effective public engagement, arguing that—

‘If it is to be effective the Bill should include provisions to require the Scottish Government to promote public awareness about the legislation and its targets; and to promote public involvement and engagement in meeting those targets…

...it would be helpful for the legislation to embody a requirement for public bodies to engage with voluntary organisations in the delivery of this [public engagement] duty.’\(^{129}\)

197. In written evidence to the Committee, the Salvation Army made the point that—


\(^{129}\) Church of Scotland. Written submission to the Transport, Infrastructure and Climate Change Committee.
‘We…believe that if it is to be effective the Bill should include provisions to require the Scottish Government to promote public awareness about the legislation and its targets; and to promote public involvement and engagement in meeting those targets. The broad Third Sector also has a vital role in raising concern about climate change and taking action to reduce negative impacts.’

198. Marjory Rodger of the Confederation of Passenger Transport UK gave an example of how individual sectors needed to contribute to help persuade the public to make the individual lifestyle changes necessary to lower emissions—

‘The bill is a valuable tool and it can make a valuable contribution to winning hearts and minds, but it cannot do it on its own; it is up to the operators of all modes of transport to come to the table and make the product more attractive. We must make viable and attractive choices available to everyone if we are going to win hearts and minds.’

199. Matthew Farrow of the CBI also suggested that some businesses needed to become more fully engaged with the climate change agenda—

‘We find that some companies, although they are not opposed to acting on climate change, find it much harder to relate it to their business. I am thinking of a small media company or a small tourism company.’

200. The Committee was interested to hear the views of young people who participated in the committee event on 27 March 2009 who highlighted the challenge of engaging with people who might not normally take an interest in climate change issues. Sagan Turner of the Inverkeithing High School Energy Group told participants—

‘Even in my school, which does very well and which has a large eco-school committee, there are still not enough people who are aware of what is happening. Thinking about the rest of the country, how are we going to get the next generation more aware of the situation and how they can contribute?’

201. Liam Beattie of the Scottish Youth Parliament commented—

‘We need to raise awareness of global warming, whether through education or adverts, and we need to change people’s perceptions about climate change, including the idea that it is not happening or that it is not our

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130 Salvation Army. Written submission to the Transport, Infrastructure and Climate Change Committee.
133 Scottish Parliament Transport, Infrastructure and Climate Change Committee event. Scotland and Climate Change – Getting It Right, 27 March 2009, Col 43
responsibility but the Government’s responsibility. Everything possible that can be done needs to be done now.’\textsuperscript{134}

202. These comments underline the challenges associated with winning public support for efforts to tackle climate change. Yet it is vital that effort is made to change the way that the Scottish public thinks about climate change. If Scotland is to meet its challenging climate change targets then individuals throughout Scotland may need to make lifestyle changes. Leadership and direction from government will be essential if public support for taking measures to tackle climate change is to remain high. Individual policies brought forward by government to reduce emissions must be explained in the context of meeting overall climate change goals, and this will be particularly important if these policies involve government taking difficult decisions which may not be universally popular. The Committee believes a public engagement strategy is vital if we are to succeed in reducing Scotland’s emissions to the extent envisaged by the targets being considered. \textbf{The Committee recommends that Ministers bring forward proposals for an engagement strategy as part of their implementation plan for the Bill, which is discussed further in a later section of this report.}

\textbf{Possible actions to reduce emissions}

203. A number of witnesses highlighted in evidence to the Committee examples of possible actions that could be taken to reduce Scotland’s emissions. Some of these possible actions are noted in this section. These are not exhaustive.

\textit{Energy efficiency}

204. Duncan McLaren of Friends of the Earth Scotland and Stop Climate Chaos Scotland told the Committee that ‘the easiest way to make significant reductions [in emissions] quickly is by reducing energy consumption’.\textsuperscript{135} He argued that—

‘A Scotland-wide home energy insulation package would provide work for plumbers, builders and carpenters as well as for scientists and energy specialists.’\textsuperscript{136}

205. The Committee notes that such a package could also provide a market from products such as recycled glass wool and paper as insulating materials.

206. Professor Peter Smith of the University of Aberdeen also mentioned the issue of energy efficiency commenting—

‘On the marginal abatement cost curve, energy efficiency is right down there as cost negative; it saves money and energy, so it makes a huge amount of sense. The question is why it is not happening.’\textsuperscript{137}

\textsuperscript{127} Scottish Parliament Transport, Infrastructure and Climate Change Committee event. \textit{Scotland and Climate Change – Getting It Right}, 27 March 2009, Col 43


207. The Committee notes the comments in the report of the Economy, Energy and Tourism Committee on the subject of energy efficiency, and in particular its views that—

‘The Committee considers that there is no room for complacency in respect to energy efficiency performance and the standards within the Scottish building stock, commercial, industrial, the public sector and, critically, the domestic sector.’

208. The Committee discusses the Economy, Energy and Tourism Committee’s recommendations in relation to energy efficiency in more detail later in this report.

Forestry
209. Professor Peter Smith of the University of Aberdeen highlighted the potential of the forestry sector in Scotland, noting that it could provide a carbon sink to remove carbon dioxide from the atmosphere.138

Workplace greening initiatives
210. Dave Watson of UNISON and Stop Climate Chaos Scotland noted the potential carbon impact of workplace greening initiatives.139

Transport
211. The Confederation of Passenger Transport UK, the Association of Train Operating Companies, and Derek Halden of Derek Halden Consultancy mentioned possible ways of encouraging shifts to low carbon transport modes.140 Derek Halden said—

‘I would like to think that, because of the more ambitious targets in Scotland and the fact that we are working to a shorter timescale, we can reach the point at which land transport produces zero emissions faster than elsewhere. However, that can take place only in the context of the electric future that we are talking about, which involves renewable or zero-carbon energy and people charging up cars and buses.’141

212. John Lauder of Sustrans noted the important role which walking and cycling could play in any emissions reduction strategy.142

Business initiatives
213. Representatives from the CBI and the Climate Change Business Delivery Group highlighted examples of best practice employed by businesses to reduce emissions, such as the use of staff carbon clubs.143

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Public sector initiatives

214. Representatives from Scottish Natural Heritage, SEPA and Scottish Water told the Committee about examples of best practice in the public sector, such as cutting the numbers of UK flights taken by staff and increasing the usage of videoconferences.144

Leadership from government

215. It is clear to the Committee that a proper assessment needs to take place of initiatives which might cut Scotland’s carbon emissions and that decisions need to take place on which policies need to be pursued in order to meet our climate change targets. This is properly the role of government.

216. The Policy Memorandum states that ‘it is right that Scotland, a country which led the industrial revolution, should show leadership in legislating to reduce emissions of greenhouse gases’.145 The Committee believes that the leadership shown by the Scottish Government after the passage of the legislation will be of even greater significance.

217. Duncan McLaren of Friends of the Earth Scotland and Stop Climate Chaos Scotland made the point that the process of reducing emissions would be about more than just identifying the necessary technology to make the cuts. He argued that ‘the crux of the matter is how much leadership the Government shows’.146 In this sense, he suggested the challenge of climate change was as much about social science as it was about physical science.

218. Judith Robertson of Oxfam in Scotland reinforced this point, arguing that the Scottish Government must—

‘Take the hard decisions…talked about earlier and it must show leadership to the public. It must show that it has to engage in the matter, ask the public to engage in it, and take responsibility.’147

219. Paul Tetlaw of Transform Scotland suggested that government should provide a clearer steer as to the actions that would be needed in order to tackle climate change—

‘There needs to be a national framework. Whether it is part of the STPR or national planning framework 2 does not matter; nationally, we must set a

framework that states that this is where we are going with policy and cascades that down to local authorities.  

220. Grant Hodges of the Climate Change Business Delivery Group raised a similar point—

‘We need a road map that tells businesses which targets will be met from heat, and which will be met from renewables technology, and which gives them a steer on where the Government wants effort to be focused. That would naturally lead to the question whether we have the skills now, or whether we need to consider different sorts of training.’

221. Brendan Dick of the Climate Change Business Delivery Group reinforced this idea, arguing that the Scottish Government ‘must somehow find a way—the Carbon Trust is a good example—to get every business, public sector organisation and voluntary sector organisation to understand how to start the journey.’ He went on to suggest—

‘One thing that Government can do that is relatively unique is to enable cultural change, working with other organisations but acting as a catalyst itself.’

222. A representative of Scottish Natural Heritage, Clive Mitchell, gave an example of the type of information which government could provide to guide organisations and individuals in order to reduce emissions—

‘It might be useful to develop energy hierarchies for transport and electricity along the lines of the well-established waste hierarchy, which prioritises avoiding use, efficient use, low-carbon use and so on, as the basis of the interventions that are required. The Scottish climate change programme should include the comprehensive package of mitigation and adaptation measures that is required across the board.’

223. The Committee believes it is essential that the Scottish Government drives forward the climate change agenda with clear leadership.

224. The Committee notes, as an example, that the new US administration has announced policies that reflect a decisive shift towards the development of low carbon technologies.

225. The Minister told the Committee that—

‘We are already working on our strategic overview. The publication of our annual targets will be accompanied by a report in which we will detail our
progress. Under the bill, we have to report on the policy measures that we are delivering, which—of course—we will have to describe. That is our view at the moment, although we will continue to work in the spirit of engaging with people. On adaptation, our action plan will shortly be issued for consultation.152

226. The Minister elaborated further on the Scottish Government’s plans in a letter dated 18 March 2009—

‘A Strategic Overview project is underway which will deliver a high level discussion document for publication later in 2009. This will set out in broad terms the key sectors for abatement in the short, medium and long term and high level policy options around these, highlighting the key milestones in policy development and delivery and barriers to implementation. This work is a prerequisite for the more detailed statutory Report on Policies and Proposals (section 30), to be published in 2010, which will set out how Scottish Ministers will meet their annual targets over the period 2010 to 2022.’

227. It is clear to the Committee that individuals and organisations believe that more leadership from government is required in order to secure emissions reductions. The Committee believes it is essential that the ‘report on proposals and policies’ document delivers the required government leadership. This should represent a comprehensive Scottish Government climate change plan, setting out the specific proposals that the Government believes should be implemented and how they should be delivered. The Committee notes the comments of the chief executive of the UK Committee on Climate Change, David Kennedy, who told the Committee—

‘The message is that there are opportunities in all sectors in Scotland, none of which should be neglected. Scotland’s strategy should cover residential and non-residential buildings, transport, agriculture, waste and the power sector.’153

228. The Committee calls on the Scottish Government to ensure that its statutory ‘report on proposals and policies’ provides a comprehensive overview of the potential contribution of all sectors in society to achieving emissions reductions. It should provide clear statements of policy intent and the direction for policy development which will lead to the reductions required to meet the challenging targets set by this Bill. It should also outline those initiatives currently underway to tackle climate change, including the Government’s public engagement implementation plan.

229. The Committee also considers it to be essential that the strategy overview document that will inform this process is produced as quickly as possible to allow sufficient time for the content of this significant and potentially detailed report to be developed, prior to its publication in 2010. The Committee requests that the

Scottish Government provides a clear timescale for the production of the strategy overview discussion document, and an indication as to its contents, before Stage 2.

ADVISORY FUNCTIONS

230. The Policy Memorandum states that ‘Ministers will be required to seek expert, independent advice in advance of setting annual targets’.154 The Bill provides for advisory functions to be conferred on an existing organisation, or a new Scottish Committee on Climate Change. These advisory functions will be wide ranging and are set out in the Bill.

231. The Policy Memorandum explains that initially the Scottish Government intends to seek independent, expert advice from the UK Committee on Climate Change. In the longer term, the Scottish Government intends to take a view on the effectiveness of this advice in meeting Scotland’s interests. The Policy Memorandum states—

‘Should the Scottish Ministers determine that the UK Committee on Climate Change does not meet all the advice needs for Scotland, the Bill contains provisions which will allow the Scottish Ministers to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.’155

Views on the approach in the Bill

232. A number of witnesses supported the Scottish Government’s position on advisory functions in the Bill, including COSLA, the Sustainable Scotland Network,156 the Energy Saving Trust,157 and business leaders.158 Phil Matthews of the Sustainable Development Commission Scotland told the Committee that the position set out in the Bill was ‘extremely sensible’. He explained—

‘There is a great deal of expertise on the UK committee, which has just published a good report, but it is useful for Scotland to at least have the option to create a body that is separate from the UK committee if, for any reason, it is thought not to be providing all the information or evidence that is necessary to implement the bill.’159

233. This view was supported in written evidence from East Lothian Council, which argued that—

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154 Climate Change (Scotland) Bill. Policy Memorandum, paragraph 33. Available at: http://www.scottish.parliament.uk/s3/bills/17-ClimateChange/b17s3-introd-pm.pdf
155 Climate Change (Scotland) Bill. Policy Memorandum, paragraph 34. Available at: http://www.scottish.parliament.uk/s3/bills/17-ClimateChange/b17s3-introd-pm.pdf
‘The UK Committee on Climate Change has considerable expertise which should be able to meet Scotland’s needs as well as provide a focus for the global challenge of climate change. Only if that does not work should a separate Scottish Committee be established.’

234. Written evidence from Glasgow City Council argued that if it became necessary to use a body other than the UK Committee on Climate Change, then existing Scottish bodies could take on these functions. The Council argued that ‘if necessary in the longer term it would appear that the existing bodies, e.g. SEPA, SNH, could advise, monitor and scrutinise the implementation of the Bill’.160

235. Professor Peter Smith of the University of Aberdeen argued that—

‘My view is that it is extremely useful to have a critical mass of expertise. If we can ensure that the Committee on Climate Change is able to provide everything that we need in Scotland, it will be the appropriate advisory body.’161

236. David Kennedy, the chief executive of the UK Committee on Climate Change emphasised to this Committee the independence of his Committee—

‘We report to Government and to Parliament, and what we say is transparent—everybody can see why we are saying what we are saying, and that it is all based on evidence and analysis. That is the foundation of our independence. We are not pulled by the political considerations of the day, and we demonstrate that by backing up our arguments with evidence and analysis.’162

237. Some witnesses did, however, express some reservations about the Scottish Government’s position. Dave Watson of UNISON outlined the position of Stop Climate Chaos Scotland—

‘Our view is that we need a distinctive body in Scotland. It should work constructively with the UK committee rather than being a competing committee; it should be a commission, if for no other reason than to differentiate between it and your committee; and it should report to Parliament, not the Government.’163

238. Stephen Boyd of the STUC said that—

‘There is a case to be made for a separate Scottish advisory body, given that there is a different legislative framework. A substantial part of the relevant policy is devolved and the public sector landscape is different in Scotland. If, as you suggest, the UK Committee on Climate Change were to provide the

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156 Glasgow City Council. Written Submission to the Transport, Infrastructure and Climate Change Committee.
technical expertise, and a separate Scottish advisory body was established, we would look on that with interest.\textsuperscript{164}

239. The Committee notes alternative models which might be applied. For example, a panel of relevant experts could be set up, which could provide the knowledge of Scottish legislative arrangements, economic and social circumstances and policy considerations needed to supplement the advice from the UK Committee, in line with the suggestion made by the STUC. The Committee also notes that the Scottish Government could enter into discussions with relevant organisations, including local authorities and Audit Scotland to see whether climate change monitoring can be integrated into existing monitoring regimes.

Resources allocated to Scotland

240. Some witnesses cast doubt on whether the UK Committee on Climate Change had the necessary resources and expertise to reflect distinctive Scottish interests. Chas Booth from the Association for the Conservation of Energy told the Committee that—

‘…The initial report’s broad-brush approach suggests that that committee does not have the resources to give independent advice in Scotland. I also question whether the UK committee has sufficient insight into the Scottish situation. On energy efficiency, for example, Scotland’s building stock has a different profile. That means that the challenges are different in achieving the energy efficiency savings targets. We would prefer a separate Scottish committee.’\textsuperscript{165}

241. The chief executive of the UK Committee on Climate Change, David Kennedy, told the Committee—

‘It is fair to say that our work programme for Scotland and the other national authorities is in flux and is up for discussion.’\textsuperscript{166}

‘I will have to go back and discuss the issue, but I think that our committee would probably have the capacity to scrutinise and discuss issues relevant to the Scottish Government, just as we did on the UK carbon budgets.’\textsuperscript{167}

242. He went on to address the question of the resources which the UK Committee would dedicate to work on Scottish climate change issues—

‘At the moment, in our work with all the devolved Administrations, Katherine White is our only resource. She is on secondment from Scotland to the committee...Further discussion will be needed on how to make progress. We


will probably need at least one other person on our side; we are not talking about another five or 10 people, but at least another one.  

243. Richard Dixon of WWF Scotland and Stop Climate Chaos Scotland commented on the evidence from the UK Committee on Climate Change—

'I did not think that it was a terribly generous presentation. Some work needs to be done in that regard.'

244. A different perspective on the question of resources was offered in the evidence by Fiona Page of the Bill Team which commented on the cost savings which could be made if Scotland used the services of the UK Committee on Climate Change—

'I believe in seeking best value for money. Frankly, we get the services of that committee at a reasonable cost and we would have to pay much more money were we to set up a Scottish climate change committee in the future.'

245. The Finance Committee took evidence on the costs associated with the advisory functions in the Bill. The Scottish Government confirmed to the Finance Committee that its contribution to the funding for the UK Committee on Climate Change is expected to vary year on year. This is partly due to the inclusion in the 2008-09 fees of one-off start-up expenditure. The Scottish Government confirmed that additional funding is also expected to be required for analysis regarding the annual Scottish targets and trajectory. It was suggested that if this work requires, for example, an additional analyst and some additional research to build on the analysis work already undertaken by the Committee, this could be estimated to be in the region of up to £100,000.

246. The Minister reaffirmed his view that the UK Committee on Climate Change was the most appropriate source of advice to the Scottish Government—

'Unless the UK Committee on Climate Change becomes unwilling or unable to respond to the needs of this devolved Administration—and of the Wales and Northern Ireland Executives—it will be the best available source of independent advice for the Government.'

247. The Minister also countered suggestions that there was currently insufficient engagement between the Scottish Government and the UK Committee, telling this Committee—

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Conclusions on advisory functions

248. The UK Committee on Climate Change has some expertise in assessing global climate change and it makes sense for the Scottish Government to tap into that existing expertise rather than attempting to replicate it.

249. Given that the UK Committee on Climate Change is in existence, it seems sensible for the Scottish Government to draw on it for advice on all matters where it has the appropriate expertise. The alternative suggestion of establishing a Scottish Climate Change Committee would potentially be costly, there would in all probability be the time delays whilst the committee was established and it would be difficult to replicate the full range of expertise the UK Committee can deploy.

250. However it is not clear that the UK Committee would be able to meet all Scotland’s requirements. In this context, this Committee notes with concern with the proposed level of resources to be allocated to Scottish interests by the UK Committee, which do not appear to be substantial at present. It is not clear whether existing resources will be adequate to provide the most appropriate level of expertise recognising the particular legislative, policy and geographic issues that are pertinent to Scotland.

251. This Committee notes that the Scottish Government has not yet formally requested advice from the UK Committee on Climate Change and so what types of advice it is best placed to deliver may not have been sufficiently assessed. This Committee therefore recommends that the Scottish Government enters into discussions with the UK Committee on Climate Change with a view to conducting a realistic analysis of the nature, level and frequency of the advice it is able to provide and the additional dedicated financial and human resources which might be required.

252. It is considered essential that the Scottish Government is in a position to provide this further information, together with an assurance that the UK Committee will be adequately resourced to provide the necessary advice, before the Bill is passed. This Committee therefore further recommends that this information should be made available to the Parliament prior to the beginning of Stage 2. If the UK Committee on Climate Change is not able to provide the necessary commitments in respect of its resources and engagement with Scottish interests, then the Scottish Government should consider what other models might be appropriate.

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REPORTING DUTIES

253. Part 3 of the Bill requires that Scottish Ministers report regularly to the Scottish Parliament on Scotland's emissions and on the progress being made towards the emissions reductions target set in the Bill. The following reports are required to be produced—

- Annual reporting duty – if the annual emissions target is not met, the report should explain why
- Report and statement on proposals and policies designed to meet future annual emissions targets
- Report and statement on proposals and policies designed to compensate for exceeding annual emissions targets – this applies where the net Scottish emissions account exceeds an emissions target
- Final statements for 2030 and 2050.

254. Section 34 of the Bill requires that when the reports outlined above are laid, Scottish Ministers must make a statement on the reports in the Scottish Parliament. In addition, in relation to the report on the annual targets, section 34 of the Bill requires that Scottish Ministers must—

‘As soon as reasonably practicable after doing so, and in so far as reasonable practicable, meet with the persons who convene and chair such committees of the Scottish Parliament as are for the time being appointed by virtue of standing orders.’

Strength of the reporting duties

255. The Committee has discussed above some of the methodological challenges associated with gathering the emissions data required to report on the meeting of the targets in the Bill.

256. Other witnesses chose to comment on the strength of the framework established in the Bill for holding the Scottish Government to account for its actions in meeting the targets.

257. Professor Colin Galbraith of Scottish Natural Heritage noted—

‘There must be a reporting mechanism, which must be seen as part of the culture change that we must put in place. If targets are set without a requirement to report effectively, it becomes difficult to measure whether progress has been made. A mechanism to draw the information together must be established.’\textsuperscript{173}

258. Some witnesses suggested that these arrangements should be strengthened in the Bill. For example, Dave Watson of UNISON and Stop Climate Chaos Scotland argued—

‘...Other bodies should also have the opportunity to be involved. Probably, the Public Audit Committee should have a role in scrutinising that annual report by asking SEPA and other regulatory bodies to comment on the approach that had been taken.’\(^{174}\)

259. Some written responses to the call for views suggested that the Bill should contain more details of the way in which Ministers will be held to account for any failure to meet targets in the Bill. Responses from COSLA and the Association for Energy Conservation, for example, indicated that these should be the responsibility of the First Minister.

260. Paul Tetlaw of Transform Scotland suggested that more robust enforcement measures could be included in the Bill—

‘The bill should include mechanisms for enforcing emissions reduction targets. I have a water industry background, so I am familiar with all the improvements in water quality and waste water quality that have been brought about over the years.’\(^{175}\)

261. In evidence to the Committee, the Minister indicated that he did not support the use of financial sanctions to enforce the meeting of targets in the Bill because it could lead to a situation whereby government was effectively fining itself. He argued—

‘The effect would, therefore, be financially neutral. It is not clear to me that the proposal would deliver any benefit.’\(^{176}\)

‘We simply do not see how it makes much sense to remove money from a public body that is not making the necessary progress and then invite it to ask for that money back, which is one of the options.’\(^{177}\)

262. The Minister expressed the view that the provisions as drafted in the Bill would be appropriate—

‘...The bill states that ministers will be dragged to Parliament to account for their failures. We see that as the appropriate and proper way of proceeding...Annual reporting and the annual statement that must be made


to Parliament are pretty robust ways of ensuring that Parliament and the wider public are on the case of failure in this area.  

263. The Committee agrees with the Minister that a situation whereby the Scottish Government is required to fine itself could be seen as illogical. The Committee believes that it is right that the Parliament will have the central role in ensuring that the Scottish Government is held to account for its performance in meeting the targets in the Bill.

264. The Committee notes the requirement in the Bill for Ministers to provide a statement to the Parliament in particular circumstances, such as if an annual emissions target has not been met. The Committee considers that this provision is welcome, however, it notes that a requirement only to give a statement to the Parliament would not allow full and robust questioning of Ministers. Additional measures could include a requirement to hold a debate on the statement or to allow an extended opportunity for questions after the statement. Another option would be for the relevant committee to report to the Parliament after taking evidence from the Minister, which would inform a debate in the Chamber.

265. The Committee does not, however, think it appropriate to be prescriptive regarding the manner in which the Parliament scrutinises Ministers in the future, but nevertheless believes that additional requirements need to be imposed in the Bill to increase the level of detailed scrutiny and substantive debate. The Committee will reflect on these options further ahead of Stage 2.

266. The Committee discusses an additional method of enhancing the arrangements for this parliamentary scrutiny in the next section of the report.

Meeting with committee conveners

267. As noted above, there is a requirement in the Bill for Scottish Ministers to meet with committee conveners following the publication of the report on meeting annual targets.

268. Stop Climate Chaos Scotland raised concerns regarding the appropriateness of the Conveners Group as a forum for holding Ministers to account because it does not meet in public and ‘therefore lacks transparency and accountability’. Richard Dixon of WWF Scotland and Stop Climate Chaos Scotland argued during evidence to the Committee—

‘The proposal for ministers to meet the Conveners Group clearly shows the Government’s good intentions about bringing the Parliament up to speed and involving key committees in the process. However, as you pointed out, the

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179 Stop Climate Chaos Scotland. Written submission to the Transport, Infrastructure and Climate Change Committee.
fact that the meeting will be off the record means that it will not form an appropriate part of the scrutiny of this very important legislation.\footnote{Scottish Parliament Transport, Infrastructure and Climate Change Committee. \textit{Official Report}, 3 February 2009, Col 1439.}

269. The Committee raised these concerns with the Minister. In response he said—

‘You are correct that the Conveners Group—on which I sat, from time to time, in a previous session of Parliament—meets in private...It is an offer that is genuinely made and which probably goes further than any that has been made in relation to any other legislation. If there is another way of achieving the same objective, we are entirely open to discussing it further.’\footnote{Scottish Parliament Transport, Infrastructure and Climate Change Committee. \textit{Official Report}, 10 March 2009, Col 1680.}

270. The Committee notes that the Bill does not specifically state that Scottish Ministers must meet with the Conveners Group, rather that they must meet with committee conveners. However, if this interpretation of this provision is taken, it is not clear from the provisions in the Bill what format such a meeting of conveners would take.

271. The Committee believes that the Conveners Group is not an appropriate forum for Ministers to meet with committee conveners due to its informal nature and the fact that it meets in private.

272. The Committee notes that the intention behind this provision is to ensure that conveners of all committees can scrutinise Scottish Ministers effectively on the cross-cutting issues contained in the Bill. The Committee welcomes this intention. However, there is a lack of clarity as to the mechanism which will allow for this additional scrutiny to take place.

273. \textbf{The Committee considers that a more appropriate option would be that a replacement provision is placed in the Bill requiring that Scottish Ministers make themselves available to attend a public meeting of the parliamentary committee (or committees) with climate change issues within its remit, to give evidence on their reports on meeting annual targets.} The wording of this provision should take into account the fact that committee names and remits can change from one parliamentary session to another. The Committee takes the view that this approach would strengthen and make more transparent the means by which Ministers would be held to account for their performance in meeting the targets. \textit{This Committee calls on the Scottish Government to bring forward an appropriate amendment addressing this issue at Stage 2.}

\section*{DUTIES ON PUBLIC BODIES}

274. The Bill contains a power to allow Scottish Ministers, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.
275. The Policy Memorandum explains—

‘The Scottish Government is committed to working in partnership with the public sector in reducing the target greenhouse gas emissions which affect climate change. But it is recognised that as emissions reductions become harder and more expensive to deliver, there may come a time when the Scottish Ministers have to ensure consistent and fair contributions to delivery across the public sector.’\(^{182}\)

276. A number of witnesses suggested that the Bill should be amended to provide for mandatory duties to be imposed on public sector bodies in relation to climate change. Dave Watson from UNISON and Stop Climate Chaos Scotland explained to the Committee—

‘The coalition’s position is very clear. We believe that hope is a wonderful thing, but a bit of statutory action gets things moving.’\(^{183}\)

277. Duncan McLaren of Friends of the Earth Scotland and Stop Climate Chaos Scotland stated in evidence—

‘The coalition strongly advocates that a general duty be placed on public bodies to reduce emissions in line with the national target. That would enable and encourage local authorities, health authorities and a range of other public bodies to start thinking about what people who live in their areas or who work for them could do. That would be one of the best ways to trickle down, or perhaps drive down, the impetus for engagement and behaviour change.’\(^{184}\)

278. This general position was supported by representatives from the Association for the Conservation of Energy\(^ {185}\) and Scottish Renewables.\(^ {186}\) Geoff Aitkenhead of Scottish Water suggested—

‘We are content for duties to be placed on public sector bodies…We might discuss further the detail of what the duties might be, but I believe that they should fall into two categories. One should be on direct emissions from public sector bodies, and the other should be on emissions from another body as a consequence of policies or regulation that a public sector body promotes.’\(^{187}\)

279. Paul Tetlaw of Transform Scotland made a similar suggestion—

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\(^{182}\) Climate Change (Scotland) Bill. Policy Memorandum, paragraph 39. Available at: http://www.scottish.parliament.uk/s3/bills/17-ClimateChange/b17s3-introd-pm.pdf .


The bill should establish a duty on all public bodies to reduce emissions in line with the national targets. We certainly do not believe that it is right that politicians at a national level should shoulder all the responsibility.\textsuperscript{188}

280. Dr Andy Kerr of the University of Edinburgh commented that a duty to reduce emissions might already be applicable to public bodies—

‘If you are talking specifically about duties to reduce emissions, the UK carbon reduction commitment will impose reductions on all public bodies that use more than a certain amount of energy, so that will be captured anyway.’\textsuperscript{189}

281. David Kennedy, chief executive of the UK Committee on Climate Change made this point as well—

‘The main lever for reducing emissions in the public sector is the carbon reduction commitment, which provides a significant opportunity across public sector bodies...It is not immediately obvious to me that there is a need to go beyond that, but there may be scope for the Government and public bodies to do something on green procurement.’\textsuperscript{190}

282. In written evidence, a number of organisations highlighted potential duties which might be placed on public bodies. The Association of British Insurers, for example, argued that the statutory duty placed on local authorities to reduce flood risk should be extended to also include a wider duty on adaptation. Changeworks suggested that local authorities should promote measures that influence the behavior of the public by rewarding actions that reduce carbon.

283. The perspective of COSLA was provided in evidence by Councillor Alison Hay who suggested that the provisions in the Bill as drafted were appropriate—

‘COSLA is not opposed to duties per se, but in light of our current duties, such as the sustainable development duty that Ken Gibb mentioned, and the biodiversity duty—there are a number of duties in the environment field—it would be useful to examine and rationalise them all, rather than impose a duty right away. The proposed enabling powers are a good way forward.’\textsuperscript{191}

284. Councillor Alison Hay went on to argue—

‘As we indicated, although we do not oppose the imposition of duties in principle, it needs to be done in such a fashion that it takes into account

everything that we are doing at the moment. To impose a duty just for the sake of imposing a duty is not a good idea.\textsuperscript{192}

285. Evidence from COSLA and the Sustainable Scotland Network also highlighted the work already being carried out by local authorities in relation to climate change. Ken Gibb of the Sustainable Scotland Network told the Committee—

‘Alison Hay mentioned the carbon management plans that all councils are delivering with the Carbon Trust. I think that we are now in the sixth phase of a process that has been around for about five years. Over the piece, councils are reducing their emissions by the equivalent of 3 per cent per year. Over the period of the carbon management plans that are in place, that averages out at a 15 per cent reduction in emissions, which is an indication of our commitment.’\textsuperscript{193}

286. The Minister explained in evidence to the Committee on 10 March 2009—

‘Having powers in reserve in the bill is the right thing to do. At this stage, it is not terribly clear what we would force people to do, if we used powers to mandate. By having a general power to fall back on, we are more likely to get innovative and imaginative thinking in public bodies.’\textsuperscript{194}

287. However, in a letter to the Committee dated 18 March 2009, it seemed that the Minister’s position may have shifted to a certain extent. He stated—

‘You will be aware that there has been considerable discussion with Committee witnesses on whether the Bill should contain an explicit duty on public bodies rather than enabling powers. Scottish Ministers are considering options in this regard including linking a potential duty with sustainable development. This will be discussed further with COSLA whose support will be required.’\textsuperscript{195}

Conclusion on duties on public bodies

288. The Committee recommends that the Scottish Government should create a general duty on public bodies to take account of climate change in their activities, although the Committee is of the view that concerted action will be required in order to translate this general duty into meaningful action. In this context, the Committee notes that the complementary approach of encouraging public bodies to roll out more widely examples of good practice in addressing climate change which were highlighted in evidence to this Committee may be more effective in delivering early action.

\textsuperscript{195} Scottish Government. Letter from the Minister for Transport, Infrastructure and Climate Change to the Convener of the Transport, Infrastructure and Climate Change Committee dated 18 March 2009.
289. The Committee notes the indication that the Minister is considering creating certain specific climate change duties on public bodies, rather than merely establishing an enabling power. **However, the Committee is concerned at the lack of clarity over the nature of such duties, and considers that discussion of the details at Stage 1 would have given witnesses representing the public sector the opportunity to respond.**

290. The Committee notes that the imposition of specific new duties may also have funding implications which Parliament would take an interest in. The Committee notes, for example, the written evidence of Falkirk Council which stated—

‘Falkirk Council acknowledges the role that local authorities can and should play in reducing greenhouse gas emissions and also acknowledges that it is appropriate that national and international government commitments should be reflected by targets at local government level. The Council reiterates its request for additional funds to support such action.’

291. It is clear from the written evidence from Falkirk Council and other local authorities and public bodies that the creating of duties would have funding implications which may vary. The Committee looks forward to further dialogue with the Scottish Government about the specific duties it is considering in this regard. The Committee notes, for example, the possibility of specific duties on the subject of travel or green procurement.

292. The Committee finally notes the concerns of the Subordinate Legislation Committee which argued in its report to this Committee that the power in the Bill to impose climate change duties on public bodies ‘is extremely wide in its scope, in particular as neither the public bodies which may be subject to climate change duties nor climate change duties themselves are adequately and clearly defined.’

293. The Subordinate Legislation Committee recommended that this power could be mitigated to some extent by provision of a list of public bodies to whom the power is to apply along with a power to add to the list subject to affirmative procedure. This would be in line with the approach adopted to other regimes regulating public bodies such as freedom of information. **This Committee endorses this recommendation and seeks a response from the Scottish Government on this point ahead of Stage 2. The Committee recommends that full consultation should be carried out in advance of any affirmative subordinate legislation being brought to the Parliament under this section.**

**ADAPTATION**

**Adaptation programmes**

294. The UK Secretary of State is required, under the UK Climate Change Act 2008, to lay a report before the UK Parliament containing an assessment of the

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187 Scottish Parliament Subordinate Legislation Committee. 2009 (Session 3) *Report on Climate Change (Scotland) Bill.*
risks for the UK of the current and predicted impact of climate change. The Bill requires that when this happens, Scottish Ministers must ‘as soon as reasonably practicable’ lay a programme addressing the risks in the report for Scotland, and more generally setting out the Scottish Ministers’ thinking in relation to adaptation to climate change, and from the second report on, for this to include as assessment of progress towards objectives set out in the previous programme. The first UK report must be produced by around the start of 2012, with a further report in 2017.

295. A number of witnesses who gave evidence to the Committee highlighted the importance of adaptation to climate change as an issue, including Professor John Mitchell of the Met Office197, Ken Gibb of the Sustainable Scotland Network198 and Richard Dixon of WWF Scotland and Stop Climate Chaos Scotland.199 Matthew Farrow of the CBI commented that ‘adaptation has been the Cinderella of the climate change debate for a long time, and politicians and business groups are all guilty of that.’200

296. Professor Colin Galbraith of Scottish Natural Heritage welcomed the inclusion of provisions on adaptation in the Bill—

‘The adaptation plan will be fundamental to the implementation of the bill. It is good to see that there is one, as it is unusual in the European context to see such a bill and plan together. That is an encouraging development.’201

297. A number of written submissions commented on the issue of adaptation. The Association of British Insurers argued, for example, that the Bill should set a series of targets to reduce flood risk across Scotland. Other written submissions argued that the Bill should provide for Ministers to be more accountable for their activities in relation to adaptation, including the suggestion that they should report annually to the Parliament on progress in relation to adaptation, and that a separate climate change impact report should be published for Scotland.

298. In evidence to the Committee, the Minister explained that ‘we will undertake a second consultation on adaptation, which will be based on what emerged from the first consultation and will play an important role in developing a way forward’.202

299. The Committee supports the provisions in the Bill in relation to adaptation to climate change and looks forward to considering the first report on this subject published by the Scottish Government under this Bill.

Muirburn

300. Muirburn is a mainly upland land management technique, and is the act of controlled burning of vegetation on open, treeless, semi-natural habitats (including muir or moorland) and involves the burning of gorse, heather and grass to stimulate new growth. Dates on which muirburn can take place are set down in statute (the Hill Farming Act 1946).

301. The provisions in the Bill allow Scottish Ministers to amend, by subordinate legislation, these dates to adapt to the effects of climate change as there is concern that, given changing weather patterns and rising temperatures, the ecology of these areas could now be compromised by burning within the currently permitted limits.

302. This provision was considered by the Rural Affairs and Environment (RAE) Committee as a secondary committee on the Bill and its conclusions were included in its report to this Committee.

303. The RAE Committee considered the muirburn provision during a roundtable discussion on 11 February 2009 and at an evidence session with the Minister for Environment on the same day. The Scottish Rural Property and Business Association commented during the discussion that its members had been anxious about supporting the proposal because it was unclear how the new power would be used. It reported that it had received insufficient information to make an informed decision about any changes to the muirburn dates.

304. The RAE Committee noted that the Minister for Environment had suggested that he had been surprised by the opposition expressed in some of the responses to the muirburn consultation and considered that the lack of detail in the Bill may have led to some overly cautious responses. He assured the RAE Committee that the power would not be used without full consultation with stakeholders and the power would only be used in such a way so as to allow muirburn practices to adapt to the impact of climate change.

305. In its report to this Committee, the RAE Committee reported that it appreciated the Minister’s reassurances that the Scottish Government will actively consult with all key stakeholders at an early stage in its deliberations on how to use this power.

306. The Minister stated in a letter dated 18 March 2009—

‘It is Scottish Ministers intention to bring forward an amendment to section 46 of the Bill (which contains a new section 23A of the Hill Farming Act 1946), so the order making power is subject to affirmative parliamentary procedure, and so that the power cannot be exercised so as to reduce the current number of days comprising the permitted muirburn season.’

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307. **On the basis of the comments made by the Rural Affairs and Environment Committee, and following the Minister’s stated intention to bring forward an amendment to the muirburn provisions at Stage 2, the Committee is content with these proposals.**

**FORESTRY**

308. Section 47 of the Bill provides for subordinate legislation to allow Forestry Commissioners within the Forestry Commission Scotland to form or participate in corporate bodies or trusts. In addition, Commissioners would have the power to provide loans and act as an officer of a body corporate, or a trustee of a trust.

309. The detail of the proposals behind section 47 are described in the Policy Memorandum, which states that the Scottish Government is proposing two specific policies. The Forestry Commission would be allowed to enter into joint venture arrangements for renewable energy developments. Such provisions on joint ventures replicate provisions already in force in England and Wales. The second proposal is to release capital by leasing up to 25% of Forestry Commission Scotland land for up to 75 years with the intention of using the funding gained to implement measures to contribute towards mitigating climate change.

310. This issue was considered by the Rural Affairs and Environment (RAE) Committee.

311. The RAE Committee report considered in some detail the leasing proposals in the Bill and noted the concerns about the proposals identified in both written and oral evidence. The main conclusion reached in its report to this Committee is set out below—

‘The Committee appreciates that consultations should not have a preconceived outcome and is concerned that consultation was undertaken during Stage 1 on a proposal already contained in documents supporting the Bill. There is sufficient concern about the leasing proposal for the Committee to be unwilling to recommend that the Bill allow this proposal to go ahead.

As detailed below the leasing proposal is contentious for numerous reasons and the consultation process for this proposal is considered to be inadequate by key stakeholders.

The Committee recommends that the Government does not progress this leasing proposal and amends the enabling section in the Bill.’

312. The Minister for Environment subsequently wrote to the Convener of the RAE Committee in a letter dated 13 March 2009 providing the Scottish Government’s response to the consultation on the forestry provisions in the Bill and noted—

‘We do not intend to use the powers provided for in section 47 of the Bill to make an order allowing leases and cutting rights over parts of the national
This intention was confirmed in a letter to this Committee from the Minister for Transport, Infrastructure and Climate Change dated 18 March 2009.

314. In respect of the proposal in the Bill for Forestry Commission Scotland to enter into joint ventures with private companies for the development of sustainable energy, the RAE Committee stated—

‘The [RAE] Committee acknowledges that joint ventures may not generate the same level of funds as the leasing proposal, or generate funds to the same timescale. However given the notable support for the joint ventures policy the [RAE] Committee recommends that, in considering alternative approaches to leasing, the Government should explore the full potential of encouraging and supporting the establishment of joint ventures schemes.’

315. The Committee notes that the Minister for Environment’s letter to the Convener of the RAE Committee dated 13 March 2009 confirms that the Scottish Government plans to use these joint venture powers.

Conclusion on forestry

316. This Committee endorses the recommendations in the report of the Rural Affairs and Environment Committee and notes that the Scottish Government has recently changed its position on one of these recommendations – the leasing proposals. This Committee notes that further clarification may be needed on the implications of the Scottish Government’s policy change, particularly the status of the funding for the mitigation of climate change which was mentioned in the Policy Memorandum as resulting from this proposal. This is something which the Rural Affairs and Environment Committee may wish to pursue with the Scottish Government. This Committee comments on the consultation arrangements for the forestry and other provisions in the Bill later in this report.

ENERGY EFFICIENCY

317. This Chapter in Part 5 of the Bill contains three distinct sets of provisions. The first set of provisions require the Scottish Ministers to produce an action plan setting out their current and proposed measures to promote the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change towards energy efficiency.

318. The second set of provisions contain measures for assessing the energy performance of existing non-domestic buildings in order to raise awareness of the contribution that those buildings can make to mitigating climate change through reducing energy demand and thereby emissions of greenhouse gases.

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204 Scottish Government. Letter from the Minister for Environment to the Convener of the Transport, Infrastructure and Climate Change Committee dated 13 March 2009.
319. The third set of provisions place a duty on the Scottish Ministers to take such steps as they consider appropriate to promote the use of heat from renewable sources.

320. The Economy, Energy and Tourism (EET) Committee considered these provisions in the Bill and made 17 recommendations to the Parliament and to this Committee. The recommendations are set out in full in the EET Committee's report.

321. The report included recommendations in relation to the improvement of energy efficiency and the take-up of renewable heat and micro-generation technologies, the extension of energy performance certificates to the non-domestic sector, and the production of an action plan to improve the take-up of renewable heat technologies in Scotland. Specifically, the EET Committee recommended that the Scottish Government—

- Takes all the necessary steps to ensure that efforts are made to improve and not just promote energy efficiency and the take-up of renewable heat and micro-generation technologies, and that the Minister brings forward amendments at stage 2 to maintain and extend the existing legislative provision in respect of living accommodation

- Clearly sets out how the monitoring and reporting procedures within this Bill will work and clarifies the roles of various bodies in this respect

- Adds the setting of targets for its energy efficiency and renewable heat initiatives to the relevant sections of the Bill and brings forward the necessary amendments

- Investigates and reports back to the EET Committee, if possible before Stage 2, on whether some form of rebate through local taxation systems to incentivise the take-up of energy efficiency, renewable heat and/or micro-generation technologies in the domestic and non-domestic sectors should be introduced, drawing on the experience and the success of such schemes in other parts of the UK

- Makes all efforts to ensure that the education and training sector in Scotland is well-prepared and can respond to the growth in employment opportunities by providing the right number of people with the right skills at the right time, and reports back to the Committee on this as soon as possible

- Ensures that energy efficiency projects are in a position to play a full and meaningful part in meeting the statutory targets for 2010 and thereafter

- Ensures that a revised financial memorandum be produced and we would expect the costs identified above to be covered within this

- Introduces, within a reasonable timeframe, an action plan to improve the take-up of renewable heat technologies in Scotland and to work with all the necessary parties to achieve progress in this area, and provides a clear
timetable from the Minister for the introduction of the heat plan before Stage 2 of the Bill

- Ensures that combined heat and power systems, preferably using sustainable energy sources, are a part of its action plans for renewable heat and energy efficiency

322. The Committee notes that the recommendations in the EET Committee's report are made directly to the Scottish Government, rather than this Committee as lead committee on the Bill. The Committee endorses many of the recommendations contained in the EET Committee's report. For example, like the EET Committee, this Committee would recommend that the Scottish Government provides clarity on its position in relation to the proposed Energy Efficiency and Micro-Generation (Scotland) Bill. The Committee also agrees that all the secondary legislation under sections 48-51 should be subject to affirmative resolution and agrees with the recommendation that the issue of the skills gap and employment opportunities is addressed by the Scottish Government, an issue which is covered elsewhere in this report.

323. The EET Committee recommended in its report that the Minister for Transport, Infrastructure and Climate Change ensures that energy efficiency projects play a full and meaningful part in meeting the statutory targets for 2010 and thereafter. The EET Committee indicated that it saw no reason why the action plan had to await the passing of the Bill and wished to see the Scottish Government publish a full draft of the action plan before Stage 2 of the Bill. The Minister for Enterprise, Energy and Tourism wrote to the Convener of the Economy, Energy and Tourism Committee on 3 April 2009 to provide an outline of the Scottish Government's Energy Efficiency Action Plan. This Committee notes that the Minister indicated that he anticipated that the Climate Change (Scotland) Bill would be passed in summer 2009 and that the Energy Efficiency Action Plan would be published thereafter.

324. This Committee notes the EET Committee's recommendation that the Scottish Government amends the Bill to include specific targets for energy efficiency and renewable heat initiatives. While the Committee does not believe setting specific sectoral targets is appropriate for all sectors, it regards land use, energy generation, energy efficiency and transport as the key sectors in which the Scottish Government should be required to define and quantify the expected emissions reduction. Setting targets for energy efficiency and renewable heat initiatives is consistent with that approach.

325. The EET Committee report recommends that various amendments are brought forward at Stage 2 in relation to the energy efficiency chapter of the Bill. This Committee will consider any amendments brought forward on this subject at Stage 2.

WASTE REDUCTION AND RECYCLING

326. Part 5, Chapter 4 of the Bill sets out measures aimed at improving waste reduction and recycling. The Bill gives powers to Scottish Ministers to make regulations in the following areas:
- waste prevention and management plans
- waste data
- deposit of recyclable waste
- procurement of recyclate
- reduction of packaging
- deposit and return schemes
- charges for carrier bags.

327. The Rural Affairs and Environment Committee considered these provisions in the Bill and recommended to this Committee that the Scottish Government should ‘have regard to—

- the urgent need to focus on reducing commercial and industrial waste being sent to landfill
- the need to address the lack of infrastructure available to implement the policy intentions in the Bill
- the need to consider issues raised by the Environment and Rural Development Committee in Session 2 on charging by sellers of goods for the supply of carrier bags
- the opportunity that current international market conditions could present for Scottish market development
- the need to ensure measures undertaken are in accordance with both the Government’s definition of ‘recycling’ and with the waste hierarchy set out in the Waste Framework Directive
- the benefits of the Government endorsing one method of measuring ‘carbon footprints’ and to establish criteria based on this reflecting which practice is more sustainable than another)
- the need to take into account any potential negative impact on social and economic factors, including in remote and rural areas, of aiming towards ambitious targets to reduce carbon emissions.’

328. This Committee endorses the conclusions of the RAE Committee’s report on the Bill and calls on the Scottish Government to respond in full to its recommendations. In relation to the specific issue of charging for the supply of carrier bags, the RAE Committee noted that it had received numerous written submissions opposing the policy behind this section of the Bill. This opposition was based on evidence which suggested that that proceeding with this policy is unlikely to deliver the intended environmental benefits and instead lead to
increased emissions. The RAE Committee noted the work conducted on this issue by the Environment and Rural Development Committee in 2006 in session 2 and commented—

‘The [RAE] Committee appreciates that there has been movement on this issue since the publication of the report in 2006, through the voluntary agreement with retailers and also by the cultural shift amongst the public towards bringing reusable bags to shops with them instead of using carrier bags once. However the considerable scrutiny undertaken by the previous committee should be used as a valuable assessment of the issue and this Committee draws the contents of the Stage 1 report to the attention of the lead committee on this basis.’

329. Matthew Farrow of the CBI commented in evidence to this Committee—

‘The carrier bag issue is endlessly rehearsed and is a symbolic issue, and to be honest I would say that the proposal for carrier bag charges is probably not the best way to increase diversion from landfill. The effort that would be put into that policy could be better expended elsewhere.’

330. Grant Hodges representing the Climate Change Business Delivery Group went on to say—

‘I suggest that the debate on carrier bags has moved on. A few years ago, the introduction of a tax on carrier bags would have been good, but many retailers have now come up with their own solutions. I wonder about the costs of enforcement and whether the tax is necessary now.’

331. In evidence to this Committee, the Minister for Transport, Infrastructure and Climate Change commented—

‘We are not minded at present to make any changes to section 59 as it is important for ministers to have the power to use in future.’

332. The Minister explained—

‘The provision has the potential to influence behaviours in ways that undoubtedly support the climate change agenda by reducing the consumption of what are perhaps unnecessary quantities of goods. That feeds into the reduction of the manufacturing carbon cost of the associated items and the transport costs of goods going from wholesalers and distribution centres to supermarkets.’


333. The Committee notes that there exists opposition to the inclusion of this enabling power within the Bill. The RAE Committee draws the attention of this Committee to the scrutiny its predecessor committee conducted on this issue in 2006. This Committee notes that the proposal in 2006 was subject to a separate and full bill scrutiny process, rather than being included as a piece of enabling legislation within a wide-ranging bill.

334. This Committee also notes the evidence that action is already being taken by some retailers in respect of charging for carrier bags, and that public attitudes in relation to recycling and reusing carrier bags appear also to have shifted within the last few years. The Committee recognises that either the current provisions or a separate Bill could provide the means to implement a carrier bag charging regime.

335. The Committee recommends that the Scottish Government reflects seriously as to whether its approach in relation to this provision is the correct one. The Committee is not convinced as to the value of this approach, and notes that the timing of the proposal may owe more to the availability of this Bill as a suitable legislative vehicle for introducing enabling powers rather than the powers being urgently required.

CONSULTATION ON PROVISIONS IN PART 5

336. The Committee notes that a full Scottish Government consultation process had not been completed for many of the provisions in Part 5 of the Bill by the date of introduction. Of the consultations run on the Part 5 provisions, only one, on energy efficiency, had been completed and the Scottish Government’s analysis of responses published, by the time of the introduction. This attracted criticism from the committees scrutinising these sections of the Bill.

337. The report of the Rural Affairs and Environment Committee stated—

‘Before commencing evidence taking on the Bill the Committee wrote to the Scottish Government to express its frustration at the late stage at which a number of consultations on the provisions were undertaken. The letter focused specifically on the forestry consultation which closed on 27 January. Given the need for this Committee to report to the lead Committee in advance of its evidence session with the Minister for Transport, Infrastructure and Climate Change as the final session of evidence taking at Stage 1, this Committee has had to scrutinise these provisions without copies of the responses to the Scottish Government’s consultation being available.

The Committee acknowledges that the Minister for Environment at that time, Michael Russell, offered an apology for the late introduction of the consultation, and the Committee also appreciates that the Government provided a preliminary analysis of responses to a short timescale. Regardless of this, introducing a Bill in advance of the conclusion of consultations on its contents is not appropriate. Parliamentary committees

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209 Scottish Parliament Rural Affairs and Environment Committee. 2009 (Session 3) Report on Climate Change (Scotland) Bill.
should be afforded the right to undertake scrutiny of legislation with all of the relevant information at their disposal.

The Committee is also concerned that a number of areas of uncertainty remain about the specifics of the Government’s proposals that the Bill’s provisions would enable. Limitations in the accompanying documents and in the supplementary information provided by the Government creates a perception that the Government’s proposals are still evolving despite the Bill having been introduced a number of months ago.

The Committee wishes to express its frustration that it has been asked to scrutinise and potentially endorse broad enabling powers to a relatively tight timescale and with a lack of sufficiently detailed information at its disposal.210

338. The Economy, Energy and Tourism Committee raised similar concerns in its report to the Parliament and this Committee, commenting—

‘It is clear to the Committee that in relation to the provisions on energy efficiency (section 48), the energy performance in non-domestic buildings (section 50) and the promotion of renewable heat (section 51), an excessive amount of the policy detail remains unclear or is still subject to consultation either in Scotland or by the UK Government.’211

339. This Committee questioned the Minister for Transport, Infrastructure and Climate Change on the way that these consultations had been handled by the Scottish Government. He commented—

‘We would certainly prefer to have completed the consultations, wherever we can, not simply to inform the deliberations of committees, important though they are, but to give us a different basis for proceeding. I would prefer to avoid the situation that you describe… I made the point before…that we are willing to engage in further evidence sessions at stage 2 if that is felt to be assistance to the committee.’212

340. In the view of this Committee, the consultation arrangements for the provisions in Part 5 of the Bill were poorly handled by the Scottish Government. It is concerned that several consultations were not completed prior to the introduction of the Bill. In particular, it seems that the consultation process related to the forestry provisions of the Bill was badly out of sync with the introduction of the Bill. This meant that the Rural Affairs and Environment Committee, and a number of other interested parties, devoted time to scrutinising the leasing proposals in the Bill, only for them to be dropped once the outcome of the consultation was known. Whilst the Committee welcomes the fact that the Scottish Government was responsive to the results of this

210 Scottish Parliament Rural Affairs and Environment Committee. 2009 (Session 3). Report on Climate Change (Scotland) Bill.
particular consultation, the Committee considers it is unfortunate that Parliament’s
time and that of witnesses was in effect wasted in this way.

341. The Committee recognises that this Bill presents an opportunity to legislate
on matters which relate to tackling climate change. However, it is a concern that
the Scottish Government considered it appropriate to include several provisions on
the face of the Bill for which the policy development process was plainly
inadequate. The Committee therefore recommends that in future, where there
is a strong possibility that legislative proposals will be substantially altered
by the outcome of a consultation, they are only brought to the Parliament
once that consultation has been completed and the results properly
assessed.

FINANCIAL MEMORANDUM

342. Under Standing Orders Rule 9.6, the lead committee at Stage 1 is required to
consider and report on the Bill’s Financial Memorandum. In doing so, it is required
to consider any views submitted to it by the Finance Committee.

Report by the Finance Committee

343. At its meeting on 13 January 2009, the Finance Committee agreed to adopt
level three scrutiny in relation to the Bill.213 The Committee took oral evidence at
its meeting on 10 February 2009 from SEPA, the Federation of Small Businesses
(FSB) and from Scottish Government officials. The Scottish Government and the
FSB submitted supplementary written evidence after they gave oral evidence to
the Committee. The Finance Committee received ten additional written
submissions.

344. The Finance Committee’s report contains a summary of the costs outlined in
the Financial Memorandum and outlines the evidence received, which focused in
particular on the advisory functions provisions in the Bill and issues around
forestry, waste reduction and recycling.

345. The conclusions of the Finance Committee are as follows—

‘The Committee acknowledges the uncertainty over some of the costs
associated with the Bill, particular in relation to the performance of unproven
technologies and methods for reducing carbon emissions. The Committee
accepts that the Financial Memorandum adequately reflects these margins of
uncertainty.

The Committee notes the enabling nature of the Bill, particularly regarding
the provisions contained in Part 5. Significant concern was raised, however,
in evidence that not enough details have been made available on the likely
cost impacts of these possible, future regulations. The Committee considers
that the Financial Memorandum would have been stronger if modelling work
had been carried out on the potential financial impact of the measures on
businesses and public bodies. The Committee also considers that in a

213 Climate Change (Scotland) Bill. Financial Memorandum. Available at:
number of areas insufficient policy direction has been provided, which has made it difficult for local authorities and businesses to be able to assess the financial impact of the proposals.

The Committee notes that the Scottish Government is currently undertaking significant pieces of work to finalise some aspects of its policy, namely, the Scottish Government’s strategic overview project, an options review on the forestry proposals and the consideration of energy efficiency scenarios. The Committee considers that this work will provide vital indications of future costs. Given the significant implications of this work, the Committee would have preferred that it had been completed in time for its consideration of the Financial Memorandum to the Bill. As a result, the Committee expects to take an interest in scrutinising the financial impact of the outcomes of this work.

The Committee, nonetheless, welcomes the Government’s commitment that all substantive regulations will be accompanied by a fully costed regulatory impact assessment.

Where significant expenditure associated with a bill will only become apparent with subordinate legislation, the Committee has in the past noted that it will track the subsequent statutory instruments and seek to scrutinise the financial implications. The Committee gives notice that it may seek to do so for instruments arising from this Bill.

Given the long-term perspective of the Bill, and the wide range of policy streams that may contribute to its implementation, the Committee recommends that the Scottish Government should consider how it will monitor and control the cumulative costs of implementation.

Views expressed to this Committee

346. The views expressed to the Finance Committee regarding the uncertainty in relation to some of the costs associated in the Bill were reflected in evidence to this Committee. Councillor Alison Hay of COSLA commented, for example—

‘As I understand it, the bill is broad ranging. I agree that we need to know the cost...We talked about the need for a minister-led body that could examine the issue, including the gaps, the barriers and where new resource will be needed. Such a discussion needs to be led from the top, but we are happy to engage in it.’

347. The Committee also notes that there is a degree of uncertainty regarding the impact of the Bill on jobs. Stephen Boyd of the STUC commented—

‘We are supportive of that [climate change] agenda and believe that jobs can be derived from that. On balance, we expect that to be beneficial to Scotland. However, I do not think that the detailed work has been done that would

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allow us to make a properly informed estimate of the net jobs impact. There are bound to be pluses and minuses, but it is difficult to give detail. 215

348. Stephen Boyd went on to comment that ‘we would support work on job impact evaluation’. 216 Grant Hodges of the Climate Change Business Delivery Group suggested that—

‘The potential exists for the creation of green jobs to result in a net positive. Many more jobs will arise from a sensible and well-thought-through programme that meets the targets. We are going through tricky economic times. The challenge is to ease the switch of jobs from the old economy to the new economy.’ 217

349. In relation to the impact of the Bill on jobs, the Minister for Transport, Infrastructure and Climate Change commented on a suggestion that it may result in 16,000 jobs. The Minister stated—

‘The figure is for 16,000 new jobs—I do not claim that it is a net figure. However, in industries that will have to make changes in response to the climate change agenda, there will be considerable work in conversion and adaptation, as we add technologies. There will be the potential for employment opportunities even in the industries in which the greatest amount of change takes place.’ 218

350. The Committee notes that this figure appears to derive from the UK Renewable Energy Strategy consultation document published in 2008 which estimates that there could be 16,000 jobs in energy-related opportunities in Scotland over the next decade. 219

351. In relation to the uncertainties contained in the Financial Memorandum, the Minister for Transport, Infrastructure and Climate Change told the Committee—

‘Will we update the financial memorandum? As a matter of course, we certainly expect to update it to reflect any changes that we make at stage 2. However, it is inevitable in such a bill that we are dealing with estimates. The figures are not undebatable and they cannot be made so. They give the best ranges of figures that we can give.’ 220

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Conclusion on Financial Memorandum

352. This Committee endorses the conclusions contained in the report of the Finance Committee, and in particular its strong comments regarding the uncertainty of the figures contained in the Financial Memorandum. The Committee welcomes the intention of the Finance Committee to take an interest in the financial impact of the outcomes of the Scottish Government’s ongoing work on climate change, and the indication that it may scrutinise the financial impact of any subordinate legislation brought forward under the Bill. However, the Committee believes that the financial information provided is totally inadequate given the scope and importance of this piece of legislation and a revised financial memorandum is required before the Bill can be approved. This Committee therefore recommends that the Scottish Government prepare a revised financial memorandum in advance of Stage 3 consideration of the Bill.

353. The Committee is extremely concerned that the job implications of the provisions in the Bill have not been properly assessed. The Minister has indicated that 16,000 new jobs may be created in one particular sector, but there is no indication as to the net impact on jobs, both positive and negative, of the Bill proposals. The Committee notes that this unfortunate situation has arisen because the Bill sets framework for targets, but the specific policies needed to meet these targets have not yet been articulated.

354. The Committee is very disappointed that it is being required to consider a Bill whilst having little indication from the Scottish Government as to its impact on jobs. The Committee believes that this information must be included as an integral part of detailed plans brought forward by the Scottish Government for the meeting of the targets. The Committee therefore recommends that the Scottish Government provides, as a matter of urgency, details on how it intends fully to assess and present the job implications of plans it brings forward under this Bill. The Committee recommends that these plans must be developed in partnership with employers and trade unions to ensure that potential job losses can be avoided and job opportunities in sustainable industries are maximised.

SUBORDINATE LEGISLATION

355. The Subordinate Legislation Committee (SLC) considered the delegated powers provisions in the Bill at Stage 1. The SLC Committee submitted a report to this Committee as the lead committee for the Bill under Rule 9.6.2 of Standing Orders. A copy of the report can be found at Annexe B and the key conclusions are set out below.

Section 19 – Meaning of advisory body
Section 20 and Schedule 1: Scottish Committee on Climate Change

356. The SLC considered the delegated powers in sections 19, 20 and Schedule 1 to be acceptable. The SLC draws to the attention of the lead and secondary committees for the Bill (in relation to the effect of the delegated powers contained in sections 19, 20 and Schedule 1) that the Explanatory Notes with the Bill (paragraph 33) and the Policy Memorandum (paragraph 31) indicate that
Ministers will require to seek expert, independent advice from the advisory body, but the Bill provides –

(a) in section 19(1) and (5), that a designated advisory body may be any public body as Ministers consider appropriate, which may be a person or body with functions of a public nature (not necessarily independent of the Scottish Ministers or Government), and

(b) in Schedule 1, paragraph 2, that the members of the Scottish Committee on Climate Change shall be appointed by the Scottish Ministers.

357. The SLC acknowledged, however, that in relation to those statements in the Policy Memorandum and Explanatory Notes, “independent” is capable of having different meanings and does not necessarily refer to a body which is wholly independent of the Scottish Ministers.

Section 26 – Guidance to advisory body
Section 27 – Power to give directions to the advisory body

358. The SLC drew to the attention of the lead and secondary committees for the Bill the delegated powers conferred on the Scottish Ministers in sections 26 and 27 to issue directions and guidance to the advisory body given that the Explanatory Notes (at paragraph 33) and the Policy Memorandum (at paragraph 31) indicate that the advisory body shall provide independent advice to the Scottish Ministers.

Section 36 - Duties of public bodies relating to climate change

359. The SLC reported to the lead committee that the power under section 36(1) to impose climate change duties on public bodies is extremely wide in its scope, in particular as neither the public bodies which may be subject to climate change duties nor climate change duties themselves are adequately and clearly defined.

360. The SLC also recommended that this could be mitigated to some extent by provision of a list of public bodies to whom the power is to apply along with a power to add to the list subject to affirmative procedure. This would be in line with the approach adopted to other regimes regulating public bodies such as freedom of information.

Section 37 – Guidance to relevant public bodies

361. The SLC considered that the Scottish Government response did not aid its consideration of this power. The SLC concluded that it would be appropriate for the Parliament to have a role in scrutinising the guidance produced under section 37 because of its potential impact, and recommends that guidance under this section should be laid before Parliament for a period prior to implementation, and any resolutions of the Parliament made in respect of the draft guidance during that period taken into account.

Section 47 - Power to modify functions of Forestry Commissioners

362. The SLC drew to the attention of the lead committee that the power under section 47(1) to modify the functions of the Forestry Commissioners in or as
regards Scotland is, in the opinion of the SLC Committee, very wide in its scope as there is no limitation within the power on what may be done in exercise of the power beyond that it must deliver a climate change purpose.

Section 52(1), (2) and (4) - Waste prevention and management plans
Section 53(1), (2), (3) and (5) - Information on waste
Section 54(1), (2), (4) and (5) - Recyclable waste: facilities for deposit etc.
Section 56(1), (2), (3) and (6) - Procurement of recyclate - regulations

363. The SLC reports to the lead committee and to the Parliament that these powers are expressed in very broad terms and that there is nothing on the face of the Bill to restrict their application to purely commercial activity.

Section 57(1), (2) and (4) – Targets for reduction of packaging etc.

364. The SLC reports that the Parliament should be made aware that these powers are expressed in very broad terms and that there is nothing on the face of the Bill to restrict their application to commercial activity.

Conclusion on subordinate legislation

365. This Committee notes all of these recommendations and is minded, in particular, to support the call for the Bill to include a list of public bodies to whom the duties under section 36 will apply. The Committee recommends that the Scottish Government provides a written response to this Committee and the Subordinate Legislation Committee ahead of the start of Stage 2 which addresses the points raised in the Subordinate Legislation Committee’s report. Subject to the response from the Scottish Government, these are issues which this Committee may return to at Stage 2.

GENERAL PRINCIPLES OF THE BILL

366. The Committee has discussed in this report the significance of the Climate Change (Scotland) Bill in setting out a framework for delivering challenging reductions in greenhouse gas emissions in the years to 2050. The Committee welcomes the Bill and endorses its general principles.

367. The Committee believes, however, that the Bill as introduced can and should be improved, to ensure that it meets the aspiration of being a leading example of climate change legislation. The Committee has made a number of recommendations in this report on how this could be achieved, but highlights two in particular.

368. First, strong early action is needed in order to secure the necessary reductions in greenhouse gas emissions. The Committee recommends that, in order to achieve this, the framework set out in the Bill in respect of targets between 2010 and 2019 needs to be altered, with the Scottish Government specifying much more precisely what emissions reductions will be expected during this period. The proposed new 2020 interim target will directly influence the annual targets during this period and the Committee has made recommendations which suggest either bringing forward the date at which Scotland reaches the 3%
annual reduction or providing explicit percentage reduction targets for each year from 2010.

369. Second, the Committee recommends that the Scottish Government should focus its attention on how the reductions in greenhouse gases required by the Bill will actually be delivered. We are concerned to avoid drift in bringing forward strategies and implementation plans, at the lack of detail in the financial memorandum and at the lack of risk analysis in such an obvious area as job impacts and opportunities. Given the emphasis on early action we cannot wait for perfect assessment tools or for comprehensive plans. The Scottish Government must demonstrate its intent by action, by adapting its policies and budgets to meet the over-riding importance it claims tackling climate change should be given.

370. It is vital that the Scottish Government addresses these and other key recommendations in this report if the Climate Change (Scotland) Bill is to provide a framework which will deliver fully on the objective of contributing to the global efforts to reduce dangerous climate change. The Committee looks forward to further dialogue with the Scottish Government as the Bill progresses through the Parliament.
ANNEXE A

TRANSPORT, INFRASTRUCTURE AND CLIMATE CHANGE COMMITTEE

EXTRACT FROM THE MINUTES

25th Meeting, 2008 (Session 3)

Tuesday 16 December 2008

Climate Change (Scotland) Bill (in private): The Committee considered its approach to the scrutiny of the Bill at Stage 1.

TRANSPORT, INFRASTRUCTURE AND CLIMATE CHANGE COMMITTEE

EXTRACT FROM THE MINUTES

3rd Meeting, 2009 (Session 3)

Tuesday 20 January 2009

Climate Change (Scotland) Bill: The Committee took evidence on the Bill at Stage 1 from—

Philip Wright, Deputy Director Climate Change, Fiona Page, Head of Scottish Climate Change Bill Team, Andrew Henderson, Policy Officer Scottish Climate Change Bill Team, and Cameron Maxwell, Climate Change Policy Team, Scottish Government.

Climate Change (Scotland) Bill - witness expenses: The Committee agreed to delegate to the Convener responsibility for arranging for the SPCB to pay, under Rule 12.4.2, any expenses of witnesses on the Bill.

TRANSPORT, INFRASTRUCTURE AND CLIMATE CHANGE COMMITTEE

EXTRACT FROM THE MINUTES

4th Meeting, 2009 (Session 3)

Tuesday 27 January 2009

Climate Change (Scotland) Bill: The Committee took evidence on the Bill at Stage 1 from—

Professor John Mitchell, Director of Climate Science, Met Office;
Professor Peter Smith, Professor of Soils and Global Change, University of Aberdeen;
Phil Matthews, Senior Policy Advisor, Sustainable Development Commission Scotland;
Dr Andy Kerr, Assistant Director of Scottish Alliance for Geoscience, Environment and Society, University of Edinburgh;
David Kennedy, Chief Executive, and Katherine White, Economic Adviser, Committee on Climate Change.
Climate Change (Scotland) Bill: The Committee took evidence on the Bill at Stage 1 from—

Richard Dixon, Director, WWF Scotland;
Duncan McLaren, Chief Executive, Friends of the Earth Scotland;
Dave Watson, Scottish Organiser, UNISON;
Chris Hegarty, Advocacy Manager, SCIAF;
Gavin McLellan, Head of Christian Aid Scotland;
Judith Robertson, Head of Oxfam in Scotland.

Climate Change (Scotland) Bill: The Committee took evidence on the Bill at Stage 1 from—

Chris Austin, Head of Public Affairs, Association of Train Operating Companies;
Marjory Rodger, Director of Government Relations in Scotland, Confederation of Passenger Transport UK;
Derek Halden, Director, DH Consultancy;
Gordon Dewar, Managing Director, Edinburgh Airport, BAA Scotland;
Robert Ashdown, Head of Technical Division, Chamber of Shipping;
Gordon Wilmsmeier, Senior Research Fellow, Transport Research Institute, Napier University;
Dr Alice Bows, Lecturer in Energy and Climate Change, Sustainable Consumption Institute & Tyndall Centre;
Paul Tetlaw, Chair, Transform Scotland;
Jeff Gazzard, Coordinator, GreenSkies Campaign;
John Lauder, National Director for Scotland, Sustrans.
Climate Change (Scotland) Bill: The Committee took evidence on the Bill at Stage 1 from—

Ken Gibb, Chair, Sustainable Scotland Network;

Councillor Alison Hay, Spokesperson for Regeneration and Sustainable Development, and Anil Gupta, Team Leader for Environment and Regeneration, COSLA;

John Stocks, Manager, Scotland, Carbon Trust;

Mike Thornton, Director, Scotland, Energy Saving Trust;

Chas Booth, Senior Press and Parliamentary Officer, Association for the Conservation of Energy;

Stephen Boyd, Assistant Secretary, STUC;

Anne Douglas, National Secretary, Prospect.

Climate Change (Scotland) Bill: The Committee took evidence on the Bill at Stage 1 from—

Matthew Farrow, Head of Environment Group, CBI;

Brendan Dick, and Grant Hodges, Climate Change Business Delivery Group;

Jason Ormiston, Chief Executive, Scottish Renewables;

Colin Galbraith, Director, Policy and Advice, and Clive Mitchell, Strategy and Communications Manager, Scottish Natural Heritage;

Dr Chris Spray, Director of Environmental Science, and David Gorman, Head of Environmental Strategy, SEPA;

Geoff Aitkenhead, Asset Management Director, and Mark Williams, Business Strategy and Climate Change Manager, Scottish Water.
Climate Change (Scotland) Bill: The Committee took evidence on the Bill at Stage 1 from—

Stewart Stevenson MSP, Minister for Transport, Infrastructure, and Climate Change, Philip Wright, Deputy Director, Climate Change, Fiona Page, Head of Scottish Climate Change Bill Team, Cameron Maxwell, Climate Change Policy Team, Madeleine Cusack, Climate Change Policy Team, and Kevin Philpott, Waste Regulation Senior Policy Officer, Scottish Government; David Henderson-Howat, Policy Adviser, Forestry Commission Scotland.

Climate Change (Scotland) Bill: The Committee considered a draft Stage 1 report.

Climate Change (Scotland) Bill (in private): The Committee considered a draft Stage 1 report. The Committee agreed the report subject to minor amendments.
VOLUME 2

ANNEXE B: REPORTS FROM OTHER COMMITTEES

- Report from the Economy, Energy and Tourism Committee
- Report from the Finance Committee
- Report from the Rural Affairs and Environment Committee
- Report from the Subordinate Legislation Committee

ANNEXE C: ORAL EVIDENCE AND ASSOCIATED WRITTEN EVIDENCE TO THE TRANSPORT, INFRASTRUCTURE AND CLIMATE CHANGE COMMITTEE

20 January (3rd Meeting, 2009 (Session 3))

Oral Evidence
Philip Wright, Deputy Director Climate Change, Fiona Page, Head of Scottish Climate Change Bill Team, Andrew Henderson, Policy Officer Scottish Climate Change Bill Team, and Cameron Maxwell, Climate Change Policy Team, Scottish Government.

Written Evidence
Scottish Climate Change Bill Team

Supplementary Written Evidence
Scottish Climate Change Bill Team

27 January (4th Meeting, 2009 (Session 3))

Oral Evidence
Professor John Mitchell, Director of Climate Science, Met Office; Professor Peter Smith, Professor of Soils and Global Change, University of Aberdeen; Phil Matthews, Senior Policy Advisor, Sustainable Development Commission Scotland; Dr Andy Kerr, Assistant Director of Scottish Alliance for Geoscience, Environment and Society, University of Edinburgh; David Kennedy, Chief Executive, and Katherine White, Economic Adviser, Committee on Climate Change.

Supplementary Written Evidence
Met Office

3 February (5th Meeting, 2009 (Session 3))

Oral Evidence
Richard Dixon, Director, WWF Scotland; Duncan McLaren, Chief Executive, Friends of the Earth Scotland; Dave Watson, Scottish Organiser, UNISON; Chris Hegarty, Advocacy Manager, SCIAF; Gavin McLellan, Head of Christian Aid Scotland, Christian Aid Scotland; Judith Robertson, Head of Oxfam in Scotland, Oxfam.
Written Evidence
Friends of the Earth Scotland

Supplementary Written Evidence
Stop Climate Chaos Scotland

10 February (6th Meeting, 2009 (Session 3))

Oral Evidence
Chris Austin, Head of Public Affairs, Association of Train Operating Companies;
Marjory Rodger, Director of Government Relations in Scotland, Confederation of Passenger Transport UK;
Derek Halden, Director, DH Consultancy;
Gordon Dewar, Managing Director, Edinburgh Airport, BAA Scotland;
Robert Ashdown, Head of Technical Division, Chamber of Shipping;
Gordon Wilmsmeier, Senior Research Fellow, Transport Research Institute, Napier University;
Dr Alice Bows, Core Researcher, Tyndall Centre Manchester;
Paul Tetlaw, Chair, Transform Scotland;
Jeff Gazzard, Coordinator, GreenSkies Campaign;
John Lauder, National Director for Scotland, Sustrans.

Written Evidence
Association of Train Operating Companies
BAA Scotland
Confederation of Passenger Transport
Chamber of Shipping
Transform Scotland

Supplementary Written Evidence
BAA Scotland:
  Covering letter
  Sustainable aviation CO2 roadmap
  Non CO2 climate change effects of aviation emissions
  Car parking additional information
  Public transport additional information
GreenSkies Campaign
Derek Halden

24 February (7th Meeting, 2009 (Session 3))

Oral Evidence
Ken Gibb, Chair, Sustainable Scotland Network;
Councillor Alison Hay, Spokesperson for Regeneration and Sustainable Development, and Anil Gupta, Team Leader for Environment and Regeneration, COSLA;
John Stocks, Manager, Scotland, Carbon Trust;
Mike Thornton, Director, Scotland, Energy Saving Trust;
Written Evidence
COSLA and Sustainable Scotland Network
STUC

3 March (8th Meeting, 2009 (Session 3))

Oral Evidence
Matthew Farrow, Head of Environment Group, CBI;
Brendan Dick, and Grant Hodges, Climate Change Business Delivery Group;
Jason Ormiston, Chief Executive, Scottish Renewables;
Colin Galbraith, Director, Policy and Advice, and Clive Mitchell, Strategy and Communications Manager, Scottish Natural Heritage;
Dr Chris Spray, Director of Environmental Science, and David Gorman, Head of Environmental Strategy, SEPA;
Geoff Aitkenhead, Asset Management Director, and Mark Williams, Business Strategy and Climate Change Manager, Scottish Water.

Written Evidence/Submissions to call for views
Climate Change Business Delivery Group
Scottish Renewables
Scottish Natural Heritage
SEPA
Scottish Water

10 March (9th Meeting, 2009 (Session 3))

Oral Evidence
Stewart Stevenson MSP, Minister for Transport, Infrastructure, and Climate Change, Philip Wright, Deputy Director, Climate Change, Fiona Page, Head of Scottish Climate Change Bill Team, Cameron Maxwell, Climate Change Policy Team, Madeleine Cusack, Climate Change Policy Team, and Kevin Philpott, Waste Regulation Senior Policy Officer, Scottish Government; David Henderson-Howat, Policy Adviser, Forestry Commission Scotland.

Supplementary Written Evidence
Minister for Transport, Infrastructure and Climate Change
ANNEXE D: LIST OF OTHER WRITTEN SUBMISSIONS IN RESPONSE TO CALL FOR VIEWS FROM TRANSPORT INFRASTRUCTURE AND CLIMATE CHANGE COMMITTEE AND RURAL AFFAIRS AND ENVIRONMENT COMMITTEE

Economy, Energy and Tourism Committee

Remit and membership

Remit:

To consider and report on the Scottish economy, enterprise, energy, tourism and all other matters falling within the responsibility of the Cabinet Secretary for Finance and Sustainable Growth apart from those covered by the remits of the Transport, Infrastructure and Climate Change and the Local Government and Communities Committees.

Membership:

Ms Wendy Alexander
Gavin Brown
Rob Gibson (Deputy Convener)
Christopher Harvie
Marilyn Livingstone
Lewis Macdonald
Stuart McMillan
Iain Smith (Convener)

Committee Clerking Team:

Clerk to the Committee
Stephen Imrie

Senior Assistant Clerk
Katy Orr

Assistant Clerk
Gail Grant
The Committee reports to the Parliament and the Transport, Infrastructure and Climate Change Committee as follows—

BACKGROUND

1. The Climate Change (Scotland) Bill (“the Bill”) was introduced to the Scottish Parliament on 4 December 2008. The Bill was referred to the Transport, Infrastructure and Climate Change Committee as the lead committee, and to the Rural Affairs and Environment Committee as the secondary committee. Although it has not been formally designated as a secondary committee, with the agreement of the lead committee, the Economy, Energy and Tourism Committee took evidence on Part 5, Chapter 3 of the Bill as energy efficiency and renewable heat issues fall within the Committee’s remit.

2. In addition to the written submissions of evidence received, the Committee held three oral evidence-taking sessions as follows—

   Evidence from the Scottish Government’s Bill Team (4 February, 2009)

   Colin Imrie, Deputy Director, Energy Markets Division
   Sue Kearns, Head of Renewable Strategy and Onshore Renewables
   Jamie Hume, Deputy Director, Renewable Energy
   Gavin Peart, Assistant Head of Building Standards Division
   Alec Millar, Principal, Non-Domestic Energy, Building Standards Division
   Philip Wright, Deputy Director of the Climate Change Division
   Cameron Maxwell, Policy Adviser on Climate Change, Scottish Government

   Evidence from various interested organisations (4 February, 2009)

   John Stocks, Manager for Scotland, The Carbon Trust;
   Chas Booth, Senior Press and Parliamentary Officer, Association for the Conservation of Energy;
   Fergus Tickell, Managing Director, Northern Energy Developments Ltd;

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1 Climate Change (Scotland) Bill, SP Bill 17, Session 3 (2008)
3. The Committee is grateful to all of those who gave both written and oral evidence to it. This information has proved to be useful in terms of preparing the Committee’s report. Copies of the written submissions, extracts from the minutes and from the *Official Reports* of the relevant meetings can be found in the annexes to this report.

**About the Climate Change (Scotland) Bill – Part 5, Chapter 3**

4. According to the Scottish Government, the main objective of the Bill is to set a long-term target to reduce Scotland’s emissions of Kyoto Protocol greenhouse gases by 80% by the year 2050. This long-term target will be supported by a framework of annual targets intended to drive the policies necessary for achieving this target. In the Scottish Government’s view, many of the policy measures required to meet these targets will not require legislation to implement them, but certain climate change mitigation and adaptation policies have been identified which do require legislation and the Bill contains provisions in Part 5 which will allow these to be taken forward.

5. For the Economy, Energy and Tourism Committee, it is the Bill’s provisions in Part 5, Chapter 3 that have been the sole focus of our evidence-taking and of this report. This Chapter contains three distinct sets of provisions. The first set of provisions in this Chapter require the Scottish Ministers to produce an action plan setting out their current and proposed measures to promote the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change towards energy efficiency. The second set of provisions contains measures for assessing the energy performance of existing non-domestic buildings in order to raise awareness of the contribution that those buildings can make to mitigating climate change through reducing energy demand and thereby emissions of greenhouse gases. The third set of provisions in this Chapter place a duty on the Scottish Ministers to take such steps as they consider appropriate to promote the use of heat from renewable sources.

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2 Climate Change (Scotland) Bill, Policy Memorandum, SP Bill 17-PM, Session 3 (2008), p1.
3 Climate Change (Scotland) Bill, Policy Memorandum, SP Bill 17-PM, Session 3 (2008), p1.
6. The provisions in this section on energy efficiency are intended to cover how the Scottish Ministers will promote energy efficiency in Scotland, particularly in relation to how this will improve the energy performance of buildings in Scotland. The provisions require the Scottish Ministers to produce an action plan setting out current and proposed measures to promote the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

7. Currently, section 179 of the Housing (Scotland) Act 2006 ("the 2006 Act") requires the Scottish Ministers to prepare a strategy for improving the energy efficiency of living accommodation. Section 179(6) allows that strategy to be part of a strategy for improving energy efficiency generally. According to the Scottish Government, the proposals for an action plan in the Climate Change (Scotland) Bill will have that practical effect. The Scottish Ministers therefore propose to repeal section 179 of the 2006 Act to avoid duplication. In addition, the proposals in the Bill will, in the view of the Scottish Government, strengthen the existing statutory duty in the 2006 Act in terms of reporting and publishing. Bringing the duty in relation to living accommodation within the general duty in the Bill will, according to Ministers, ensure a consistent approach to tackling energy efficiency across all sectors, and will allow for better alignment of reporting on implementation and carbon savings, which can then be accounted against the overall target of this Bill.

8. The Scottish Ministers are required to report on the action plan annually, and to revise the action plan on a regular basis, but as a minimum every three years in line with the Spending Review process.

9. The Scottish Government notes that the action plan could be developed without the need for primary legislation, but the Scottish Ministers believe that a legislative requirement to develop, revise and report on an action plan will give it the weight which this issue requires. Furthermore, Ministers consider it will show the level of importance that these measures will play in tackling climate change and helping with rising fuel costs. It will also, in their view, be an important means for delivering a coordinated approach.

10. Section 49(1) requires the Scottish Ministers to lay the initial (energy efficiency) plan and any subsequent revised plan before the Scottish Parliament as soon as is reasonably practicable after it is published. Subsections (2) and (3) require Ministers to lay a report before the Scottish Parliament on what steps have been taken to implement the plan. The report must be laid within 12 months of the plan being first published and at least annually thereafter.

11. According to the Scottish Government, the aim of the provisions for improving the energy performance of existing non-domestic buildings is to raise the contribution that the existing non-domestic stock can make to mitigating climate change. This is supported by the Scottish Government's Energy Efficiency and Renewable Energy Strategy, which sets out a series of measures to improve the energy efficiency of buildings in Scotland. The provisions require the Scottish Ministers to produce an action plan setting out current and proposed measures to promote the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

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4 Climate Change (Scotland) Bill, Policy Memorandum, SP Bill 17-PM, Session 3 (2008), p18-19.
5 Climate Change (Scotland) Bill, Explanatory Notes, SP Bill 17-EN, Session 3 (2008), p14.
6 Climate Change (Scotland) Bill, Policy Memorandum, SP Bill 17-PM, Session 3 (2008), p19-23.
climate change. Buildings account for over 40% of emissions and there is scope to reduce these levels. They are to be subject to an assessment of the emissions of greenhouse gases and energy performance, an enhanced form of energy performance certificate (EPC).

12. This is one of the areas of the Bill on which the Scottish Government is currently consulting. According to Ministers, the results of the ongoing consultation will inform the detailed route forward but could call on building owners or their delegated persons to draw up improvement action plans. These plans may include building work actions for owners to follow which lead to improved performance, and where appropriate could also include operational measures that building users may choose to act on. This would also apply to traditional and historic buildings, recognising that appropriate environmental improvements should be undertaken with due consideration to the historic character of the buildings in question.

13. As the policy memorandum notes, the provisions in this section of the Bill are enabling in nature and provide for regulations in a number of areas to be made in due course. This is particularly the case in relation to the content and form of assessment.

*Section 51*\(^7\)

14. Part 5 Chapter 3 of the Bill also places a duty on the Scottish Ministers to take such steps as they consider appropriate to promote the use of heat from renewable sources.

15. The Scottish Ministers have devolved responsibility for the promotion of heat from renewable sources. The Scottish Government’s policy aim is to build a commercially viable, diverse, renewable heat industry in Scotland. Renewable heat take-up across the UK is very low (<1%) and making progress on renewable heat will be crucial, according to the Scottish Ministers, if Scotland is to meet the EU 2020 target of 20% of final consumption of energy from renewable sources (which is made up of individual targets for electricity, heat and transport).

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\(^7\) Climate Change (Scotland) Bill, Policy Memorandum, SP Bill 17-PM, Session 3 (2008), p23ff.
16. This section of the report sets out the key issues considered by the Committee in its scrutiny of Part 5, Chapter 3 of the Bill. These are set out on a section by section basis, following the numbering of the Bill itself, as well as looking at a number of more general issues.

General issues

The merits of a framework bill with enabling provisions

17. As noted by the Scottish Government itself, much of the Bill can be considered as ‘enabling’ giving the Scottish Ministers the power to take forward a series of initiatives, the detail of which will be part of consultations and which will be introduced through secondary legislation laid in the Parliament at a later date or through the issuing of documents such as the various action plans.

18. In the sections of the Bill of most interest to this Committee, namely sections 48 to 51 inclusive, this ‘enabling approach’ is especially apparent. As the Minister for Transport, Infrastructure and Climate Change (“the Minister”) told the Committee—

“The bill is a framework bill. The details of how its provisions will be implemented will largely be in secondary legislation. When the Government presents secondary legislation or policy documents, committees and parliamentarians generally will be able to probe the accompanying explanations and justifications, as is appropriate.”

19. However, this approach of presenting a ‘framework bill’ for which much of the detail on the planned implementation has yet to be published or is still subject to ongoing or further consultation once the Bill is passed, did receive some criticism amongst the witnesses giving evidence to the Committee.

20. For example, in relation to the proposed consultation on the energy efficiency action plan which follows the passing of the Bill, Chas Booth of the Association for the Conservation of Energy told the Committee that, “The Government has already consulted on the energy efficiency strategy, so I fail to see why another consultation on an action plan is needed.”

21. Similarly, when asked if it was necessary for the Bill to be passed before the detail of the energy efficiency action plan was published, Elizabeth Leighton of WWF Scotland said “There is no reason why it [the action plan] cannot go ahead now.”

22. Other sections of the Bill are also the subject of ongoing consultations to develop the detail of how the objective will be met. For example, as a Scottish
Government official noted in relation to the proposal to increase the proportion of heat generated from renewable energy sources, “the intention is to provide a market incentive that will work for individual householders. Exactly how that will work is the subject of the consultation.”

23. At the request of the Committee, the Minister provided further details setting out the current status of the various Scottish and UK consultations that are relevant to these sections of the Bill. These are set out in Tables 1 and 2 below.

Table 1: Scottish Government consultations

<table>
<thead>
<tr>
<th>Scottish Consultations</th>
<th>Energy Efficiency</th>
<th>Future action plan consultation planned.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy performance of non</td>
<td>Action on Climate Change: Proposals for improving the energy performance of existing non-domestic buildings:</td>
<td></td>
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<tr>
<td></td>
<td>• Consultation ran from 2 September to 25 November 2008</td>
<td></td>
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<tr>
<td></td>
<td>• Consultation responses published on 22 January 2009</td>
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<tr>
<td></td>
<td>• Analysis of Consultation Responses Report published on 9 February 2009</td>
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<td></td>
<td>• Scottish Government Response published on 10 March 2009</td>
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<tr>
<td>Renewable Heat</td>
<td>Making Scotland a Leader in Green energy – draft framework for the development and deployment of renewables in Scotland. This consultation contained a section on renewable heat, including a draft Action Plan.</td>
<td></td>
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<tr>
<td></td>
<td>• Consultation ran from 8 October 2008 – to 1 December 2008</td>
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<tr>
<td></td>
<td>• Consultation responses published on 30 January 2009.</td>
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<tr>
<td></td>
<td>The responses will inform the Scottish Government’s Renewable Energy Action Plan due to be published later this year.</td>
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</tbody>
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Source: Scottish Government

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24. The Minister also commented on the proposed ‘enabling approach’ when he gave evidence to the Committee and in particular on the balance that needs to be struck between such an approach and the need for parliamentary scrutiny at stage 1 of the legislative process. He said—

“…in every bill, there is a tension between what is contained in primary legislation and what is drawn forward in secondary legislation. It is quite proper that there is a debate on whether in any particular bill the right balance has been struck in that respect.”\(^{12}\)

25. Furthermore, the Minister indicated that he would be supportive of committees needing to take further evidence if required. On this he said—

“It is not unprecedented to hold further evidence sessions at stage 2, if that is appropriate. If that were the way to deal with some of the issues that we are not able to bottom out just now, the Government would be happy to co-operate and collaborate and to appear at that stage, if appropriate.”\(^{13}\)

26. He also said that, in relation to a timetable for the Bill after stage 1—

“It is not for me to speak for the Minister for Parliamentary Business, who represents our interest in such matters. However, I am interested in ensuring that, to the extent that it is possible, we flesh out any policy


27. In terms of the specific sections of the Bill, the Committee heard a number of concerns about the approach being adopted and also on the timetable for the eventual implementation of the various provisions. Firstly, concern was expressed that the time taken to enact the powers in sections 48 and 49 of the Bill and then conduct a further consultation and subsequently publish an energy efficiency action plan (after a period of up to 12 months) could prejudice the ability of the Scottish Government to meet its statutory targets for 2010 in part through its energy efficiency initiatives.

28. In response, a Scottish Government official told the Committee that it was the intention to publish “an outline of the plan in March [2009]” and that a “series of measures is already under way and to some extent the [energy efficiency action] plan will bring all that action together.”15 This was a point also made by the Minister when he appeared at the Committee.16 However, in his evidence to the Committee, Chas Booth of the Association for the Conservation of Energy said—

“The Scottish Government clearly has something drafted and ready to go. I understand that it does not want to publish it because it is worried that the plan will appear too weak, partly because of concerns about whether responsibility for energy efficiency is devolved or reserved and where the line between promotion and delivery lies. I share your view that 12 months is much too long—a couple of months are all that is needed.”17

29. The second main area of concern expressed by some of the witnesses giving evidence to the Committee related to the terminology used in the relevant sections of the Bill which, in certain respects, refer to a significant degree of latitude for the Scottish Ministers in terms of what they chose to do. For example, section 51(1) of the Bill as drafted – which deals with the promotion of renewable heat – states that, “The Scottish Ministers must take such steps as they consider appropriate [our italics] to promote the use of heat produced from renewable sources.”18 Similarly, in relation to non-domestic buildings, sections 51(1) and 51(2) as currently drafted give the Scottish Ministers the option of laying regulations and a series of possibilities on what “may” be contained therein.19

Devolved versus reserved powers

30. One of the difficulties cited by the Scottish Government in being more specific on the face of the Bill about how the objectives of the Bill in this Chapter

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18 Climate Change (Scotland) Bill, SP Bill 17, Session 3 (2008)
19 Climate Change (Scotland) Bill, SP Bill 17, Session 3 (2008)
will be achieved, is the boundary between what is considered to be devolved and what is reserved to the UK Parliament.

31. The first example that arose relates to the ability of the Scottish Ministers to take steps to “promote” or to “improve” energy efficiency in Scotland. As the policy memorandum notes, “There are limitations on the actions that are within the legislative competence of the Scottish Government for promoting energy efficiency.”20 As the Minister stated in his evidence to the Committee—

“We must be conscious of competences, but I am entirely happy to put it on the record that the policy is to improve energy efficiency. The question whether we can incorporate the word "improve" in the legislation is simply to do with the devolved competence of the Parliament. I am entirely happy to ensure that we deal with and talk to colleagues at Westminster on that. We believe that we can, to an extent, make the change that is sought, but until I have further advice, I cannot give the committee a commitment to do so. We certainly understand the issue and we are seeking to deal with it.”21

32. This is believed to be the factor behind the decision to repeal section 179 of the Housing (Scotland) Act 2006, 22 which requires the Scottish Ministers to prepare a strategy for improving the energy efficiency of living accommodation. Section 179(6) allows that strategy to be part of a strategy for improving energy efficiency generally. According to the Scottish Ministers, repeal of this section and its replacement by the provisions in the Climate Change (Scotland) Bill will avoid unnecessary duplication and will have the same “practical effect”.23 In his evidence to the Committee on this point, the Minister for Transport, Infrastructure and Climate Change said—

“There is certainly no intention to dilute. The reason why we are having discussions is to ensure that we provide a legally binding response that ensures that no dilution is possible.”24

33. His view is not one shared by some of the organisations that gave evidence to the Committee. For example, Chas Booth of the Association for the Conservation of Energy said that “…there must be some way forward that ensures that section 179 of the 2006 act is not diluted.”25 Similarly, Elizabeth Leighton of WWF Scotland said—

“There is little doubt that “promote” dilutes the requirement in the Housing (Scotland) Act 2006 to “improve” energy efficiency. There must

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20 Climate Change (Scotland) Bill, Policy Memorandum, SP Bill 17-PM, Session 3 (2008), p19.
23 Climate Change (Scotland) Bill, Policy Memorandum, SP Bill 17-PM, Session 3 (2008), p18.
be scope to maintain that and to import that language into the bill, rather than repeal the requirement, and to maximise, rather than minimise, devolved powers in that area.”

34. A similar issue relating to the boundary between devolved and reserved powers arose in relation to the promotion of micro-generation technologies such as micro-wind and solar thermal. A Scottish Government official told the Committee that Ministers consider the promotion of these technologies to be largely reserved and that is why the relevant initiatives would be part of any energy efficiency action plan and not on the face of the bill.

35. The central question for the Committee was whether the boundary between reserved and devolved competences placed any limitations on the ability of the Scottish Government to meet its various objectives. On this issue, the Minister told the Committee that—

“...energy efficiency is a shared responsibility for the Scottish Government and the Westminster Administration. I do not think that that sharing of responsibility should cause any great difficulties, as I have no indication that people are unwilling or unable to work closely together.”

36. Although no such indication was given by the Minister when he appeared before the Committee on 4 March to given oral evidence, in response to a further correspondence from the Committee, the Minister has now given a commitment to amend the Bill at stage 2 in respect of the issue of ‘promoting’ versus ‘improving’ energy efficiency. He said—

“It is proposed to seek to amend section 48(2) to replace the word “promote” with the word ‘improve’ to change this provision to “improve” the energy efficiency of living accommodation.”

37. The third, more general issue raised during the Committee’s evidence-taking is the setting of specific targets for the contributions that energy efficiency and renewable heat can play in meeting the overall targets within the Bill. For example, in relation to the proposed action plan on energy efficiency, Elizabeth Leighton of WWF Scotland said, “We recommend that it [the action plan] include targets for energy efficiency and that progress is reported, either in the annual report or as

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part of an emissions reduction plan addressing demand reduction, energy efficiency and renewables.”

38. Her view was supported by Friends of the Earth Scotland in its evidence to the lead committee on the Bill, which states that “the reporting duties [in the Bill] should include detail on key measures such as energy demand reduction, and parallel consumption side reporting.”

39. In response to this issue, the Minister suggested that specific targets for energy efficiency and renewable heat were not required and that “all sectors of our economy and all elements of public, business and private life will need to make appropriate contributions [to the 2030 and 2050 targets set out in the Bill]”.

Incentivising investment in energy efficiency and renewable heat initiatives

40. The Committee also heard evidence more generally on how the Scottish Government might provide incentives to people and organisations to invest in energy efficiency and/or to consider renewable heat schemes or micro-generation technologies. One specific area which was explored was that of enabling local authorities to reduce the levels of council tax paid by householders who had made such investments. According to information received by the Committee, such a scheme is in place in Northern Ireland (via the system of rates) and in England and Wales (via the council tax).

41. In her evidence to the Committee, Elizabeth Waterson of the Energy Saving Trust told the Committee that “council tax incentives have, in theory, a big role to play in encouraging consumers to take action.” Furthermore, she said that “the level of incentive does not have to be that high” and that “talking to people about tax rather than energy efficiency is much more exciting for them and has a big impact.” Similarly, in relation to renewable heat systems in the domestic sector, Fergus Tickell of Northern Energy Developments Ltd., said, “There must therefore be innovative thinking about financial incentives, and in that respect, council tax rebates are interesting.”

42. This view was also shared by Scottish and Southern Energy in its submission to the lead inquiry which states that “all avenues should be explored, such as using local and national tax incentives to reward energy efficiency or microgeneration”.

31 Friends of the Earth Scotland. Written submission of evidence to the Transport, Infrastructure and Climate Change Committee.
36 Scottish and Southern Energy. Written submission of evidence to the Transport, Infrastructure and Climate Change Committee.
43. In his evidence to the Committee, the Minister was non-committal on whether this type of financial incentive would be taken forward in Scotland as it has been in other jurisdictions within the United Kingdom. He told the Committee that the Scottish Government was “quite open-minded” and was “happy to consider these matters.” However, he would not be drawn on the matter and indicated that, “We are considering other options, including loans and cashback offers. There is a variety of ways of proceeding on this agenda.”

‘Green jobs’ and skills gaps
44. One of the wider issues explored by the Committee is the potential to create employment opportunities through investments in energy efficiency and/or renewable heat initiatives. In an announcement made in February 2009, the Cabinet Secretary for Finance and Sustainable Growth outlined his plans to create up to 16,000 ‘green jobs’ over the next decade.

45. When questioned where these jobs would come from and also what proportion would be produced from the provisions set out in Part 5, Chapter 3 of the Bill, the Minister would only say in his written response that—

“The estimate of 16,000 new green jobs in Scotland by 2020 is based on the UK Renewable Energy Strategy consultation, which cited a figure of 160,000 new energy-related jobs in the UK by 2020. The estimate assumes that Scotland achieves a 10% share of jobs created across the UK. We consider, however, that the Scottish Government’s renewables targets, combined with Scotland’s natural resource, energy infrastructure and skills mean that we can go higher than this estimate.”

46. The Committee also sought to address whether the current education and training sector in Scotland is geared up to respond to the employment opportunities that may be provided through this Bill. According to Scottish Government officials, steps are already being taken in this respect—

“We are working on key elements of the renewable action plan and the heat action plan now, mapping out the critical powers, deciding what needs to happen between now and 2020 and beyond, and building on existing intelligence. Doing that hand in hand with industry is fundamental to our approach. We recognise that it is important to engage with industry, skills providers and potential employees—all the key stakeholders—in order to deliver.”

39 Scottish Government News Release, Green Jobs Blueprint, 2 February 2009
47. However, as Fergus Tickell of Northern Energy Developments Ltd, told the Committee, “Scottish Government ministers must realise that addressing the skills gap is a key part of the promotion of renewable heat and energy efficiency.” Similarly, John Stocks of The Carbon Trust said—

“...there are skills shortages throughout the supply chain, not just in renewables. There is a shortage of people who are skilled in ordinary energy efficiency. The Scottish energy officers network, which is the local authority energy managers meetings, is like musical chairs, only with more posts than people.”

48. The Minister also indicated that the skills gap was an issue in at least one respect. He told the Committee that—

“One general difficulty is the lack of skills in carbon assessment among planning officials. That has been a constraint, but work is being done to address it.”

The role of the Scottish Government in promoting energy efficiency in the public sector

49. During the course of our work, the Committee also took evidence from officials from Audit Scotland on that organisation’s recent audit of the energy efficiency performance in the public sector. This pointed to a range of areas where performance could be improved.

50. One of these relates to the ‘leadership’ role that can be played by the Scottish Government within the public sector in terms of the wider energy efficiency performance. When questioned on this, the Minister said in a written reply that “there is sufficient leadership shown at the higher levels of the public sector.”

Estimates of costs

51. A final, more general issue raised during the Committee’s consideration is that of the information set out in the Scottish Government’s Financial Memorandum for the Bill. This is also a subject matter that has been considered by the Parliament’s Finance Committee in its consideration of the Bill. In its overall conclusion, the Finance Committee stated that—

“The Committee notes the enabling nature of the Bill, particularly regarding the provisions contained in Part 5. Significant concern was raised, however, in evidence that not enough details have been made

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available on the likely cost impacts of these possible, future regulations.”

52. Furthermore, the Finance Committee considered that—

“...in a number of areas insufficient policy direction has been provided, which has made it difficult for local authorities and businesses to be able to assess the financial impact of the proposals.”

53. Similar issues were raised in the Economy, Energy and Tourism Committee when taking evidence from the Minister. In his response, the Minister stated that—

“In the financial memorandum, we seek not to give false certainty about what is a framework bill that covers a long period of time but, rather, to give the best possible indication. As we approach many of the interventions, we will of course provide further financial information.”

54. He also indicated that he did not believe “that financial memorandums claim to be accurate” but that they were designed to be “estimates”. As a conclusion, the Minister stated that the Scottish Government would “continue to engage and to consider the financial costs that are associated with what is a framework bill to take us to 2050.”

55. Other matters relating to the costs of particular provisions, such as the proposed energy performance certificates, are covered in subsequent sections of this report.

Section 48 – Promotion of energy efficiency

General permitted development rights for micro-generation technologies

56. The issues of whether this section of the Bill should refer to a role for the Scottish Government to “promote” rather than “improve” energy efficiency, the possible contribution that an energy efficiency action plan will have to any targets for 2010, the use of council tax rebates and the issue of whether further consultation on an action plan is necessary, have all been considered in the preceding sections of this report. In addition, however, the Committee did take evidence on a number of issues relating to increasing the take-up of micro-generation technologies, including that of general permitted development rights for such technologies.

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47 Finance Committee, Report on the Financial Memorandum of the Climate Change (Scotland) Bill, 4 March 2009, paragraph 75.
48 Finance Committee, Report on the Financial Memorandum of the Climate Change (Scotland) Bill, 4 March 2009, paragraph 75.
57. As stated above, the Scottish Government considers that the promotion of such technologies involves many issues that are reserved.\(^\text{52}\) As such, it has not provided any detail on its plans on the face of the bill. It is proposed that any such detail would be part of the energy efficiency action plan once published.

58. In its announcement in early February 2009, the Scottish Government stated that it would enable householders to install certain micro-generation equipment - such as solar panels, biomass systems and heat pumps - at their homes without requiring planning permission.\(^\text{53}\) However, as part of the same announcement, the Scottish Ministers stated that further work was needed to explore the feasibility of introducing such permitted development rights for air source heat pumps and wind turbines. The importance of such permitted development rights is that planning permission is granted as a right and there is no need to apply to the planning authority for consent.

59. In respect of the decision taken not to include certain technologies such as micro-wind and air source heat pumps for use in urban areas, Elizabeth Leighton of WWF Scotland said that her organisation was “hoping for a more positive approach to installation of microrenewables”.\(^\text{54}\) Her views were shared by Elaine Waterson of the Energy Saving Trust who told the Committee that, “Not only is it a hassle for consumers to have to go to the planning department and wait for a significant amount of time before they get planning permission, but there is a cost associated with that”.\(^\text{55}\) She also said that it made “sense for permitted development rights to be extended to community-scale developments.”\(^\text{56}\)

60. This view is also one shared by a range of organisations that gave evidence to the lead committee on this Bill. For example, Scottish Renewables said that it was necessary to “extend general permitted development rights for all microgeneration with sensible, evidence based limits included where appropriate”.\(^\text{57}\) Furthermore, Scottish and Southern Energy questioned whether the reference data and costs associated with ground source heat pumps used by the Scottish Government were out of date.\(^\text{58}\)

61. In respect of air source heat pumps, the Minister told the Committee that the omission was because of “…difficulties that we and the Westminster Administration are experiencing in getting an adequate definition of noise.”\(^\text{59}\) However, the Minister went on to say that additional work on air-source heat pumps and wind

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\(^{57}\) Scottish Renewables. Written submission of evidence to the Transport, Infrastructure and Climate Change Committee.

\(^{58}\) Scottish and Southern Energy. Written submission of evidence to the Transport, Infrastructure and Climate Change Committee.

turbines is under way, which he hoped “will inform further changes that we could—I emphasise the word “could”—make later this year on permitted development rights.”

Section 50 – non-domestic buildings, assessment of energy performance and omissions

62. One of the main issues in relation to this particular section of the Bill was that of the precise approach to be taken by the Scottish Government to further develop the use of energy performance certificates (EPCs) in the non-domestic buildings sector and the costs associated with this.

63. The provisions in the Bill enable the Scottish Ministers to create regulations which could be used to place obligations on building owners, responsible authorities and other bodies for improving the energy performance of non-domestic buildings. In particular, the Bill allows for regulations to be created which will enable various approaches to be taken on the extent to which the enhanced EPCs are applied to the existing non-domestic building stock. How this might be achieved is outlined in the Policy Memorandum, which sets out seven possible options or scenarios and which vary, in part, in the level of compulsion on the part of the building owner to act on the recommendations made during the EPC process.

64. The Bill’s provisions in this respect were welcomed by the Association for the Conservation of Energy which thought EPCs were “useful” but that there should be “…some form of compulsion and that should go alongside finance—organisations should have a fund to which they can apply for investment in energy efficiency.” This organisation also called for an extension to the energy saving Scotland small business loans scheme as well as a domestic version of these grants.

65. In his oral evidence to the Committee, the Minister indicated that his preference was to move forward on the basis of option 2 as set out in the policy memorandum, namely enhanced EPCs on sale or rent for all buildings and all large buildings with additional guidance to promote uptake of recommendations and an increase in the frequency of certification. If this approach was not successful, he indicated he would be likely to pursue the extension of EPCs to all buildings, not just large buildings, and introduce compulsory uptake of recommendations. In short, he stated that “…compulsion will be necessary if the outcomes are not achieved.”

66. In subsequent written evidence to the Committee, the Minister went further and indicated that—

“...Stage 2 amendments are proposed to require, through secondary legislation, mandatory implementation of cost-effective improvements to existing non-domestic buildings. This SSI will be subject to affirmative resolution."\(^64\)

67. However, he also said in his letter that—

“It is not intended that this provision would be utilised immediately and as announced in the response to the consultation, a voluntary approach will be adopted initially to the implementation of cost-effective improvements to existing non-domestic buildings. This regulation making power is intended for future use if a voluntary approach is considered inadequate for delivering emission savings."\(^65\)

68. Whilst we welcome the further information provided by the Minister, the Committee is still not completely clear what is intended to be achieved and how, and we cannot judge at this stage whether the Scottish Government’s preferred option is likely to succeed.

69. Additionally, the Minister’s officials indicated that local authorities would be the enforcement bodies in respect of EPCs and that they would recover costs via penalty charge notices.\(^66\) On this particular issue, the Committee did not receive any submissions that indicated that this approach would be problematic. However, it is important to note that bodies such as the Convention of Scottish Local Authorities were not contacted specifically by the Committee for a view although it would have been free to submit evidence if it wished.

70. In addition to the direction of policy, the Scottish Government was also quizzed on the estimated costs for the various options for EPCs. In relation to the two likely scenarios suggested by the Minister (options 2 and 5), the estimates of the average annual costs to local authorities of the provisions relating to EPCs are £4.1m - £5.5m (option 2) and £27.7m - £37m (option 5).\(^67\) The potential costs for other bodies, individuals and businesses are £8.2m - £9.6m per year and £55.4m – £64.7m per year respectively.\(^68\) Finally, in relation to the costs for the Scottish Government, the ranges were a one-off cost of between £0.5m and £0.6m for options 2 and 5 respectively and an average annual cost of between £0.5m and £12.4m.\(^69\)

71. To provide greater clarity on the estimated costs, the Scottish Government has indicated that regulatory impact assessments (RIAs), with further cost estimates, will be produced, in due course, along with the secondary legislation to be laid in this area. However, such RIAs are not routinely provided to this

\(^64\) Scottish Government. Supplementary written evidence. Letter of 12th March, 2009. See the annexe to this report.
\(^67\) Climate Change (Scotland) Bill, Explanatory Notes, SP Bill 17-EN, Session 3 (2008), p37-39.
\(^68\) Climate Change (Scotland) Bill, Explanatory Notes, SP Bill 17-EN, Session 3 (2008), p37-39.
\(^69\) Climate Change (Scotland) Bill, Explanatory Notes, SP Bill 17-EN, Session 3 (2008), p37-39.
Committee when it considers draft Scottish Statutory Instruments. On this point, the Minister indicated that the Scottish Government “...will announce our definitive position, with the information that committees such as this one will need in order to make the necessary judgments.”70

72. A separate issue raised in relation to section 50 of the Bill was its focus only on the non-domestic sector. In evidence to the Committee, organisations such as the Energy Saving Trust and WWF Scotland called for the extension of such provisions to the domestic sector, the latter indicating that “...the [domestic] sector is responsible for more than a third of our emissions” and that “there is a gaping hole in the bill in that respect.”71

73. This was a view shared by Chas Booth of the Association for the Conservation of Energy who said that—

“We need considerably increased investment and powers to ensure that we bring [domestic] buildings with the poorest energy efficiency up to standard. If we do not make a real effort to do that, Scotland will be cursed with a group of people in the hardest-to-treat houses who will be permanently fuel poor.”72

74. Additionally, in its evidence to the Committee, the Energy Saving Trust called for enabling provisions for the domestic building sector to be included in the Bill.73 On this point, in supplementary written evidence provided to the Committee, the Minister said that—

“There are currently no plans to introduce requirements for further periodic energy assessments for the domestic sector other than the requirements for Energy Performance Certificates at sale or rent that have just been implemented. As outlined above, this is because we believe that we can continue to make progress in improving domestic energy efficiency within existing legislation.

The introduction of regulatory requirements for the energy efficiency of housing would, in any case, be likely to drive out CERT investment. This would be contrary to current policy which is to seek to maximise CERT activity in Scotland and means that many Scottish householders would be denied access to this support.”74

75. Finally, in relation to the current energy efficiency standards and the state of Scotland’s domestic and non-domestic building stock, the Committee heard

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74 Scottish Government. Supplementary written evidence. Letter of 12th March, 2009. See the annexe to this report.
conflicting views. In response to a question from the Committee Convener, the Minister said—

“I would take issue if I may, convener, with the suggestion that we have the poorest standards. On the contrary, we have in many ways led many other jurisdictions to follow our example.”75

76. Furthermore, in relation to the Scottish Government’s recent announcement to set a 30% target for the reduction in emissions for both new housing and non-domestic buildings, he said that—

“At the moment, we are probably only marginally behind Finland, and our minimum standards for insulation are substantially better than those in Denmark, for example. Far from our standards being poor, by setting the target of 30 per cent on top of what we have already done, we are setting standards that are higher than anywhere else in the British Isles and in the majority of jurisdictions in Europe.”76

77. However, in its evidence to the lead committee for the Bill, the Energy Saving Trust stated that, “In the context of improving the energy efficiency of Scotland’s housing stock we therefore believe the Bill could and should go further” and that “it would seem sensible to include some provision within the Bill to make it easier for the Scottish Government to regulate energy performance improvements in the housing stock in the future.”77

78. This desire for additional action to be taken to improve the energy efficiency levels in existing domestic buildings was a prominent feature of much of the evidence that the Committee has received during its ongoing energy inquiry, especially when considering this issue of the current levels of fuel poverty in Scotland. For example, in the Royal Society of Edinburgh’s recent energy report, which it submitted to the Committee as part of this inquiry, it states—

“...we note that Scandinavian and German buildings are considerably more energy efficient than those in Scotland. Raising building standards in Scotland to the level in those countries could save approximately 20% of domestic energy consumption.”78

Section 51 – Renewable Heat

79. Some of the more general issues relating to the further development of renewable heat technologies, such as the possible use of financial incentives, have been addressed elsewhere in this report.

77 Energy Saving Trust. Written submission to the Transport, Infrastructure and Climate Change Committee.
80. However, one of the main points raised during the Committee’s deliberations on this particular section of the Bill was whether there should be an ‘obligation’ placed on Ministers to produce a renewable heat action plan and details on what a plan should contain.

81. Section 51(1) of the Bill, as currently drafted, states that Ministers must take such steps as they consider appropriate in relation to the promotion of renewable heat. This has been described by some members of the Committee as “a bit woolly.”\(^79\) In response, a Scottish Government official said that—

“At stage 2, we intend—subject to ministerial approval—to turn that into an obligation to produce an action plan and update it regularly. We need to do that to create a policy focus and keep the issue within that focus.”\(^80\)

82. However, when the Minister gave oral evidence, he stated only that—

“The process is slightly more complex than the minister simply issuing a fiat on the subject. The consultations on what we will introduce at stage 2 are in progress. I can assure the member that that is one of the issues that are being considered.”\(^81\)

83. On this point, one of Scotland’s leading developers of renewable heat systems, Fergus Tickell, told the Committee that—

“...the bill probably needs to be strengthened in respect of ministers’ obligation not just to promote but to deliver. That suggests that those of us who work at a practical level to deliver renewable heat and other forms of renewable energy projects have to be given the tools to do that.”\(^82\)

84. As can be seen above, although no such indication was given by the Minister when he appeared before the Committee on 4 March to give oral evidence, he has now provided further written evidence on the issue of whether there will be an ‘obligation’ on Ministers to produce an action plan on renewable heat. He said in his letter to the Committee that—

“It is proposed to amend the provision to introduce a commitment to produce an Action Plan and to update it regularly.”\(^83\)

\(^83\) Scottish Government. Supplementary written evidence. Letter of 12th March, 2009. See the annexe to this report.
CONCLUSIONS AND RECOMMENDATIONS

Background

85. Although not formally a secondary committee for the consideration of the Climate Change (Scotland) Bill, this Committee welcomes the opportunity to have taken evidence on the relevant sections of the Bill covering energy efficiency and renewable heat. The Committee is grateful to the lead committee – the Transport, Infrastructure and Climate Change Committee – for its understanding in this respect. The Committee places on record its desire for such collaborations between parliamentary committees to continue at stage 2 of the legislative process, given the highly cross-cutting nature of the Bill.

86. The Committee welcomes all the evidence received during its consideration of the Bill and is grateful to all the organisations that assisted us during our deliberations.

An ‘enabling’ bill, consultations and the legislative timetable

87. The Committee recognises that the Scottish Ministers always intended the Climate Change (Scotland) Bill to be a framework, which provides for a range of powers for the Scottish Government to take forward initiatives, such as an energy efficiency action plan and the promotion of renewable heat technologies, at a later date.

88. The Committee accepts that this approach will mean that there is always a balance to be struck between what is on the face of the Bill and what follows through secondary legislation if the Bill completes its legislative passage.

89. Furthermore, the Committee accepts that it is not unusual for the Scottish Government to continue to consult on certain provisions during the course of the consideration of a bill, particularly during this first stage.

90. However, it is clear to the Committee that in relation to the provisions on energy efficiency (section 48), the energy performance in non-domestic buildings (section 50) and the promotion of renewable heat (section 51), an excessive amount of the policy detail remains unclear or is still subject to consultation either in Scotland or by the UK Government.

91. The Committee was disappointed at the lack of detail provided by the Scottish Government’s officials when they appeared to give evidence at the Committee. It was because of this that the Committee felt it necessary to take additional, unscheduled evidence from the Minister in charge of the Bill. However, even after this, the Committee is still not in a position to have secured a detailed understanding of the policies and plans underpinning the relevant sections of the Bill.

92. This lack of clarity on the direction of policy makes it difficult for the Committee to fulfil its responsibility to scrutinise the policy and financial memoranda and to judge whether the measures in the Bill are adequate to meet the overall objectives.
93. The Committee believes that this is regrettable as it prevents the type of detailed scrutiny that we would ordinarily like to have subjected the Bill to. The Committee recognises that the Minister for Transport, Infrastructure and Climate Change has indicated that he will endeavour to provide committees with further detail – such as drafts of the various action plans and secondary legislation – and will be sympathetic to a revision of the timetable should the Bill be passed at this first stage.

94. The Committee recommends that the Scottish Government as a whole accepts the commitment given by the Minister in charge of the Bill that parliamentary committees must be afforded a reasonable amount of time to adequately scrutinise the Bill and works with lead committee and any other committee involved at stage 2 to set a realistic timetable going forward for this important, cross-cutting Bill. (RECOMMENDATION 1)

95. Furthermore, the Committee recommends that the Scottish Government agree to provide a revised financial memorandum, including more detailed and clearer cost estimates, for the sections of the Bill we considered. (RECOMMENDATION 2)

96. The Committee found it almost impossible to scrutinise adequately the provisions in relation to the use of energy performance certificates in particular, given the wide range of possible options that may be followed and the associated cost estimates.

97. Finally, the Committee believes that whilst the Climate Change (Scotland) Bill can be considered as a framework bill, we have reservations on the extent of the enabling powers and whether this gives too much discretion to the Scottish Ministers and insufficient powers to Parliament. We recommend that all the relevant secondary legislation proposed under sections 48-51 is subject, if they are not already, to affirmative resolution and that the Committee has the opportunity to see drafts of the instruments before they are laid. (RECOMMENDATION 3)

Reserved versus devolved powers

98. The Committee accepts that the ‘promotion’ of energy efficiency, renewable heat and micro-generation technologies is an area where both the Scottish and the UK Parliaments have an interest and legislative competence. We also believe that, in many respects, these are also areas where there are shared goals between the administrations.

99. The Committee does not consider the issue of what is reserved and what is devolved to prevent the Scottish Government from delivering on existing commitments to improving energy efficiency in co-operation with the UK Government and other parties.

100. The Committee recommends that the Scottish Government – at both official and ministerial level – continue to discuss matters of common interest with the UK Government and to report progress to this Committee in
respect of the subject matter of sections 48-51 of this Bill. (RECOMMENDATION 4)

101. The Committee welcomes the Minister’s recent change of policy and his commitment to introduce amendments at stage 2 to amend section 48(2) of the Bill to replace the word “promote” with the word “improve” to change this provision to “improve” the energy efficiency of living accommodation. **We recommend that the Minister takes all the necessary steps to ensure that efforts are made across the piece to improve and not just promote energy efficiency and the take-up of renewable heat and micro-generation technologies, and that the Minister brings forward amendments at stage 2 to maintain and extend the existing legislative provision in respect of living accommodation. (RECOMMENDATION 5)**

Targets

102. The Committee notes that the Scottish Government has stated a general policy against the setting of targets. However, this Bill does propose statutory targets for 2050 and interim targets, which we support. However, in respect to the contributions of energy efficiency and renewable heat, no such targets have been set.

103. **The Committee recommends that the Scottish Government clearly sets out how the monitoring and reporting procedures within this Bill will work and clarifies the roles of various bodies in this respect. (RECOMMENDATION 6)**

104. **Furthermore, the Committee recommends that the Scottish Government adds the setting of targets for its energy efficiency and renewable heat initiatives to the relevant sections of the Bill and brings forward the necessary amendments. (RECOMMENDATION 7)**

Financial and fiscal incentives

105. The Committee notes the calls made by many of the witnesses giving evidence to the Committee to introduce some form of financial or fiscal incentive to encourage people and organisations to invest in energy efficiency, micro-generation or renewable heat technologies.

106. **The Committee recommends that the Scottish Government investigates and reports back to the Committee, if possible before stage 2, on whether some form of rebate through local taxation systems to incentivise the take-up of energy efficiency, renewable heat and/or micro-generation technologies in the domestic and non-domestic sectors should be introduced, drawing on the experience and the success of such schemes in other parts of the UK. (RECOMMENDATION 8)**

Skills gaps and employment creation

107. The Committee is supportive of the efforts to create employment opportunities through the various energy-related provisions in this Bill. However,
the Committee is concerned at the evidence we have heard in relation to the potential skills gaps, including from the Minister himself. **The Committee recommends that the Scottish Government makes all efforts to plan accordingly and ensure that the education and training sector in Scotland is well-prepared and can respond to the growth in employment opportunities by providing the right number of people with the right skills at the right time, and reports back to the Committee on this as soon as possible. (RECOMMENDATION 9)**

**Specific recommendations in relation to sections 48, 50 and 51 of the Bill**

**Section 48 – contribution to the 2010 targets**

108. The Committee heard evidence that the production of an energy efficiency action plan has been underway since December 2004. The Committee also heard evidence that the time taken to pass the Bill, enact the various provisions and then consult and finally publish an action plan could impact markedly on the contribution that could be provided in meeting the 2010 emissions reductions targets by energy efficiency initiatives.

109. The Committee does not consider that it is necessary to consult further on its energy efficiency action plan and certainly not for a period of up to 12 months following the passing of the Bill. However, the Committee does welcome the statements made by the Minister that an outline plan will be published shortly. **The Committee recommends that the Minister ensures that energy efficiency projects are in a position to play a full and meaningful part in meeting the statutory targets for 2010 and thereafter. The Committee sees no reason why the action plan has to await the passing of the Bill and wishes to see the Scottish Government publish a full draft of the action plan before stage 2 of the Bill. (RECOMMENDATION 10)**

110. The Committee notes that the progress of the proposed Energy Efficiency and Micro-Generation (Scotland) Bill (a members bill) has been stalled due to the introduction of the Climate Change (Scotland) Bill and the indication from the Scottish Government that it intends to legislate in this area. The Committee also notes the recent announcements by the Minister providing for general permitted development rights to some micro-generation technologies but not, at this stage, to micro-wind or air-source heat pumps for use in urban areas.

111. The Committee notes that the Bill, as it stands, does not as yet take forward all of the main provisions that were to be part of the proposed Energy Efficiency and Micro-Generation (Scotland) Bill. **The Committee recommends that the Minister sets out the Scottish Government’s intentions in this regard during the stage 1 debate. (RECOMMENDATION 11)**

112. Furthermore, the Committee recommends that, subject to appropriate controls on noise etc., general permitted development rights are extended to micro-wind and air-source heat pumps for use in urban areas, as soon as possible. (RECOMMENDATION 12)
Section 48 - costs

113. The provisions in this section of the Bill put a duty in statute on the Scottish Ministers to produce a plan for promoting energy efficiency in Scotland. The action plan will provide details of the measures to improve energy efficiency and/or to promote micro-generation across all Scottish Government Directorates. This duty is part of current planned activity, is not expected to give rise to additional resources and will be met from within existing Scottish Government administration budgets.

114. The Committee understands why this particular form of words on costs is being made in the Financial Memorandum in that the ‘production’ of an energy efficiency action plan is not expected to be a costly exercise. However, we have serious reservations about the lack of detail at this stage on the costs of the measures that will be contained within the plan itself and we would question whether the overall climate change objectives can realistically be met without additional budgetary resources from within the Scottish Consolidated Fund. Whilst there may be an existing budget for publication of an energy efficiency action plan, the Committee believes that the successful passage of the Bill must result in the Government doing more than it is at present and we would be surprised if the initiatives in the action plan did not have cost implications.

115. The Committee has recommended above at paragraph 95 that a revised financial memorandum be produced and we would expect the costs identified above to be covered within this. (RECOMMENDATION 13)

Section 50 – recent announcements and extension of provisions to the domestic sector

116. The Committee notes that the Bill in section 50 currently applies only to the non-domestic sector. The Committee considers that there is no room for complacency in respect to energy efficiency performance and the standards within the Scottish building stock, commercial, industrial, the public sector and, critically, the domestic sector.

117. The Committee notes the recent announcements made by the Minister in response to the Sullivan Report to set a 30% target for the reduction in emissions for both new housing and non-domestic buildings. The Committee does not have sufficient evidence to make a judgement on this decision but we do want to see ambitious targets being set and we recommend that the Minister provides feedback on how the setting of a target of 30% is consistent with meeting the targets set within this Bill. (RECOMMENDATION 14)

118. Furthermore, despite our reservations on the ability to scrutinise the cost implications associated with the use of energy performance certificates, we welcome the provisions in this respect. However, we note the calls for similar enabling provisions to be introduced as part of this Bill to extend such ideas to the domestic sector and we recommend that the Scottish Ministers give consideration to this and outline their intentions during the stage 1 debate. (RECOMMENDATION 15)
Section 51 – an obligation to produce an action plan

119. As it is currently drafted, the Committee considers that the duties on the Scottish Ministers to take such steps as they consider appropriate to promote renewable heat are too vague. The Committee welcomes the additional written information provided by the Minister and his statement that he intends to amend the Bill at stage 2 to provide for a “commitment” to produce a heat plan. However, the Committee believes that this still does not go far enough and recommends that there should be an ‘obligation’ on the Scottish Minister to introduce, within a reasonable timeframe, an action plan to improve the take-up of renewable heat technologies in Scotland and to work with all the necessary parties to achieve progress in this area. Furthermore, we seek a clear timetable from the Minister for the introduction of the heat plan before stage 2 of the Bill. (RECOMMENDATION 16)

120. One area that we want to see progress being made is in relation to the use of combined heat and power (CHP), particularly in the industrial and commercial sectors and in urban areas for district heating. As part of our energy inquiry, we were impressed by the developments being taken forward by Diageo at Cameronbridge in Fife (a biomass-fired CHP plant) and by Aberdeen Heat and Power Ltd., tackling fuel poverty in municipal housing and public buildings. We want to see these initiatives replicated across Scotland and we will return to this issue, and that of capital support schemes, in more detail when we complete our energy inquiry in the coming months. At this stage, we recommend that the Scottish Government ensures that CHP systems, preferably using sustainable energy sources, are a part of its action plans for renewable heat and energy efficiency. (RECOMMENDATION 17)
ANNEXE A: EXTRACT FROM THE MINUTES

4th Meeting, 2009 (Session 3), Wednesday 4 February 2009

Present:

Ms Wendy Alexander  Gavin Brown
Rob Gibson (Deputy Convener)  Christopher Harvie
Marilyn Livingstone  Lewis Macdonald
Iain Smith (Convener)  Dave Thompson

Also present: Sarah Boyack and Nigel Don

Climate Change (Scotland) Bill: The Committee took evidence on Part 5, Chapter 3 of the Bill at Stage 1 from—

Colin Imrie, Deputy Director Energy Markets Division, Sue Kearns, Head of Renewable Strategy and Onshore Renewables, Jamie Hume, Deputy Director Renewable Energy, Gavin Peart, Assistant Head of Building Standards Division, Alec Millar, Principal Non-Domestic Energy, Building Standards Division, Philip Wright, Deputy Director of the Climate Change Division, and Cameron Maxwell, Policy Adviser in Climate Change, Scottish Government;

And then from—

John Stocks, Manager for Scotland, The Carbon Trust;
Chas Booth, Senior Press and Parliamentary Officer, Association of the Conservation of Energy;
Fergus Tickell, Managing Director, Northern Energy Developments Ltd;
Elaine Waterson, Strategy Manager, Energy Saving Trust;
Elizabeth Leighton, Senior Policy Officer, WWF Scotland.
8th Meeting, 2009 (Session 3), Wednesday 4 March 2009

Present:

Ms Wendy Alexander                Gavin Brown
Nigel Don (Committee Substitute)   Rob Gibson (Deputy Convener)
Christopher Harvie                 Marilyn Livingstone
Lewis Macdonald                    Iain Smith (Convener)

Also present: Sarah Boyack

Climate Change (Scotland) Bill (in private): The Committee agreed its lines of questioning.

Climate Change (Scotland) Bill: The Committee took evidence on the Bill at Stage 1 from—

Stewart Stevenson MSP, Minister for Transport, Infrastructure and Climate Change, Philip Wright, Deputy Director of Climate Change, Gavin Peart, Assistant Head of Building Standards, Sue Kearns, Head of Renewables Energy Policy Team, and Sarah Hart, Energy, Efficiency Policy Analyst, Scottish Government.

9th Meeting, 2009 (Session 3), Wednesday 11 March 2009

Present:

Ms Wendy Alexander                Gavin Brown
Rob Gibson (Deputy Convener)      Christopher Harvie
Marilyn Livingstone               Lewis Macdonald
Stuart McMillan                   Iain Smith (Convener)

Climate Change (Scotland) Bill (in private): The Committee considered an outline of a draft report to the Transport, Infrastructure and Climate Change Committee.

10th Meeting, 2009 (Session 3), Wednesday 18 March 2009

Present:

Ms Wendy Alexander                Gavin Brown
Rob Gibson (Deputy Convener)      Christopher Harvie
Lewis Macdonald                    Stuart McMillan
Iain Smith (Convener)              David Whitton (Committee Substitute)

Climate Change (Scotland) Bill (in private): The Committee considered a draft report to the Transport, Infrastructure and Climate Change Committee.
ANNEXE B: ORAL EVIDENCE

Scottish Parliament

Economy, Energy and Tourism Committee

Wednesday 4 February 2009

[THE CONVENER opened the meeting at 09:32]

Climate Change (Scotland) Bill: Stage 1

The Convener (Iain Smith): Welcome to the fourth meeting in 2009 of the Economy, Energy and Tourism Committee. We have a couple of guests with us this morning—Sarah Boyack and Nigel Don—who have a particular interest in the Climate Change (Scotland) Bill, and will be entitled to participate in the discussion.

I know that Wendy Alexander is running a little late this morning and will join us later. Also, a member of the panel is stuck on a train somewhere and will join us shortly.

The only item on the agenda is stage 1 of the Climate Change (Scotland) Bill. The committee is considering chapter 3 of part 5 of the bill, which deals with energy efficiency and renewable heat.

We have two panels this morning. The first panel is made up of members of the Scottish Government’s bill team—they rather outnumber us. Later, we will take evidence from a number of organisations with a particular interest in energy efficiency issues.

The bill falls within the remit of a number of committees. We have an understanding with the convener of the Transport, Infrastructure and Climate Change Committee, which is the lead committee, that we will comment specifically on the energy aspects in chapter 3 of part 5.

Lewis Macdonald (Aberdeen Central) (Lab): Convener, before you invite the members of the panel to introduce themselves, I would like to ask for clarification of one point. An aspect of the bill that we appear not to have been asked to consider relates to the privatisation of the forestry estate, which seems to be based on the proposition that it should be done in order to promote renewable energy. That clearly gives it an energy aspect. Which committee is considering that matter? Should this committee be asked to comment on the matter, as it involves energy?

The Convener: My understanding is that the Rural Affairs and Environment Committee is addressing that part of the bill.

Lewis Macdonald: Will that include the energy aspects?

The Convener: I presume that it will, but we will confirm that.

Lewis Macdonald: That would be helpful, because we might want to comment on energy-related issues at some point in the proceedings.

The Convener: Thank you for that.

I ask the panel members to introduce themselves briefly.

Philip Wright (Scottish Government Climate Change and Water Industry Directorate): I am deputy director, climate change division, which has responsibility for the bill as a whole. I and my colleague Cameron Maxwell can provide general context and background information if the committee wishes us to do so, and we can perhaps say something about the delivery of the bill and the duties that it contains.

Cameron Maxwell (Scottish Government Climate Change and Water Industry Directorate): I work with Philip Wright in the climate change division, which has responsibility for the bill. I and my colleague Cameron Maxwell can provide general context and background information if the committee wishes us to do so, and we can perhaps say something about the delivery of the bill and the duties that it contains.

Alec Millar (Scottish Government Directorate for the Built Environment): I am principal for non-domestic energy in the building standards division of the directorate for the built environment. I am examining the existing non-domestic building aspects.

Gavin Peart (Scottish Government Directorate for the Built Environment): I am assistant head of the building standards division, and I have a particular interest in non-domestic buildings.

Jamie Hume (Scottish Government Enterprise, Energy and Tourism Directorate): I am deputy director for renewable energy. I had hoped to be joined by my colleague Sue Kearns, who is our expert on heat, and the team leader within my division, but she is not here yet. The heat
aspect of renewable energy and the heat action plan sit within my division.

Colin Imrie (Scottish Government Enterprise, Energy and Tourism Directorate): I am the deputy director, energy markets division, and I am here to talk about the energy efficiency promotion measures in the bill.

The Convener: Perhaps someone from the Scottish Government could outline the purposes of the bill, particularly in relation to chapter 3 of part 5, and explain the provisions that it contains. I understand that there are some thoughts about amendments at stage 2, so it would be useful if panel members outlined them.

Philip Wright: I will briefly outline the background to the bill, and my colleagues will address the individual elements. The first four parts of the bill relate directly to climate change. Part 1 covers the setting of the targets, including the 80 per cent reduction in all greenhouse gas emissions by 2050, and the interim target of a 50 per cent reduction by 2030. Parts 2 and 3 cover the advice and reporting aspects, and clearly set out the requirements on, for example, annual reporting on different aspects of the bill, such as targets and performance. Part 4 covers the enabling powers to place duties on public sector bodies if the need should arise. Part 5 is an amalgam of various provisions that are linked to climate change and will help to support the delivery of the targets. Chapter 1 of part 5, on adaptation, is about placing a duty on ministers to report on the action that they plan to take to adapt to the impact of climate change, based on the United Kingdom-level risk assessment.

That is the general background. My colleagues will cover the individual provisions.

Jamie Hume: I will talk about renewable heat. It is fair to say that there is a UK-wide question about how renewable heat should be addressed in legislation. Ministers already have the ability to promote renewable heat, and the inclusion of renewable heat in the statute reflects its importance. The need to build a commercially viable renewable heat industry and to ramp up provision from the current estimate of less than 1 per cent of demand to the target—on which we consulted—of around 11 per cent of demand in order to meet the 2020 targets will, effectively, involve the development of a whole new industry. It is acknowledged that in order to do that, the main lever must come through a UK-wide mechanism—there must be a market lever and a regulatory mechanism. In February, the Department of Energy and Climate Change will issue a consultation on the renewable heat incentive.

We estimate that the renewables obligation for the provision of electricity from renewable sources is working effectively. According to 2007 figures, renewable electricity accounts for around 20 per cent of Scottish demand. The UK provisions will address the lack of any equivalent incentive for the production of renewable heat through the use of biomass heat pumps or solar thermal systems.

As committee members will be well aware, heat is important because it accounts for around 45 per cent of total energy demand; electricity accounts for around 26 per cent of demand. If we are to live up to the aspiration to meet 20 per cent of the total energy demand from renewable sources by 2020, it is clear that the step change on heat that I have mentioned will be necessary.

What is the current position? When it reported on renewable heat early last year, the forum for renewable energy development in Scotland recommended the introduction of a heat target. The analysis that we have carried out estimates that to meet the 20 per cent target, 11 per cent of heat would need to come from renewable sources, provided that we reached the targets of producing 50 per cent of electricity from renewable sources and running 10 per cent of transport on renewable resources. That is the figure in our consultation, and it was broadly supported by consultees.

The Scottish ministers and the Scottish Government have the power to prepare the ground for the broad, UK-wide regulatory mechanism and to do some of the softer things, such as providing information, encouraging heat mapping at local authority level, making available consumer information, examining skills needs, particularly around installation, and reviewing the building regulations. We propose to cover those elements and more in a renewable heat plan, which we will issue in the renewables action plan that we are due to produce by the end of June.

That is the background to the actions that we believe we can take to prepare the ground for the introduction of the UK-wide mechanism, which is expected to provide a significant market lever that will enable the renewable heat targets to be met on a UK-wide basis. As I have said, the inclusion in
the bill of provisions on renewable heat reflects the importance that the Scottish ministers attach to the issue and puts up front recognition of the step change that will be needed to meet the 2020 targets.

Colin Imrie: Shall I deal with the energy efficiency provisions?

The Convener: Yes, please.

Colin Imrie: The reason for including section 48, which will require the Scottish ministers to

“prepare and publish a plan for the promotion of energy efficiency in Scotland”;

is that energy efficiency will make a key contribution to meeting the carbon reduction targets that are set out in the bill. Section 48 will require ministers to prepare and publish the plan within a year of the section coming into force, and to review the plan at least every three years. It sets out that the plan

“must include provision about the promotion of the energy efficiency of living accommodation.”

It is proposed that the bill will repeal and replace section 179 of the Housing (Scotland) Act 2006, which requires the Scottish ministers to

“prepare a strategy for improving the energy efficiency of living accommodation.”

The energy efficiency plan that the bill proposes will cover living accommodation, but it will go wider than that; it will aim to be a comprehensive plan to promote energy efficiency across a range of areas.

09:45

We have committed to the publication by March of an outline of what the plan will contain. In general terms, it is expected that the plan will cover issues in the domestic sector, issues relating to the business sector and issues for the public sector, as well as issues concerning buildings specifically. It will cover the range of measures that are already in place, including advice networks, business loans schemes and the energy efficiency design awards, which were announced yesterday. We also expect it to cover microgeneration issues. When the outline is published, we will give a clear indication of what other measures will be included. We are working on that internally at the moment.

In terms of the drafting of section 48, I stress that the aim is to have a comprehensive plan that covers energy efficiency in its broadest sense. It is important to recognise that many powers relating to the regulation of energy markets, which have an influence on the way in which energy efficiency is delivered in Scotland, are the responsibility of the UK Government at Westminster. For example, the carbon emissions reduction targets scheme, which is an important obligation on companies to deliver energy savings, is regulated by UK regulations.

The important reason for being comprehensive in the approach, including in Scotland, is that the implementation of the scheme in Scotland has a major implication for the other measures that are designed to achieve energy efficiency. It is for that reason that the Scottish ministers are preparing a CERT strategy to increase the uptake of CERT in Scotland, to complement the measures that are being taken through the Scottish budget.

Alec Millar: Section 50 covers existing non-domestic buildings. The Sullivan report, which was published in December 2007, set out recommendations for the improvement of new buildings and existing non-domestic buildings, for which enabling powers could be included in the bill. Buildings account for more than 40 per cent of the emissions in the UK. However, as only 1 per cent of the building stock is replaced annually by new build, it will take a considerable time to achieve a significant improvement in the overall building stock. The aims of the provisions are to improve the energy performance of existing non-domestic buildings and to increase the contribution that such buildings can make to the mitigation of climate change. The provisions are required to enable the Scottish ministers to make regulations that provide for the assessment of the energy performance of non-domestic buildings and the emissions of greenhouse gases that are produced by or associated with such buildings.

A public consultation was opened in September and closed on 25 November. More than 500 invitations to respond were issued and we received 71 responses. The responses that could be published were published by the Scottish Government library on 22 January and were placed on the consultation website on 27 January. I have provided the committee with a link to that webpage. The report on the consultation is close to being finalised and is with the minister just now. We expect that we will be able to publish it very soon. We will send a copy to the committee.
We carried out an initial in-house analysis of the responses to the consultation, which indicated that the marker provisions in the bill—the assessment of the energy performance of existing non-domestic buildings and the assessment of emissions of greenhouse gases that are produced by or associated with such buildings—were strongly supported. The responses also indicated support for a database for non-domestic buildings. Proposals in that regard are being worked on.

The bill’s provisions will allow for action on various topics. The scope of energy performance certificates could be extended into assessments of carbon and energy performance. ACEPs will take account of operational ratings as well as asset ratings and could take account of embodied energy and carbon when a robust methodology is available. Such an approach would help to address the issue of historic and traditional buildings. The lifespan of assessments or certificates could be varied—EPCs currently have a lifespan of 10 years. Owners could be required to obtain ACEPs even when they are not renting or selling their properties, and they could be required to formulate and implement action plans to improve their building, as a result of the advice in ACEPs. Appropriate standards, for example on energy-efficient lighting, roof-space insulation or sub-metering, could be developed for such building work. Finally, local authorities or other bodies could be empowered to check ACEPs.

After the consultation report has been published we will develop options whereby the Scottish ministers can progress section 50 of the bill. That work will include consideration of whether the bill should be amended. Key areas in which respondents to the consultation were divided will need to be discussed with ministers. For example, respondents were divided on whether the cost-effective improvements for buildings that will be set out in ACEPs should be mandated through regulations. Respondents were also divided on whether there should be a wholly separate process for assessing the energy and carbon performance of historic and traditional buildings.

It is anticipated that the bill’s provisions will be implemented through regulations in a gradual, cost-effective manner. Regulations will be developed following detailed research, consultation and costing, and will be subject to the affirmative resolution procedure. The model will be similar legislation that was implemented gradually, such as the Disability Discrimination Act 1995.

The Convener: I thank the witnesses for their helpful opening remarks. This is a general question on a matter that is of concern to me and, I am sure, other members of the committee. Given how the bill has been formulated, we are being asked to take an awful lot on trust. Alec Millar has indicated that a number of provisions were still subject to consultation when the bill was introduced and might be significantly amended at stage 2. It is difficult for the committee to give the bill meaningful consideration at stage 1 if we do not know what shape it will take.

Is the approach that is being taken realistic? The options on EPCs have cost implications that range from £500,000 to £12 million for the Government, from £5 million to £65 million for businesses and from £2.5 million to £37 million for local government. Those ranges are big and reflect big differences in approach. Would it have been better to bring forward more detailed proposals in the bill? That would have enabled the committee comprehensively to consider the bill’s implications.

We must also wait for the results of the consultation before we find out what approach will be taken to renewable heat. To say that we have been given a pig in a poke might be to put it too strongly, but is it fair to say that we are being asked to take too much on trust?

Gavin Peart: We can provide a mock-up version of regulations, if that would help.

The Convener: It would help, but it would have been more helpful to explore such matters as part of our stage 1 consideration.

Jamie Hume: On renewable heat, we are not anticipating any great unanswered questions around cost implications for Government, local authorities or other stakeholders. The inclusion of section 51 reflects the importance that ministers attach to renewable heat. The detailed steps that will be taken towards meeting the target will be contained in the action plan to which I referred. The section is a sort of marker that flags up the issue. Heat is not mentioned anywhere in the Scotland Act 1998, so it is kind of devolved by omission. We have taken this opportunity to flag up the issue, given the importance of the heat sector in meeting the
Colin Imrie: As the briefing note states, in March to June 2007, there was a consultation on a draft energy efficiency and microgeneration strategy for Scotland. In June 2008, the Scottish Government published a consultation analysis, which summarised the points raised by respondents. The key difference in the bill is the intention to promote an action plan for energy efficiency rather than a strategy. The purpose is to focus on actions, but a clear statement has been made that the intention is to base the action plan on the results of the consultation that has already taken place—the consultation will feed into the action plan. The aim is to publish in March an outline of what will be in the plan.

Dave Thompson (Highlands and Islands) (SNP): I am particularly interested in how we deal with areas that are off the gas grid. At the moment, people in those areas use heating oil, liquid gas, coal and so on. Some 25 per cent of homes are off the gas grid; many are in the Highlands and Islands and have all sorts of other problems, too. The options that appear to be available, such as cavity wall insulation, would not be applicable to a lot of the housing in the north—traditional stone cottages, for example—which would not benefit from them. We need to consider external and internal cladding, which I believe is very expensive. Solar power, biomass, heat pumps and all the rest need to come into play, too. I understand that the current grant schemes are insufficient to stimulate demand for those things. I think that Jamie Hume said that the UK legislation will pick up on that and create incentives to stimulate demand for biomass and so on. Does he think that that UK legislation will be sufficient to deal with the problem and help develop biomass, solar power and so on?

Jamie Hume: Colleagues at Westminster recognise that those issues are fundamental, particularly for Scotland. I referred earlier to the difficulty of assessing the entire market and the issues that arise, measuring the extent to which solutions are being found and assessing how best to provide an incentive that works for consumers and which will benefit individuals in the circumstances that you describe.

My colleague Sue Kearns will keep me on track if I get any of this wrong, but the intention is to provide a market incentive that will work for individual householders. Exactly how that will work is the subject of the consultation. One option is that if someone were to install a renewable heat apparatus in their home, they would receive a benefit that would be paid for by a tariff on non-renewable heat providers—the utility companies and so on. Consideration is being given, for example, to whether it is possible to assess how much a particular appliance would generate over a period and provide an up-front cash payment to enable householders to install such equipment—that is one route that is being explored. Complications need to be ironed out. For example, if a householder who has installed such an appliance sells the property, where will the benefit go? How can the new occupants benefit?

Such issues are considered in the consultation, and it is very much the intention to address the kind of issue to which you referred, so that we not only take the action UK-wide that is necessary to meet the 2020 target but provide something for communities and individual consumers that is economically workable. Sue Kearns might want to add to what I have said.

Sue Kearns (Scottish Government Enterprise, Energy and Tourism Directorate): What Jamie Hume said is correct. We can take action at devolved level. For example, under the energy assistance package, which will be introduced in April to help alleviate fuel poverty, people will be able to get air-source heat pumps, if those are appropriate, in off-gas-grid houses. Through the Scottish biomass heat scheme we aim to help businesses in off-gas-grid areas and to encourage demonstrator district heating schemes. We are aware that in Scotland we must concentrate on opportunities for renewable heat in off-gas-grid areas.

Dave Thompson: It is encouraging to hear about what we can do at a devolved level. Have you explored other incentives for people who install such schemes, such as council tax reductions?

Jamie Hume: Our approach so far has been to agree that the renewable heat incentive is the right UK-wide mechanism to address the issue. Detailed questions are being considered as part of the consultation. There will be a lag, because the provisions will not come into force for 18 months or so. In the meantime, the action that is taken in Scotland will include action through the
grants schemes and support mechanisms to which Sue Kearns referred, and the action plan that we are producing will cover issues to which I referred, such as community awareness, skills needs in relation to installation and so on.

At this stage we are not considering incentives of the type that you suggest. I do not know what consideration has been given to such issues during the past few months, at either the UK level or the devolved level, but we can find out about that for you. Sue Kearns might know more of the history.

Sue Kearns: Dave Thompson’s suggestion has not come up. We consulted on the renewable heat action plan under the renewable energy framework, which is supportive of the production of a plan and a grants scheme. I think that people are thinking—they are right to think—that the main incentive will come from a UK regulatory mechanism. We do not know the details of that, so it is difficult to comment on whether additional incentives will be needed to make the approach work.

Lewis Macdonald: The bill will confer on the Scottish ministers a duty to “prepare and publish a plan for the promotion of energy efficiency”.

It is striking that the first thing that the bill does in that regard is to repeal a tougher law—the statutory requirement to “prepare a strategy for improving ... energy efficiency”, which is in the Housing (Scotland) Act 2006. Why is that?

Colin Imrie: It is proposed to focus on the promotion of energy efficiency in the general sense, which is consistent with the nature of devolved legislation. There is an expectation that what has been done in the context of the 2006 act will continue. There is no intention to undermine the current approach.

Lewis Macdonald: However, the bill will repeal section 179 of the 2006 act, which requires the Scottish ministers to prepare a plan for “improving”, rather than just promoting, energy efficiency. Do you accept that the approach in the bill dilutes the existing statutory provision?

Colin Imrie: That is certainly not the intention, but I hear what you are saying.

Lewis Macdonald: It might not be the intention, but is it the effect?

Colin Imrie: I do not have an answer to that. We can consider that point. It was certainly not the intention.

Lewis Macdonald: I am hearing both an answer and the absence of an answer to the question. The effect of the bill has to be our primary concern. Is it feasible to keep the new provision in the bill without repealing the existing provision in the Housing (Scotland) Act 2006?

Colin Imrie: The intention of the bill is to provide a comprehensive approach to energy efficiency. Therefore, it seems to make sense to include the housing provision in the bill. It was certainly not our intention to dilute the current approach and we will reflect on the point that you raised.

Lewis Macdonald: Do you recognise that it might be opportune to consider whether amendments could be lodged at stage 2 that would maintain the existing requirement to improve energy efficiency, rather than merely to promote it?

Colin Imrie: It is certainly the Government’s overall intention to improve levels of energy efficiency in Scotland across the board, and particularly in domestic accommodation.

Lewis Macdonald: That is helpful.

You talked about widening the effect of the requirements beyond the housing sector, which is covered by the existing legislation. What is additional in the promotion of energy efficiency sections of the bill, as distinct from the areas covered by your colleagues in relation to existing non-domestic buildings? I think that you mentioned the public sector in your introductory remarks. Is that the extent of the additional requirements under those sections?

Colin Imrie: The additional requirements relate to business and industry. They also relate to the public sector, in which a series of activities is already under way. The consultation on energy efficiency and microgeneration looked at a number of other areas, too, such as energy standards for equipment. Many of the issues are reserved or are subject to European legislation. An energy efficiency action plan has to recognise that we need to cover the approach in both reserved and devolved terms. A comprehensive approach is the best way to achieve progress.

Lewis Macdonald: You have described extending the provisions, limited though they may be, to a range of different buildings. How
do the provisions fit with the sections that Mr Millar has described in relation to existing non-domestic buildings? In other words, what is the application of the action plan for promoting energy efficiency in relation to existing non-domestic buildings? Is there duplication or a mutual reinforcement? What is the relationship?

Gavin Peart: Section 50 looks at the building itself. We are talking about the building fabric and the comfort factors of the building, rather than business energy use and that sort of thing.

Colin Imrie: On the business sector, one of the actions that we are undertaking is the setting up of a loan fund for small and medium-sized businesses to enable them to put in place improvements to their premises and to their activities as businesses. We are looking at that comprehensively. The aim is very much to ensure that the specific measures in section 50 and in the proposed action plan under section 48 are complementary and reinforce one another.

Philip Wright: I forgot to mention in my opening remarks what may be a relevant point on the advice that the Scottish Government will take from a body called the UK Committee on Climate Change, which was established under the UK Climate Change Act 2008. That committee produced its report, “Building a low-carbon economy—the UK’s contribution to tackling climate change”, in December, and energy efficiency is a key feature. The Committee on Climate Change views energy efficiency as playing a vital part in reducing emissions.

To pick up on Colin Imrie’s point about the need for complementarity between reserved and devolved issues, the UK Government will take from a body called the UK Committee on Climate Change, which was established under the UK Climate Change Act 2008. That committee produced its report, “Building a low-carbon economy—the UK’s contribution to tackling climate change”, in December, and energy efficiency is a key feature. The Committee on Climate Change views energy efficiency as playing a vital part in reducing emissions.

Colin Imrie: I mentioned a practical example in the form of the carbon emissions reduction targets scheme. The CERT scheme is run under regulations that are set out in the Energy Act 2008, which, although it was passed by Westminster, applies in Scotland just as much as it applies in England. However, it is generally accepted among energy companies and the Scottish Government, and more widely, that the way in which the scheme has been operated in the UK has tended to favour investment south of the border, rather than north of the border. The exact reasons for that are still being established and discussed in the context of the CERT strategy.

However, one reason is that the cheaper measures that the CERT scheme promotes, such as cavity wall insulation, cannot be undertaken in stone buildings, and there is a much greater number of those in Scotland than there is south of the border. Similarly, the nature of our urban tenement stock is different from that of housing stock south of the border. One of the current key priorities is, therefore, to ensure that the uptake of the CERT scheme in Scotland increases and that Scotland gets its fair share. The ability to tackle that in the energy efficiency action plan—even if it is not specifically the legislative responsibility of this Parliament—is a good reason to take a comprehensive approach.

Gavin Brown (Lothians) (Con): I begin by focusing on section 51, which relates to the promotion of renewable heat. Section 51(1) states:

“Ministers must take such steps as they consider appropriate”.

That seems a bit woolly, if I can put it that way. There is a clear obligation on ministers to produce and publish a plan in relation to energy efficiency. Given the importance of heat in reaching our carbon targets, why is there not an obligation to produce and publish a plan in relation to heat from renewable sources?

Sue Kearns: At stage 2, we intend—subject to ministerial approval—to turn that into an obligation to produce an action plan and update it regularly. We need to do that to create a policy focus and keep the issue within that focus.

Gavin Brown: So you intend to lodge an amendment to deal with that.

Sue Kearns: Yes.

Gavin Brown: Do you also intend to draw up a timescale? The timescale for the energy efficiency plan is 12 months. Will there be a timescale for the heat plan?

Sue Kearns: Yes. We have a renewable heat target for 2020; the indicative figure that has been discussed is for 11 per cent of heat to come from renewables by 2020. In order to reach that target, we will have to monitor progress, so we will need to produce a plan...
and update it regularly.

Gavin Brown: What timescale is likely to be set in the amendment?

Sue Kearns: We intend to produce the first renewable heat action plan this summer, and we will then work out a sensible interval for updating it. We are considering updating it once every two years.

Gavin Brown: I will move away from renewable heat and back to energy efficiency.

Given the amount of work that has been undertaken—to which Colin Imrie referred—on the consultation, and given the work that has been carried out for a number of years by organisations such as the Carbon Trust and the Energy Saving Trust, our level of knowledge is quite sophisticated.

Under section 48, the Government has a full 12 months to publish its plan for the promotion of energy efficiency—that is 12 months after the provision becomes enforceable, which is some time away yet. Let us imagine that the bill is passed just before the summer recess. Twelve months after that it will be summer 2010. However, legally enforceable targets will be set for 2010. Is it realistic to require the plan to be published more quickly, so that energy efficiency can make a meaningful contribution to the 2010 target? Many organisations that have given evidence to the committee put energy efficiency at the top of the chain—Friends of the Earth Scotland did that most recently.

10:15

Colin Imrie: The 12-month period was proposed in recognition of the importance of consultation in the preparation of the plan. A consultation will have to be carried out and responses will have to be analysed. We must ensure that the final version of the plan has been subject to that process and is as solid as possible.

However, it is important to take action straight away, as you said. For that reason, we propose to come up with an outline of the plan in March. In the context of statements that have been made recently, our expectation is that we will be able to publish the outline of the plan later this year, so that it can be subject to consultation, with the aim of ensuring that the plan can be in place as soon as possible.

Gavin Brown: I accept that consultation takes time. Is it the Government’s intention to take as much action as it can do before the bill is passed, so that energy efficiency can make a meaningful contribution to the 2010 target?

Colin Imrie: Yes, absolutely. A series of measures is already under way and to some extent the plan will bring all that action together. Discussions are going on about how to reinforce such measures in other areas. The reason for having an action plan is to ensure that the matter can be considered comprehensively, so that activity can be added in areas in which there are gaps.

Energy efficiency is already contributing, but if we are to meet the ambitious carbon targets it will have to contribute much more. Energy efficiency is one of the most cost-effective elements of carbon abatement. In many cases, measures pay for themselves in a relatively short time. However, the area is notoriously difficult, because it is about the behaviour of all individuals and businesses in society. That is a reason why the bill focuses on promotion.

Jamie Hume: I will add a couple of points about the timing of the action plan’s publication and about how quickly we can take effective action. It is worth noting that all European Union member states are required to produce by summer 2010 a renewables action plan that shows how they will meet the 2020 targets. The UK Government consulted on its renewable energy strategy in summer 2008 and is due to publish the final version of the strategy in summer 2009. It will then have a further 12 months in which to produce an action plan.

In the meantime, in recognition of the notorious difficulty of making progress on energy efficiency, which Colin Imrie mentioned, we are framing up an action plan for heat as part of the renewable energy action plan, focusing on the interim steps that we are taking. We are allowing ourselves a degree of flexibility to amend and update the plan as new information comes in. That is the approach that we are all taking to action plans on heat, energy efficiency and renewable energy more broadly. This is about focusing on what we can do immediately to make progress, rather than extending the planning period and attempting to capture everything that might happen during the next decade or so. We can revisit issues further down the line, when it makes sense to do so.
Cameron Maxwell: In light of the various measures that we have discussed around energy efficiency, buildings and renewable heat, it would be useful to set the overall context and explain some of the work that we are doing. We have the bill, the interim emissions reduction target of 50 per cent by 2030, the emissions reduction target of 80 per cent by 2050, and annual targets. As an important piece of the climate change work that we are doing, we are trying to set that work in the context of the short to long term to see where all the measures will come in. As has been mentioned, energy efficiency measures sit in the short to medium term, because it is cost effective to deliver a lot of energy efficiency measures. We are trying to identify where the key mitigating, carbon-saving measures will come in in the short, medium and long term, particularly to 2020, but also to 2030 and 2050, and the steps that we must take now to deliver them.

Sue Kearns and Jamie Hume mentioned the proposal for an 11 per cent renewable heat target by 2020. The advice, particularly from the Committee on Climate Change, whose report Philip Wright mentioned, is that if we do not do something about renewable heat now, we will not meet the target of decarbonising heat supply by 2050, which must be done if we are to meet our other targets. We must act now to push the market, encourage money to go into it, and encourage development to allow us to meet bigger targets later on. I thought it important to set all of that in context.

Marilyn Livingstone (Kirkcaldy) (Lab): I want to follow on from what Cameron Maxwell said about targets and the mitigating action that we need to take now. I have two concerns. First, as the convener said, there are big fluctuations in costs to local government. It has been said that the proposals will be self-financing, but I cannot see that happening; rather, I can envisage costs to local government being a barrier in the current financial climate. What do you have to say about that? Will you comment on non-domestic buildings in particular?

Secondly, various witnesses have said that there are skills gaps in technologies such as heat pumps rather than in standard energy efficiency work. Those skills gaps cannot be fixed in the short term, as programmes have to be planned, money must be spent, people must be found to be trained, and then they must go through the training programmes. If we want to invest in the new measures—which are welcome—but do not have the relevant skills in the domestic market, what provision will there be for fast-tracking? Will that be part of the energy efficiency action plan? Everybody says that that plan will be comprehensive but, like the convener, I would like to hear more at stage 1 about costs and planning for skills. We need that if we are to come anywhere near meeting our targets.

Gavin Peart: The intention is that the roll-out of the non-domestic buildings provision will be gradual. We are considering the regulations that will follow on from the primary legislation, which will be subject to regulatory impact assessments and the affirmative resolution procedure. Before those regulations are implemented, research will have to be done, and we will have to ensure that we get the best value and that the recommended measures are cost effective. The figures that accompany the draft regulatory impact assessment for the primary legislation have a wide range to provide a context for what are only enabling provisions.

Marilyn Livingstone: What is the timescale for the process?

Gavin Peart: It will take a number of years. People will get an initial assessment of their carbon and energy performance, after which an action plan will be worked up to give a timescale for implementation. As Alec Millar said, the consultation brought up the issue of whether the cost-effective recommendations should be mandatory. That issue might involve a stage 2 amendment, but we need to discuss the matter with our minister.

Jamie Hume: The skills gaps are a significant issue with different aspects. My perspective derives from having started work in the area only relatively recently. Several studies in recent years have considered the skills gaps and needs in renewable energy, the heat industry, energy efficiency and so on, and they have pointed to a challenge and an opportunity.

I mentioned earlier the possible focus of our Scottish action plan for the heat industry. It can certainly look at the skills needs and assess not just the numbers but how to deliver the skills, training courses and people to the industry. That points to an opportunity because our approach to the heat action plan, the renewable action plan and other activities is also about bringing economic benefits to Scotland. Skills gaps must be addressed in the heat industry, but that will create employment—there will be supply
chain opportunities for Scottish firms in the heat industry as well as in other parts of the renewable industry.

Our action plan must focus on not just assessing the numbers but taking the practical steps that have been described to ensure that we have people ready to do the installation work and other required tasks. That point links broadly to the announcement by the Cabinet Secretary for Finance and Sustainable Growth earlier this week on job opportunities in the renewables sector and the notion of a green-led recovery and green jobs for Scotland, to which we are alert.

Marilyn Livingstone: We have heard evidence over past months about the skills gaps. I presume that you consult people who work in the relevant areas, and I believe that much of the work has been done, so I am keen for best practice to be fast tracked. Like the convener, I am concerned about the woolly nature of things that we are asked to take decisions on. If we are to consider a skills action plan, the relevant work should be done now rather than in the future. I am concerned about timescales and cost implications.

Jamie Hume: I can offer a bit of reassurance. We are working on key elements of the renewables action plan and the heat action plan now, mapping out the critical powers, deciding what needs to happen between now and 2020 and beyond, and building on existing intelligence. Doing that hand in hand with industry is fundamental to our approach. We recognise that it is important to engage with industry, skills providers and potential employees—all the key stakeholders—in order to deliver.

Over the next month or two, we would welcome the opportunity to brief the committee in more detail on the renewables action plan and the emerging heat action plan—which we will take forward whether or not it comes through as a stage 2 amendment.

10:30

Sue Kearns: It might reassure committee members to know that there is a core skills group on renewables. It is led by the Scottish Further and Higher Education Funding Council and Skills Development Scotland, and it includes developers, colleges and a small heat installer. We are on the group, too. It is looking into what we can do to gain quick wins in filling the skills gaps in renewables—we are considering all forms of renewables, including microgeneration and heat—as well as the long-term measures that will have to be put in place.

Marilyn Livingstone: I am aware of that work. If we are going to train more people, there will be cost implications. Big discussions have been held in the Parliament on increasing the numbers of training places and modern apprenticeships. How will the action plan take those costs into account?

Jamie Hume: We will have to work out—more fully than has been done to date—a cost benefit analysis for all the proposals on renewables and low-carbon solutions. That analysis will be a key strand in the action plan, and the numbers for hardware, such as buildings and equipment, will have to be clear. Some renewables technologies will have infrastructure implications. We are developing our understanding of those implications and considering exactly what will be required in the long term—the investment that will be required and how it will feed through.

Earlier, we mentioned the regulatory mechanism that Westminster is proposing. Ultimately, measures will trickle through and impact on bills for domestic consumers. Whether we are talking about impacts on consumers, about skills and training costs, about the costs of large pieces of infrastructure or about the balance between public sector and private sector investment, they are all elements that will have to be considered in the renewables action plan and the heat plan within it.

The issues appear not to be fully understood yet, but they are being discussed. I was at the Renewables Advisory Board in London a couple of weeks ago, and we considered those very issues. They are acknowledged as a priority UK-wide, and they need to be explored and understood more fully.

Colin Imrie: Marilyn Livingstone mentioned the costs for local government. The bill will simply place an obligation on the Government to provide an energy efficiency action plan. No obligation to spend any money will flow on to local authorities or anyone else. The issues will have to be tackled on their own merits.

I will add to what Jamie Hume said. In Scotland, we could do a lot more work on energy efficiency in order to gain an economic benefit, which would apply to skills as well. It is assumed that putting in loft
insulation is not a highly skilled task, but developing an energy efficiency industry—an industry that is strong in the Scandinavian countries, for example—will require considerable skills, including entrepreneurial skills.

The energy efficiency industry is not a strong part of Scotland’s construction industry, but it should be, given the investment that will be required to meet our carbon targets. That is why the announcement was made this week on the importance of targeting economic benefits and jobs from the investments in renewables and low carbon. The various bodies involved will be working on that urgently. We have been in discussions with the Convention of Scottish Local Authorities about getting involved in the process, and we intend to cooperate with it to make progress.

Philip Wright: I apologise for making a further supplementary point, but I want to pick up on the costs to local government.

A new instrument is coming along—the carbon reduction commitment. It will apply to the non-energy-intensive sector, including retail and public sector bodies. There is a qualification threshold for inclusion within the carbon reduction commitment, and most local authorities in Scotland will qualify. In effect, a carbon trading scheme will operate between the different parties; local authorities will be part of that and will therefore be obliged to take action. It will encourage action that we know to be cost effective, so it should bring in savings rather than extra costs.

The Convener: For clarity, can you indicate where the instrument originates from?

Philip Wright: It is a UK-level instrument, although the issue is devolved. The Scottish ministers support it and are partners in it. It is a domestic commitment rather than being EU-driven, although it complements the EU emissions trading scheme.

Jamie Hume: I have spoken about analysing the costs and considering the cost benefits to which we have referred, and which Colin Imrie picked up on. We are heading towards an understanding of the commercial opportunities in heat, energy efficiency and renewables for Scottish firms in the supply chain. We need to develop a fully informed understanding that, although investment is needed, there are commercial opportunities in job creation and so on. We must get smarter about channelling resources in order to realise the maximum benefits for the Scottish economy.

Rob Gibson (Highlands and Islands) (SNP): To return to energy efficiency and microgeneration plans, can you give us a flavour of what your consultation has revealed about the ease or difficulty for people in taking up some of the options? What constraints on take-up have arisen in relation to permitted development rights and planning legislation? That is a starting point—I want to get a feel for the issue to understand why you have adopted such an approach in section 48.

Colin Imrie: We have acted on a key element of the consultation responses to the strategy that were published in May by establishing one-stop-shop advice centres for consumers. Those are now in place in the west, east and north of Scotland. Increasing the availability of advice is viewed as an essential element in the process of helping people to find ways to change their behaviour. That was one of the strongest points in the consultation responses, in addition to more general issues of raising awareness.

There was also considerable comment about building standards, in new buildings as well as in existing stock. As far as I can see, there is nothing specific on permitted development rights in the consultation responses, but we would be happy to come back with some information if it helped.

Rob Gibson: It would certainly help. Although the stated intention is generally welcomed, I am concerned about the difficulties of applying it.

We have heard about the difficulties in relation to skills. I am trying to tease out your sense of whether, once the bill is passed, we can make each of the provisions stack up so that people can get on practically with the job at an early stage. Do you have any further comments on that?

Philip Wright: I was going to make a point earlier on why we have included certain provisions with amendments trailed for stage 2. As much as anything, it is to get our ducks in a row so that we can deliver early action.

The Government is being pressed for early action. We took the opportunity last year to consult colleagues across the office to find out what action they felt needed to be taken and what powers they might want in order to ensure that the Government can deliver—as
Mr Gibson says—early action on the various commitments. The strategic overview that Cameron Maxwell mentioned is part of that package. It picks up all the action—not just the action that my colleagues have covered today but action across the Government, for which we already have the necessary powers.

The bill completes our legislative arsenal to address early action, and the strategic overview will bring out the extent to which that is possible. Our approach will also take account of the further advice that we will get from the Committee on Climate Change. We are taking a strategic view, and action will be taken in each of the relevant areas. When the Committee on Climate Change prepared its advice, it took account of the point about take-up that Mr Gibson referred to. One can take a theoretical view of what is possible by way of energy efficiency and what carbon savings might be, but one might not know what the take-up percentage will be, so it is necessary to make some assumptions. The thinking that has been done has taken that into account.

Rob Gibson: That is helpful.

The Convener: With Christopher Harvie’s forbearance, I will let Sarah Boyack come in at this point, as her question is on a similar issue.

Sarah Boyack (Edinburgh Central) (Lab): I want to follow up on Philip Wright’s comment about having all the equipment in one’s arsenal to tackle the issue quickly.

There are two specific gaps in the bill, the first of which is on incentives. Dave Thompson asked about fiscal incentives, particularly the incentive of taking money off people’s council tax bills. Evidence from England and Wales suggests that local authorities have used that mechanism highly successfully to promote energy efficiency. What are your views on that? There is a reasonable degree of cross-party support for a practical mechanism that gives householders an incentive and which allows partnerships to drive energy efficiency to develop between power utilities and local authorities. The Energy Saving Trust suggested its use after carrying out research several years ago and reinforced the proposal in its publication last June, but we do not have the legislative capacity for such a measure in Scotland; we need to amend legislation.

The second gap relates to planning. Rob Gibson asked a highly pertinent question about permitted development rights—which many people believe are a blockage to developing existing buildings—but my question is about new buildings. Nearly two years ago, the Scottish Government adopted a Scottish version of the Merton rule whereby, for all major new planning developments, developers must reduce their projected carbon emissions by at least 15 per cent through the use of on-site renewables. As well as being good from the point of view of householder renewables and renewable heat, the requirement helps to increase energy efficiency. What plans are there to extend its application? Do you intend to extend it to cover all new buildings? Rural areas are missing out because large-scale developments are less common there. Such a measure could be included in the bill.

Gavin Peart: We will have to come back to you on that as Scottish planning policy 6 is not in my policy area. We will take a note of what you have said and get back to you.

Sarah Boyack: Would it be possible to get an update on the impact that the Merton rule has had? I know that the authorities that are pushing its use are monitoring its effect.

Gavin Peart: I do not have any—

Sarah Boyack: I do not mean from you personally. Perhaps some information on its implementation could be provided after the meeting.

Gavin Peart: We can always ask.

Sue Kearns: That rule might not be such a panacea; in fact, it might have had some unintended consequences. Some developers have installed a biomass boiler when they could have used the gas grid, just so that they could tick the box and meet the obligation. When that has been done in urban areas, it has caused some air quality problems, and some local authorities in urban areas now view biomass in a fairly negative light. We are having to consider that, and guidance on air quality and biomass installations for urban authorities will be produced shortly. The rule can have unintended consequences.

Sarah Boyack: You talk about unintended consequences, but is it not the absence of clear emissions guidelines from Europe that has caused the uncertainty? I know that my local authority was forced to drop such proposals from its schools developments because there was uncertainty, but there is no evidence of health problems. Such
schemes are widely implemented south of the border and in rural areas. The unintended consequence is due not to the application of the planning policy but to the absence of clear guidance on standards from central Government.

10:45

Sue Kearns: We are catching up, in that we carried out research on air quality and biomass last year. The intention is that air quality colleagues will produce guidance for local authorities on how to site such kit appropriately. We need to ensure that there is appropriate siting and that abatement technology is put in place. The UK Government is catching up as well, in that it is also producing guidance. I certainly agree that we need to get up to date on that.

Sarah Boyack: However, to be clear, the requirement should be not for biomass but for any form of renewables on site.

Sue Kearns: Developers have opted for biomass because they know how to put boilers into developments. Biomass is easier for them because they just need to think about installing a biomass boiler rather than a gas boiler. The problem is that developers have not always thought properly about whether heat pumps or similar technology is more appropriate.

Sarah Boyack: My other question was about incentives, which Dave Thompson also asked about.

Jamie Hume: I cannot offer a particularly conclusive answer on that as we have not discussed the issue since I have been in post. Perhaps Sue Kearns will know whether previous consultations have considered it as a policy option.

Sue Kearns: The issue has never come up in the context of renewable heat.

Colin Imrie: However, the issue has come up in the context of discussions on proposed energy efficiency measures. We do not have a specific answer at this point, but I am happy to come back with more details on that, permitted development rights and the Merton rule.

The Convener: That would be helpful.

Jamie Hume: We will look at Sarah Boyack’s suggestion. We might be interested in taking the idea forward and considering how it might work. We will come back to the committee with our thoughts on that.

Christopher Harvie (Mid Scotland and Fife) (SNP): First, I want to ask for a definition of targets, which loom considerably in the bill. An American school of thought associated with the Chicago school—not of economics but of management studies—is highly sceptical of arbitrary numerical targets, or ANTs. How international are the targets? The British economy managed to maintain a fair degree of moderation of increase in emissions, but that can largely be put down to the abandonment of manufacturing. Manufactures have been imported from China, where there are no such inhibitions. Is there an element of avoidance of moral hazard in the selection of targets?

Jamie Hume: On our approach, I referred earlier to the need for engagement. As we discussed previously, it is notoriously difficult to achieve movement on some issues. Members might also be familiar with the support of our minister—Mr Mather—for John Seddon’s systems-thinking approach, which argues that a target-driven approach is not the way forward. As I said, the challenge is to produce an action plan that focuses clearly on what practical things need to be done, by whom and by when if we are to achieve progress. We want to focus on that to create enough of a centre of gravity around which all the different players can coalesce so that, by making visible what everyone is doing, we can move forward in an agreed way rather than just provide people with an arbitrary target.

You make a valid point, which was also picked up when we consulted on the proposed target of 11 per cent for renewable heat. We had some rather lengthy submissions arguing whether the target should be 11, 14 or 16 per cent. Given the magnitude of the step change that is required, a percentage point here or there is less material than whether we are able to generate the collective action that is necessary to move forward. In that sense, our action plans are clearly focused on the critical path of what needs to happen, by whom and by when so that we can start the ball rolling. Therefore, we are not necessarily thinking in a target-driven way, even though we might need to publish targets to make clear the direction of travel and our aspirations.

Colin Imrie: Jamie Hume is right that this is about changing the way in which we operate collectively. However, a small number of outcome-based targets can focus the mind. There is no doubt that the
European decision to go for getting 20 per cent of all energy from renewable sources has focused minds positively across Europe and the UK on the importance of renewable generation.

The European target on energy efficiency is to reduce energy use by 20 per cent by 2020, but no obligations are associated with the target. That is because energy efficiency is cost effective, but it is very difficult to do, which is why the primary focus is a combination of legislative and promotional measures.

Christopher Harvie: I want to elaborate on that. Most of our targets will have been made as a result of the enormous economic growth of the past decade. We are not going to see that growth in the next decade, even at our most optimistic.

One thing that we will see, and it has not been mentioned here much at all, is the human factor. Many people will be unemployed or underemployed as a result of the crisis that we are heading into. They are the potential insulators, energy reducers and the like, but there does not seem to be very much planning for that in the macro figures. One thinks of the very few people that one ever sees cycling in Scotland, or the huge amount of do-it-yourself that goes on that could surely be shifted towards low-energy characteristics with the proper appeal. Is that planning being undertaken, with a view to the likely employment situation during the next two or three years?

Jamie Hume: I echo what Colin Imrie said, and in that context, the Scottish Government's decision to go for the more ambitious 20 per cent target rather than the UK's target of 15 per cent, is significant and focuses minds in the way that Colin Imrie described.

We were talking earlier about the economic and employment benefits and about the supply chain opportunities for Scottish industry. In recognition of that and of the need to start thinking in totally different terms about how to approach the agenda, we are working closely on the potential opportunities with bodies such as Scottish Enterprise, Highlands and Islands Enterprise, Scottish Development International and local authorities. Whatever happens in the sector must not be isolated and driven by a targets mentality but must be real and must relate to the employment situation on the ground, including the opportunities that might be created by unemployment in other sectors.

Our ambition is to develop a cross-cutting action plan that picks up on economic opportunities and thinks differently about our approach. It is fair to say that that applies to our approach to the energy challenge and opportunities more broadly.

Philip Wright: I will answer Christopher Harvie's point from a more general, climate change point of view. You make good points about your short-term concerns, but it is essential that we keep an eye on the long term. That is why we have the 80 per cent target, which was informed by science and comes from the global situation. That is then reflected back to the EU and the individual countries. Yes, we have an economic recession. We will take our emission reductions from anywhere during this early phase, but we must keep our eye on the long-term goal—the 2020 European target, the 2030 target in the bill, and the 2050 target.

Christopher Harvie: And meanwhile, over the past 10 years, we have committed ourselves to a retailing policy that has led to the building of vast supermarkets across the country. These buildings not only have social implications but are associated with colossal heat loss and demands with regard to the mobility of freight and customers. How do we reverse that kind of development?

The Convener: That might be slightly outwith the scope of the bill, although I suppose that it could come under section 50.

Colin Imrie: As I stressed with regard to the energy efficiency action plan, energy efficiency must be promoted across the board. An essential element of that will be every town's big supermarket, and the various implications of such an approach will have to be considered. I do not envisage the energy efficiency action plan tackling such a fundamental planning issue, but it might well come up in other forums.

Philip Wright: Larger retail outlets such as Tesco and Asda will have to take action under the carbon reduction commitment. As Colin Imrie has made clear, the matter that Christopher Harvie raises is more of a planning issue, but I believe that my planning colleagues are taking it very seriously and are trying to reverse some past decisions.

Nigel Don (North East Scotland) (SNP): I thank the convener for allowing me to sit in on this morning's meeting. I have been wondering what interests I should declare. I do not think that I have any, although I...
suppose that, as a former member of the Institution of Chemical Engineers, I have an abiding interest in the laws of thermodynamics. In that context, I was struck by Alec Millar’s comment that 40 per cent of heat loss comes from buildings. I hope that I have got that right; if so, my first question is about where the other 60 per cent comes from.

**Gavin Peart:** No. More than 40 per cent of CO₂ emissions come from buildings. Domestic buildings contribute 25 or 26 per cent and non-domestic buildings about 17, 18 or 19 per cent.

**Nigel Don:** Okay. Do you know how much come from power stations?

**Gavin Peart:** I think that that is a different sector.

**Philip Wright:** It is quite difficult to answer that question. We can give you the statistics if you want, but I should point out that power generators supply the domestic sector, which means that, although power stations emit CO₂, the energy that is produced is used in homes. Direct CO₂ emissions from the domestic sector come from the use of solid fuel, while the electricity supplied by power stations is caught by the EU emission trading scheme. The relationship between power stations, home energy use and emissions is a tricky one.

**Nigel Don:** That is my very point. Energy efficiency anywhere is, of course, an important issue and surely the best way of reducing energy costs is simply not to use the energy in the first place. We need to recognise that a very large proportion of CO₂ emissions comes from power stations and I am slightly concerned about ensuring that the relationship between what is in front of us and the global target—by which I mean the target for the whole country—for reducing emissions is being properly addressed.

**Philip Wright:** A key part of the bill is the net Scottish emissions account, which we will use to report whether we are achieving our targets. Key to that is the EU emission trading scheme, which allows trading between EU countries. I can go into more detail on that, but I very much doubt that the committee will want me to do so. The emissions associated with the electricity used in the home are actually emitted from power stations, which effectively have an allowance. If a station exceeds its allocation, it has to buy allowances from another country, which is where the savings will be made. All we will take into account in the net Scottish emissions account will be the allocation to, say, Longannet power station. That is factored into the arithmetic that we will follow when we report on progress against the annual targets, which have still to be set. The relationship is very complex.

**Nigel Don:** I have no desire to get us into that complex relationship. Is it not possible that carbon capture and storage, for example, at Longannet could make far more difference than everything else that we are talking about added together?

**Colin Imrie:** I will answer that, as I am responsible for power generation in general. We are developing policies in parallel that envisage that, over time—by 2020 and then 2030—Scottish power generation will be predominantly low carbon. That will happen through a combination of promoting renewable generation and accelerating the introduction of carbon capture and storage in thermal plants. You are right that the introduction of carbon capture and storage will make a significant difference, as will the increase in renewable energy.

**Philip Wright** has explained that, because power generation is in the traded sector, the way in which it counts towards our emission targets is complex and needs to be understood. However, one reason why energy efficiency is a crucial part of the exercise—as well as heat—is that reductions in emissions from power generation alone will not allow us to meet our 80 per cent target. It is clear that, to meet the target, action must be taken across the board. The energy sector as a whole, including energy efficiency, power generation and renewables, is crucial, as is heat in its more general sense and, of course, transport, which is not being considered here.

**Cameron Maxwell:** I have a point that is partly about timescale and partly about cost effectiveness. Carbon capture and storage will have to go through a development phase, so there is a requirement to take up cost-effective energy efficiency measures now. We might have decarbonised electricity and heat in the long term but, in the short to medium term, we will not have those in sufficient quantities, so we should choose cost-effective energy efficiency options. In the long term, it is useful to compare the cost of saving energy with the cost of producing energy using carbon capture and storage,
because that will not be free.

Lewis Macdonald: Sarah Boyack’s proposed member’s bill, which she has discussed with ministers, covers microgeneration as well as energy efficiency. Why is there no direct reference to microgeneration in the Climate Change (Scotland) Bill?

Colin Imrie: The reason why the bill refers to energy efficiency and not microgeneration is that microgeneration is considered, in the context, to be a reserved matter and outwith the scope of the bill. However, as I said, it is our clear intention to cover microgeneration in the energy efficiency action plan.

Lewis Macdonald: The judgment that microgeneration is reserved raises wider questions about some of the other aspects of the bill. Nigel Don raised the issue of where emissions come from. The most recent Scottish Government figures that I have seen suggest that 45 per cent of energy is used for heat and about 26 per cent is used for electricity. The bill has provisions on renewable heat. The Government proposes a target of 11 per cent of heat coming from renewable sources but, in setting that target, what account is taken of electricity as an alternative to existing sources of heat?

Sue Kearns: We are certainly considering the impact that electricity-to-heat technologies will have on the grid. We have to factor that in and we are thinking about the issues, such as the use of heat pumps. Another aspect is that the move to electric vehicles will have implications for electricity generation.

Lewis Macdonald: Absolutely. That is what I want to understand. Much of the detail is not there at the moment but, hopefully, it will be by the time the bill gets to stage 2. The Government talks about 11 per cent of heat coming from renewable sources but, in setting that target, what account is taken of electricity as an alternative to existing sources of heat?

Sue Kearns: At the moment, it is biomass, solar and heat pumps. Part of the renewable electricity that is generated, the target for which is 50 per cent, will go towards the renewable heat target. That is how we are looking at it at the moment, but I agree that there is more thinking to be done.

Lewis Macdonald: Does that create a risk of having potentially conflicting targets or tracks of development? In other words, by seeking to promote renewable heat separately from renewable electricity, you must run the risk of missing the point.

Jamie Hume: I was talking about where the targets were derived from. It is about meeting the overall 20 per cent target for energy—electricity, heat and transport. There is flexibility within those three categories of usage. If we see a big shift towards electric vehicles, the energy will be renewable only if the electricity is from renewable sources. That is why it is important to track progress and make the necessary adjustments. I do not think that the targets are incompatible.

We are not going to have all the answers in a few months, but we will be further forward than we are now. Within the renewables action plan, we are seeking to do a cost benefit analysis by working out the benefits in terms of energy generation, carbon reductions and economic benefits, and balancing those against the cost.

The fact that we have activity on renewable heat and renewable electricity in a single place within the Government ensures that the link-up is made. It is fair to say that the whole bill has brought together these parts of the Government. We are working much more closely than happens in other areas of the Government. There is a degree of interconnection between officials and stakeholder groups. Bringing all those together and ensuring that this entire agenda moves forward in a coherent way is absolutely our focus.

Lewis Macdonald: On the energy efficiency action plan, I think that you said in response to Gavin Brown that there would be a need to consult again. Would such a consultation be the third in three years? It would certainly be the second. What do you expect to learn that you have not learned already before publishing a plan?

Colin Imrie: In publishing a plan, it is important that we ensure that it is up to date and reflects the developments since the previous consultation, which was in 2007. There will be a number of developments. I give the clear commitment that we will not seek to reinvent the wheel. What has already been learned through the previous consultations will be included in the document that is produced.

Lewis Macdonald: If I understand the bill correctly, the plan will be updated every 12 months in any case.

Colin Imrie: The intention is to provide a final version of the plan, following the consultation, within 12 months of the act coming into force and to review the plan at
least every three years.

**Lewis Macdonald:** Section 49(3) states that there should be a report on the plan within 12 months of its publication. If I understand the section, it also says that the plan should be updated every 12 months thereafter. Is that meant to be every three years? What does the 12 months in section 49(3) refer to?

**Colin Imrie:** Section 48(3) states that the plan must be published 12 months after the act comes into force. Section 48(4) states that the Scottish ministers must review the plan and, in effect, publish a new one. The maximum period of time set out is three years. Section 49 states that ministers must report to the Parliament every year on the implementation of the plan.

The Convener: That concludes questions from members. There are a number of areas on which officials have indicated that they will come back to us, and it would be helpful if they could do so as soon as possible—we are on a fairly tight timetable, as we must report to the lead committee. It strikes me, however, that there are a number of significant policy matters that still require to be clarified. It might be helpful for the committee to invite the minister to give evidence to clarify some of the policy issues, for example on whether or not there was any change in the statutory requirement to improve energy efficiency. There were also some further aspects to explore in relation to the energy action plan.

I would like clarification on the Government’s policy direction on energy performance certificates for non-domestic buildings. There are significant differences between the seven approaches that were referred to in the consultation document. There is also the question that Lewis Macdonald raised, right at the start, about whether or not there was any change in the statutory requirement to improve energy efficiency. There were also some further aspects to explore in relation to the energy action plan.

If the committee agrees, we should probably schedule an additional session and invite the minister in to update the committee on the thinking for what is likely to be introduced at stage 2.

Members indicated agreement.

The Convener: In the meantime, I thank the extensive panel of officials for their very helpful evidence this morning. We look forward to their further responses to the points that were raised.

11:11
**Meeting suspended.**

11:18
**On resuming—**

The Convener: We will now hear from our second panel on the Climate Change (Scotland) Bill. We have an opportunity to hear from a range of organisations about how content they are with the general principles of the bill and whether they want it to be amended. Should we toughen up the expectations of the Scottish ministers or, as we heard last week, introduce mandatory energy standards for new houses at national home energy rating 7 at least? I invite the witnesses to introduce themselves and to make brief opening remarks before I invite questions from members.

Elizabeth Leighton (WWF Scotland): I am senior policy officer with WWF Scotland and today I am representing Stop Climate Chaos Scotland, which is a campaigning coalition of more than 30 organisations.

Elaine Waterson (Energy Saving Trust): I work as a strategy manager for the devolved nations at the Energy Saving Trust. My job involves leading our policy work for Scotland, Northern Ireland and Wales. The Energy Saving Trust works to reduce carbon emissions in the household and road transport sectors. Through our network of advice centres, we advise around 130,000 people on energy efficiency every year.

Fergus Tickell (Northern Energy Developments Ltd): My name is Fergus Tickell, not Fegus, as it says on my name plate. The “r” has been thrown away, in the words of the Proclaimers song. I am managing director of Northern Energy Developments—a renewable energy company that specialises in bioenergy from wood. I am also on the board of Scottish Renewables and I have been a member of the FREDS bioenergy and renewable heat groups.

John Stocks (Carbon Trust): I am the Carbon Trust’s manager for Scotland and I head the trust’s activities with businesses and public sector organisations.

Chas Booth (Association for the Conservation of Energy): I am the senior press and parliamentary officer for the Association for the Conservation of Energy,
or ACE for short, which saves time. We undertake research and we campaign to reduce overall energy demand to ensure a secure and sustainable energy future. Our work reflects the interests of, and is largely funded by, our members, who are major manufacturers and installers of energy-saving equipment throughout the UK. ACE is a member of the Scottish fuel poverty forum and—as of last month—of Stop Climate Chaos Scotland. We are also a regular contributor to the energy debate in Scotland.

The Convener: I sympathise with Fergus Tickell; I am very used to getting one of the letters in my name dropped. I have not managed to train this committee not to do that.

Several of you listened to the evidence from officials about possible amendments at stage 2. Have you any comments on whether chapter 3 of part 5 might need amendment at stage 2?

Chas Booth: We share many of the concerns that members have expressed—in particular the convener’s concern that the bill is a work in progress with many gaps. We have heard that a lot of measures will be introduced at stage 2, but that might mean that they could be rushed through.

The previous panel was asked whether we have sufficient weapons in our armoury. Using that analogy, if we rely on the weapons that are currently in the bill, we have a couple of peashooters when what we really need are a couple of cruise missiles. The current weapons in the bill are insufficient to deliver the level of the Government’s ambition—the 80 per cent cut in emissions that is stated in part 1. We need a great deal more.

John Stocks: I will make a couple of points that relate to the conversation with the previous panel. It has been made clear in the past couple of hours that people understand what energy efficiency means. It is about ensuring that we get maximum benefit and utility from every kilowatt hour of energy we use.

The term “energy efficiency” is redefined in section 48(8). I think I understand why—it is something to do with devolution. However, energy efficiency and its importance are not defined in that section, which is an omission. I would like energy efficiency to be defined as a primary objective in the bill. I would also add consideration of clean, low-carbon energy sources and the carbon footprint of the goods and services that we all use.

The other thing that comes to mind—it came out in Lewis Macdonald’s questions about promotion and obligations—is that there is a distinct difference between promotion and regulation. That comes into sharp focus in the relationship between the Carbon Trust and the Scottish Building Standards Agency. Yesterday we presented our low carbon buildings award to three absolutely fabulous buildings that have carbon footprints that will cut the mustard in 2050 with a decarbonised electricity grid. They are the leaders.

There is an important role in ensuring that people understand that we can build such buildings today, and that they can be built for not much more than conventional buildings. If we can get that accepted and get people doing it now as the norm, it would allow the Scottish Building Standards Agency to raise the drawbridge behind the people who do not want to do it voluntarily. Regulation and promotion are both important, but are different.

Fergus Tickell: I will confine my remarks to renewable heat. I do not know nearly as much about energy efficiency as the others on the panel.

I welcome the provisions in the bill, and the recognition that renewable heat is vital in meeting the targets. However, the bill probably needs to be strengthened in respect of ministers’ obligation not just to promote but to deliver. That suggests that those of us who work at a practical level to deliver renewable heat and other forms of renewable energy projects have to be given the tools to do that.

I am bound to say, given officials’ earlier comments, that I am not totally convinced that the scale of the challenge of delivering the renewable heat targets—even at 11 per cent—is fully recognised. It is an immensely complicated area that involves the commercial and industrial sectors, which have been very much neglected in the renewable energy framework. There is no significant comment in the framework on the way in which the commercial and industrial sectors can help to deliver renewable heat and other forms of renewable energy projects have to be given the tools to do that.

Elaine Waterson: As others have said, it is great that the bill recognises the importance
of energy efficiency and renewable heat, but an area in which it could be strengthened is regulation of the domestic sector. The bill allows for some regulation in the non-domestic sector, but there is nothing on regulation in the domestic sector. Given that the domestic sector is responsible for about 34 per cent of Scotland’s energy demand, it would be useful to include provision for regulation of the domestic sector in the future. That is not to say that we want regulation now; rather, it is that promotion and incentives will take us only part of the way.

Elizabeth Leighton: I second Elaine Waterson’s remarks on the domestic sector. Given that the sector is responsible for more than a third of our emissions, there is a gaping hole in the bill in that respect. Regulation of the sector was recommended in the Sullivan report, “A Low Carbon Building Standards Strategy for Scotland”, which suggested that we should consider existing building standards, enhance energy performance certificates and keep an eye on the future direction of the European energy performance of buildings directive, which will strengthen energy efficiency requirements. I agree that we should have provision in the bill to enable or enhance EPCs.

The idea of exploring the potential to strengthen the language by changing “promote” to “improve” came up earlier. There is little doubt that “promote” dilutes the requirement in the Housing (Scotland) Act 2006 to “improve” energy efficiency. There must be scope to maintain that and to import that language into the bill, rather than repeal the requirement, and to maximise, rather than minimise, devolved powers in that area.

We welcome the fact that the action plan has finally been put on a statutory footing, and we look forward to its arrival. We have waited a long time for this: we urge its publication as soon as possible, as has been called for by several members of the committee. We recommend that it include targets for energy efficiency and that progress is reported, either in the annual report or as part of an emissions reduction plan addressing demand reduction, energy efficiency and renewables.

11:30

We need a broad range of incentives. We know that, even with 100 per cent take-up, the existing measures would take us only to a reduction in emissions of between 20 and 23 per cent. We need a full package that includes loans, local tax incentives and grants tailored to needs.

I concur with comments about renewable heat: we need a plan with targets and reporting. At the moment, the information that we have from the Government is rather sketchy. We believe that a target should be set based on good evidence, rather than using a subtraction method. Instead of saying, “This is what we are getting from the other sectors, so we will take the remainder for renewable heat,” we should assess the potential and set a target based on that.

My final point is linked to part 4 of the bill, which deals with the duties of public bodies. Targets for energy efficiency cannot be set from the centre—the public sector must be involved. Stop Climate Chaos Scotland believes that primary legislation should place a duty on public bodies to contribute to reduction of emissions.

The Convener: I ask Chas Booth to elaborate on the rearmament that we need to do to take us from peashooters to cruise missiles.

Chas Booth: Elizabeth Leighton has described the cruise missiles that are needed. The bill’s big gap is in respect of domestic energy efficiency. As Elaine Waterson said, domestic use accounts for about 34 per cent of final energy demand and about a third of emissions. Tackling domestic energy efficiency ties in with many agendas, including the carbon agenda. In the context of the bill, we are discussing statutory targets that will come into force this year, but there is already a statutory target for fuel poverty, which the committee discussed last week. At current rates of investment and with the current powers in our arsenal, the Scottish Government will not meet that target, which is to abolish fuel poverty by 2016. We need considerably increased investment and powers to ensure that we bring buildings with the poorest energy efficiency up to standard. If we do not make a real effort to do that, Scotland will be cursed with a group of people in the hardest-to-treat houses who will be permanently fuel poor.

Mention was made of the energy assistance package, which will target investment at the fuel poor. From April, for the first time, the package will include air-source heat pumps and solid-wall insulation. We warmly welcome that, but we do not think it goes far enough. Ground-source heat pumps, which could do even more to lift
people out of fuel poverty, have not been accepted into the programme. Admittedly, the cap on maximum investment has been raised, but only to £6,500. You cannot get both solid-wall insulation and an air-source heat pump for that money—it is one or the other. It is not reasonable to ask people who are in fuel poverty to make a choice between proper insulation and a decent heating source.

Fergus Tickell mentioned that he is not entirely sure that the Government recognises the scale of the problem: I wonder whether it recognises the urgency of the problem. Climate change is an urgent issue and we need to make quick, cost-effective cuts in our emissions. The quickest, easiest and cheapest way of doing that is to improve energy efficiency. In many ways, that has a negative cost, as was mentioned earlier. When insulation measures are installed, they pay for themselves very quickly. When officials talk about gradual implementation and consulting again on an energy efficiency action plan, we are frustrated, to put it mildly. We would like Government to get on with things.

Fergus Tickell: It is important to emphasise the urgency of the issue. As I said earlier, the apparent omission of the commercial and industrial sectors from the renewable energy framework and the approach to renewable heat means ignoring the lowest-hanging fruit in respect of the mass use of renewable heat.

Chas Booth talked about energy efficiency measures in the domestic sector as being the quickest way of achieving the greatest gains. I think the commercial industrial sector has the potential to do the same on the renewable heat side of the equation.

John Stocks: I am not sure that I totally agree with Fergus Tickell. The business sector is similar to the domestic sector, and energy efficiency is the easiest and quickest win. I agree with him that, particularly in Scotland’s national drinks industry, the waste streams of certain industrial processes are energetic. Initiatives around them, such as the one that Diageo is progressing at the Cameron Bridge distillery, represent a very big prize. Generally, however, I would argue that energy efficiency is the best, easiest and most cost-effective win for industry.

The Convener: As part of our energy inquiry, the committee visited the Cameron Bridge distillery to discuss the proposed biomass plant. I am aware of similar initiatives around Scotland, such as the one at the Quaker Oats plant in Cupar.

Rob Gibson: Earlier, I asked the civil servants about the state of the information they have. The frustration that you feel seems to be related to our having focused money to apply. We can make it easier to apply that money by having a clearer picture of current evidence, for example, on the ease or difficulty of the uptake of each of the methods of energy efficiency that we have been talking about, or the constraints that arise from permitted development rights. Is there a need for us to have a clear view of what is holding us back? If so, should we include in the bill provisions to deal with that or should we ensure that the following secondary legislation deals with such detail? Many of the things that you have talked about are things that need to be done, but we have to decide what should be included in this enabling bill.

Elizabeth Leighton: Enabling provisions on the domestic sector must be in the bill. We have waited a long time for the civil servants to arrange a consultation on existing homes and climate change. The intention was to have something ready that could go into the bill, but time has dragged on and, unfortunately, we are not in that position.

However, that is not to say that we should not include in the legislation enabling sections that would allow for secondary legislation to be brought in on the back of that consultation. The reviews of the energy efficiency grant schemes and microgeneration schemes have pointed to the approaches that should be taken. For example, we need loan schemes, a range of incentives based on need and so on. The information is at hand, but the Government has not yet introduced any proposals. I recommend that an enabling provision that would allow appropriate secondary legislation be included in the bill.

Rob Gibson: I think that the intention is to have many initiatives delivered by the means that you describe. Am I right in thinking that, apart from the issue around domestic buildings, which you would like to be included in the bill, there is nothing else that you think should be included?

Elizabeth Leighton: I think that Chas Booth wants to answer that.

Chas Booth: My concern is not just about what is missing in terms of which areas are not covered—the domestic sector is the big
one. I am also concerned about what is missing because measures that are included in the bill do not go far enough. For example, the provisions on non-domestic energy only give ministers the power to require a wider roll-out of energy performance certificates. We think that energy performance certificates are useful, particularly with regard to rented buildings, because they inform the tenant what their approximate fuel costs will be.

Recent research from Denmark, which has had an energy performance certificate scheme since 1996, suggests that the scheme makes no significant impact on carbon emissions from the buildings involved. The bill’s provisions on energy efficiency in the non-domestic sector therefore rely on a measure that some evidence suggests has a negligible effect. If I return to the analogy of weapons in our armoury, that suggests that we do not have the proper weapons.

We would like some form of compulsion and that should go alongside finance—organisations should have a fund to which they can apply for investment in energy efficiency. The small and medium-sized enterprises loan scheme, which used to be called loan action Scotland and is now called the energy saving Scotland small business loans scheme, is useful. That scheme was worth about £7 million—that figure has recently increased slightly. The SMEs to which we talk say that that scheme is fantastic, and its investment costs per tonne of carbon are really low. We would like that to be rolled out and we would like a domestic version of that scheme.

Two ways forward are possible for what the bill should require of people. The previous panel mentioned one option that was laid out in the Government’s consultation on non-domestic buildings last year, which involves the energy performance certificate. The certificate will list cost-effective improvements that a building owner could undertake. The Government proposed that some of those improvements should be mandatory—for example, the building owner would be required to undertake them within a year or a couple of years. That would be a useful and helpful way forward and it would not be a problem, as long as cost-effective finance was available.

Shortly after the Government’s consultation on non-domestic buildings was published, we ran a consultation event in conjunction with the Scottish Government, the Built Environment Forum Scotland and Third Wave Consultants Ltd. That event was attended by a number of people from the public sector and the private sector and by building owners, who agreed almost unanimously that some compulsion is needed. Their only caveat was that a level playing field must be provided and that compulsion should not apply to one sector but not another. The people who attended were in favour of the proposal, so I was greatly surprised to hear the previous panel say that the proposal is contentious. We think that such a measure would be favourable and that people would accept it.

The Convener: Does Rob Gibson want to follow that up?

Rob Gibson: No. The point has been made and we shall note it.

Marilyn Livingstone: You will hear no disagreement from me about the need to push on as quickly as possible. If we are to meet our targets, we must get serious. You might have heard me ask earlier about a couple of serious barriers. I think that Elizabeth Leighton talked about area-based initiatives. We have heard evidence about skills shortages in the Highlands and Islands, which do not have skilled people to install heat pumps—that is a huge skills gap. I want to hear your views on the skills and training agenda. With the best will in the world, even if our action plan is up and running and we have funding for it, if we do not have people to deliver measures, that is a huge barrier.

My colleague Sarah Boyack asked about planning. What are the panel’s views on that?

I agree with Chas Booth that the question is how we target action on the most fuel-poor people. My questions focus on that.

Elizabeth Leighton: One reason why area-based approaches are recommended is that they can achieve economies of scale. However, significant investment must be provided to create the demand, so that industry invests in Scotland and SMEs are kept in Scotland to develop skills and fill the skills gap. Then we can win the energy efficient economy that Colin Imrie talked about earlier—we can win those jobs. If we do not have the right level of investment linked to the right amount of regulation, that cannot happen. Provision will be too spotty and there will be a scatter-gun approach such as we have now across Scotland—a stop-go approach.
On the second question, on permitted development regulation, I was interested to hear that the first panel of witnesses could not say what happened to the consultation on that. There was consultation on that and we were hoping for a more positive approach to installation of microrenewables, but that has not been forthcoming. I would be interested to hear that panel’s response on that. Clearly, there is much room to make it easy for people to install microrenewables—instead of telling them that they cannot have a solar thermal panel on the south side of their building because somebody might have to look at it, but that they can have it on the north side. That is not very helpful. I agree that there are still significant blockages that are preventing people from installing microrenewables when they want to do so.

**John Stocks:** I disagree with Marilyn Livingstone: there are skills shortages throughout the supply chain, not just in renewables. There is a shortage of people who are skilled in ordinary energy efficiency. The Scottish energy officers network, which is the local authority energy managers meetings, is like musical chairs, only with more posts than people. We need energy managers who are trained in ordinary energy efficiency as well as people who can install renewables technologies.

We need to look across the whole range. Yes, we need installers, but we also need to train the building services engineers and the architects who design our buildings so that they understand what a low-carbon building is and the importance from day one of designing low-carbon buildings. There is a shortage of such training among the full range of professionals, from engineers through to the people who carry out the installation work, and across the board, from energy efficiency to all the renewables technologies.

**Marilyn Livingstone:** How far away are we from knowing where the gaps are?

**John Stocks:** A long way, I suspect. My evidence is anecdotal; it is not hard evidence. I have heard of people changing jobs, and vacancies just sit there. People have come to me to ask whether I know of anybody who can fill a post. I know that there are gaps, but I do not have hard, numerical evidence of that.

**Fergus Tickell:** Skills are a major issue. The fundamental point is that people are not going to skill up to install and maintain renewable heat systems unless there is demand for those systems. Especially in difficult times, businesses do not spend money speculatively in the hope that some Government policy will work in the relatively short term. That is a fundamental issue, and the two things must go hand in hand. Scottish Government ministers must realise that addressing the skills gap is a key part of the promotion of renewable heat and energy efficiency.

There are a range of different technologies for renewable heat, which require different skills. For example, a different set of skills is required to install a biomass heat system in a house from the skills set that is required to install a ground-source heat pump. In the course of the FREDS renewable heat discussions, the pertinent point was made that having a scattering of one technology throughout the whole off-gas area, with one installation here and one installation there, does not promote the development of local skills to support those installations. It is, therefore, important to cluster installations as far as possible. For example, the installation of a cluster of biomass boilers in a particular area will support a local business that can both install and maintain them. Also, that business will be able to deliver a much better quality of service to the individuals or businesses that want to install such systems, thereby reducing the risk and encouraging more people to install them.

**Elaine Waterson:** I echo the point that Elizabeth Leighton made about permitted development and the importance of microgeneration technologies having permitted development status. Not only is it a hassle for consumers to have to go to the planning department and wait for a significant amount of time before they get planning permission, but there is a cost associated with that.

Permitted development is important not just from the householder’s perspective but from the community’s perspective. Communities that are looking at a distributed energy scheme, whether that is powered by a wind turbine or something else, really struggle with the planning process, so it makes sense for permitted development rights to be extended to community-scale developments.

**Chas Booth:** I want to make a quick comment on skills. I disagree slightly with John Stocks. On manufacturing energy efficiency equipment, our industry has a lot of
capacity at the moment because of the downturn in new build, which has dropped off dramatically. One of our members has mothballed one of their factories in England, and another has put on hold the development of a new factory where insulation materials were to be manufactured. At the moment, we have capacity.

Obviously, I primarily represent the industry that manufactures insulation materials, but we are in touch with the people who install those, and I have also heard of those companies laying off staff recently. That is happening partly because of the drop in new build, but also because the CERT scheme, which is the main funder of energy efficiency improvements, is very stop-go by nature. One minute the energy companies are installing lots of cavity wall insulation; the next minute, they stop that because they have reached their quota. There is a lot of frustration in our industry.

Fergus Tickell spoke about our ability to plan for the long term, and that is what we would like from Government. We can best achieve that if sectoral targets are set. For example, the energy efficiency target could be to improve the general level of energy efficiency in Scotland by 20 per by 2020, which is the same as the European target. That would give our industry something that it could use to plan investment, upskilling and training.

I certainly agree that skills are a key issue that we need to keep a close eye on. However, at the moment, the industry has capacity.

Christopher Harvie: I want to raise one bogeyman that has not appeared so far: methane. Various statistics show enormous increases in the production of methane, which is a highly toxic substance. Its impact, in association with ozone, is reckoned to be up to two thirds of the impact of carbon dioxide. A lot of methane comes from human and animal waste. All those cows grazing quietly in a field are economically more pernicious than Jeremy Clarkson.

There are positive ways in which methane can be used as a fuel. Despite its considerable toxic menace, we ought to consider the possibility of leaching it off from the 45 per cent of supermarket food that is uneaten, discarded and left to rot in landfill sites, and converting it into power. Coming up from London on the train yesterday, I noticed a landfill site near Peterborough that was tapped for methane production. What are the options?

Elizabeth Leighton: You bring up a valid point; we need to look at land use across the board, whereas the bill tends to focus on forestry. However, your point is outwith the scope of today’s discussions.

The Stop Climate Chaos Coalition would be supportive of the production of energy from organic waste. Some supermarket chains are already setting up facilities to produce energy from organic waste, and we are seeing the onset of green gas, as well as green electricity, which is a good thing. However, we would be wary of any proposal that would send us in the direction of burning waste for energy when the waste could be recycled, because that approach is not sustainable.

Fergus Tickell: I think that almost all the large landfill sites in Scotland, and probably almost all in the UK, now capture methane from landfill gas for electricity generation. I will not comment on the contribution of cattle, but it is clearly substantial. Vegetarianism is probably the only answer for us in that regard.

The future of biogas is important. One of the real problems in delivering renewable heat is that some of the greatest opportunities for doing so are in urban and suburban areas that are on the gas grid. The gas network presents an infrastructural opportunity for the mass delivery of renewable fuel in the form of biogas. I am conscious that considerable work is going on to identify biogas opportunities and how biogas might be introduced into the gas network. Centrica is probably rather nervous about all of that at the moment, but it is clear that there is an opportunity for that type of delivery to be developed.

Lewis Macdonald: I have a couple of questions that follow on from our earlier evidence session.

A number of witnesses will be aware that the Government officials simply did not have an answer to my question about the effect of replacing the requirement to improve energy efficiency, which is in the Housing (Scotland) Act 2006, with the proposal in the bill, which is merely to promote energy efficiency. Do the witnesses have a view on what the effect of that would be? The officials said that there was no intent to dilute the existing provision.

Elizabeth Leighton: As I said earlier, I think that the effect of repealing section 179
of the 2006 act and having a requirement simply to promote energy efficiency would be a dilution. From my discussions with civil servants, I understand that they have difficulties in that area as a result of trying to understand exactly where the line between devolved and reserved matters is drawn. However, surely it is not beyond the wit of civil servants to sort that out, maximise our powers and make it clear that the bill should include a requirement to improve energy efficiency. If there are issues outwith that, they could be noted. I would prefer that approach rather than going to the lowest common denominator and saying that we want to promote energy efficiency, because promotion is, after all, more about words than action. Improving involves a commitment to action.

Chas Booth: I agree with Elizabeth Leighton and Mr Macdonald that the effect would be to dilute the provision in the 2006 act. I understand that the reason for repealing the provision is that it is thought that there would be an overlap, but does that matter? I do not know. Perhaps it does, but surely there must be some way forward that ensures that section 179 of the 2006 act is not diluted.

I wonder whether the revitalised Calman commission might want to consider the matter. Perhaps that is a slightly cheeky comment, but there is certainly a grey area between the responsibilities of the Scottish Government and those of the Westminster Government on energy efficiency. Lawyers have told me that it is okay for the Scottish Government to promote energy efficiency, but not to deal with delivery. That seems unsatisfactory.

Lewis Macdonald: It strikes me that repealing the provision in the 2006 act is unnecessary and that the two provisions could comfortably live together if the officials’ description of the bill as building on existing legislation is accurate. Is that the view of the witnesses, too, or has someone come across a legal obstacle to that?

Chas Booth: I can see no legal obstacle.

Lewis Macdonald: My next question is about another issue that was raised earlier: incentives, primarily for householders, but also for community schemes.

I think that Elizabeth Leighton talked about the potential for providing loans, grants and local tax rebates. From your knowledge of the experience of organisations that operate south of the border, what is your view of the effectiveness of the arrangements that apply there? Could they be readily applied in Scotland?

12:00

Elizabeth Leighton: My understanding is that the arrangements have been effective in incentivising the take-up of insulation measures and in attracting CERT funding by creating partnerships of local authorities, energy companies, utilities and local community groups. Additional incentives could make Scotland a more attractive funding environment for the CERT scheme. The funding environment is one of the reasons why we do not have our fair share—in inverted commas—of CERT funding.

Elaine Waterson: I agree with Elizabeth Leighton that council tax incentives have, in theory, a big role to play in encouraging consumers to take action. We at the Energy Saving Trust did a huge amount of consumer research a number of years ago in which we explored the idea of council tax incentives with consumers across the UK. A key finding was that the level of incentive does not have to be that high. Talking to people about tax rather than energy efficiency is much more exciting for them and has a big impact. That approach has a big marketing advantage as well. As Elizabeth Leighton said, many of the schemes down south have been particularly successful and have incentivised significantly greater numbers of people to take action than would have been the case if just the CERT scheme had been available.

Fergus Tickell: The previous witness panel mentioned the provision of grants through the community and householder renewables initiative, the biomass support scheme and so on. Those grants are welcome as a way of getting something going in the heat sector, but they are inefficient as a way of delivering support. They tend to be challenge funds to which people must apply in almost a competitive way to secure funding. They also tend to be irregular, so there is no continuity and the skills base is not developed. I therefore welcome consideration of a renewable heat incentive.

I talked earlier about scale, and the figures that I got from Scottish Renewables suggest that, in the domestic sector, about 1,500 renewable heat systems are installed in Scotland every year. To put that in context, if the 11 per cent target is to be met from the
domestic sector, as is implied in the renewable energy framework, we must increase the number of renewable heat systems that are installed to 25,000 a year. There must therefore be innovative thinking about financial incentives, and in that respect, council tax rebates are interesting.

There are major challenges around the development of the energy supply companies that might run district heat schemes or deliver energy to commercial or non-domestic developments. One of the big challenges is the lack of indemnity. Such systems often have only one customer, or a relatively small number of customers. Customers can disappear and may not be replaced by others that have exactly the same demand profile for heat. Distilleries, which I think John Stocks mentioned earlier, are a good example in that regard. Many distilleries are off-gas and use heavy fuel oil to heat their stills. They also tend to be a long way from anywhere else and have a nasty habit of shutting down for periods. Despite Diageo’s development in Fife, many distilleries are not particularly interested in becoming energy generators. There is therefore a big opportunity to encourage energy service companies to develop so that they can service that market. However, ESCOs cannot get funding in such situations because they cannot indemnify themselves against a distillery or any other heat user shutting down for a period. A project cannot be financed on that basis. Government must consider other, innovative ways of encouraging different types of renewable heat delivery.

Elizabeth Leighton: On tax incentives, the whole package is needed. We deal with a range of technologies and installations. Jamie Hume suggested earlier that we do not need to consider council tax incentives because the renewable heat incentive will come on stream, although not for 18 months or so. However, that incentive will not apply to the many householders who simply want to do up their loft or have cavity wall insulation. Even solid wall insulation will not be covered. We need a range of measures that will fit the range of needs for the range of houses.

Chas Booth: I have a brief comment on council tax discounts. Last month, the Northern Ireland Executive announced that it is introducing rate rebates—it has rates, rather than the council tax. Under that scheme, houses that are renovated to the highest energy efficiency standard will receive a five-year rate rebate, which is a substantial incentive. It is disappointing that, yet again, Scotland is being overtaken and another devolved nation in the UK is taking the lead.

Mr Macdonald referred to energy efficiency loans. We would point to the German energy efficiency loans scheme, which has been running for some time. The Germans invest about €1.3 billion per year in the scheme, the idea of which is that householders can apply for a low-interest loan for whole-house renovation. People can apply for up to €50,000 at a time, which is about £30,000. The cost of the scheme is about €17 per person per year. Introducing the same scheme at the same rate in Scotland would cost about £70 million per year, which is possibly too much to fit into this year’s budget, but we hope that Governments will consider it in future.

The Convener: I was not aware of the Northern Ireland scheme. It would be worth while for the committee to have more information on that. However, the danger with that approach is that it is non-targeted. With a five-year rebate for houses that achieve the best energy efficiency rating, the ones that are nearest to achieving that already will get the rebate fairly easily, but people for whom that is hard to do will not necessarily be able to afford it. Does such a scheme target resources where they are most needed, which is the hard-to-heat and hard-to-insulate housing?

Chas Booth: I do not accept that houses that are already fairly energy efficient are necessarily easier to get to the zero carbon level. Your colleague Rob Gibson was one of the MSPs who engaged in the MSP home energy challenge that we ran with Friends of the Earth Scotland last year. At the start of the year, Mr Gibson’s house was the most energy efficient, but there was a limited number of measures that he could install to make it better. He could not take any insulation measures, because his house was already fully insulated, and his options were limited to microrenewables. On the other hand, Mr Harper, who won the prize, achieved that by topping up his loft insulation, replacing his rather ageing boiler with a more energy efficient one and installing draught-proofing. Therefore, it might not be easy to get houses that are already energy efficient to the zero carbon level.

My understanding of the Northern Ireland
scheme is that it is graded. People who achieve a certain energy efficiency level receive a six-month rebate, and those who achieve a better level receive a year’s rebate—and so on, up to the maximum of five years. I can research the scheme a bit more and provide information to the committee, if that would be useful.

The Convener: I will resist the temptation to say that I am disappointed that Mr Harper’s house was so badly insulated.

Lewis Macdonald: In much of what has been said, there is a suggestion that part of the reason for the deficit in CERT spending in Scotland is precisely a result of the absence of such schemes. Are there any other opportunities in the bill that will help to ensure that more CERT money is spent north of the border? Are there any opportunities that are not taken in the bill to improve the attractiveness of Scotland for energy company investments?

Chas Booth: To clarify, Scotland does not get its fair share of CERT money. Under the predecessor to CERT, which was called EEC—the energy efficiency commitment—Scotland received about 7 per cent of the funding, yet we have 9 per cent of the homes. If those proportions are still the same, we are clearly not getting our fair share. On how the issue should be addressed, I welcome the Scottish Government’s establishment of a CERT strategy group, through which it is discussing with the energy companies how they can ensure better investment in Scotland.

I suggest that the group’s programme needs to change, however. This is a Westminster issue. At the moment, if loft insulation is installed in Kirkwall, that saves a lot more carbon than if the same loft insulation is installed in Cornwall, but the CERT scheme does not recognise that. There is a blanket carbon allowance no matter where the insulation is installed. If we had regional grading that more accurately reflected the carbon that would be saved through the installation of such measures in Kirkwall, for example, that would be the easiest way to ensure that Scotland got its fair share. At the moment, energy companies are not investing in Scotland because it is more costly to deliver a carbon saving here compared with the south-east of England. If the scheme more accurately reflected the carbon saving, that issue could be addressed.

Lewis Macdonald: And that would presumably help to address Iain Smith’s question, too.

Chas Booth: Yes.

Elizabeth Leighton: I will respond on what might be done in the bill to encourage greater investment through the existing CERT scheme as it is run now. One approach would be to ensure that there are clear targets and a clear reporting procedure on the energy efficiency action plan—perhaps with a view to improving it. If it is clear what the targets are, it will be clear to industry what direction is being taken—there will be annual reporting and scrutiny, and that will drive more investment.

On the public sector duty, if local authorities had a clear duty to contribute to the agenda, they could drive more area-based approaches, which could develop across Scotland. That would provide a good funding environment and good economies of scale for the CERT scheme.

Gavin Brown: John Stocks said that there should be a definition of energy efficiency in the bill. Will you, either now or by way of a written submission, give the committee more detail on what ought to be included?

My second question is to the panel in general. It is a question on renewable heat that I asked the Government officials earlier. In my view, the obligation that has been placed on the Government in relation to renewable heat is not very onerous, so I was comforted to hear that amendments will be lodged. Those amendments are not just desirable; they are imperative if the bill is to have teeth in this regard. What else is required? What other provisions ought to be included in section 51 that cannot wait for further regulations and so on? I think Fergus Tickell will have views on this.

John Stocks: It would be a challenge to draft some words for the bill on the hoof, so I will hang back and submit something in written form. Primarily, there must be an obligation on us all to get the absolute maximum utility from every unit of energy that we use in a building. That would be a reasonable definition of energy efficiency. I would like to revisit the point, however.

If we reduce demand, we reduce the amount of renewable energy that is needed to achieve a certain percentage of carbon reduction. We also reduce our call on the earth’s resources, we reduce our bills, and the investments that we make can generally be much more cost effective, easy and
reliable, even if "insulation" does not have the same ring to it as "wind turbine". Investments in those important areas will deliver the goods. I will leave renewable heat to Fergus Tickell.

Fergus Tickell: It is a difficult question, in that we do not know what might emerge at stage 2. There needs to an absolute commitment to finding an effective financial mechanism to support the installation of systems. There has to be clarification at some point in the progress of the bill that the intention is to promote renewable heat in all its forms and for all its uses. The lack of recognition of the commercial potential for renewable heat is a major problem.

12:15

John Stocks disagreed with me slightly when I said that that was the low-hanging fruit. Energy efficiency is important for business—it is not an either/or situation. At the moment, there is some support for renewable heat through the renewables obligation; there is banding within the obligation to give additional benefit to combined heat and power. That is important, but it does not do the whole job. Fifty per cent of the heat that we use in Scotland goes to commercial and industrial activity and 50 per cent goes to domestic activity. There is a huge opportunity. Industry is leading the way in large-scale deployment of renewable heat in Scotland. I refer to projects such as those of UPM-Kymmene at Irvine, Diageo, Balcas—which is investing at Invergordon—and Tullis Russell. However, there are many more opportunities. I would like ministers to make a firm commitment not to rely just on the domestic sector to deliver the targets that they have set for renewable heat.

I am not sure that I have answered the question, but I have given an overview of what I think needs to be achieved. I am much more concerned about what we can achieve through the bill than about what is said in it specifically.

Elizabeth Leighton: My point relates to the definition of energy efficiency. We need to keep our eyes on the prize, which is to reduce emissions and, therefore, our energy demand. Often we focus on energy efficiency, but that will not necessarily lead to a reduction in energy demand. An AAA-rated fridge that is big enough for someone to walk into it does not lead to a reduction in demand. We need to keep an eye on that issue in the action plan. We must understand how improvements in energy efficiency can lead to reductions in demand, and what they mean for reductions in emissions.

John Stocks: I agree. Demand should be included somewhere in the definition of energy efficiency, as we need to minimise demand for our activity.

The Convener: You are welcome to have a stab at an amendment in writing and to send that to the committee.

Gavin Brown: The energy efficiency plan has been touched on. I questioned the Government on whether a 12-month period was needed between the activation of section 48 and publication of the plan. That is important, because if the plan does not come into force until the middle of 2010, it will not have a big impact on the 2010 figures. If we fail at the first hurdle in 2010, we will have further to go to catch up, which could have a detrimental effect on momentum and motivation. I appreciate that consultations take time, but how quickly do you think a plan could be pulled together, once section 48 has been activated?

Chas Booth: We were first promised an energy efficiency strategy on 7 December 2004, so we have waited quite a long time for it. As recently as November last year, the Scottish Government committed to setting “out in 2008 our Energy Efficiency and Micro-generation Action Plan, outlining the actions we are taking and plan to take across Government.”

The Scottish Government clearly has something drafted and ready to go. I understand that it does not want to publish it because it is worried that the plan will appear too weak, partly because of concerns about whether responsibility for energy efficiency is devolved or reserved and where the line between promotion and delivery lies. I share your view that 12 months is much too long—a couple of months are all that is needed. The Government has already consulted on the energy efficiency strategy, so I fail to see why another consultation on an action plan is needed.

Elaine Waterson: Although some energy efficiency issues are devolved, others are reserved, and much of what Scotland needs to do to deliver on its plan will have to build on what is happening at Great Britain or United Kingdom level. That means that, to some extent, the Scottish plan will have to wait for the UK Department of Energy and Climate Change to finalise and publish its action plan and wider strategy, because that
will give Scotland a better sense of what policies will be delivered in the country under reserved powers and what it will need to add under its devolved powers.

Elizabeth Leighton: We could get into something like the iterative phase of consultation, with things simply going on and on. The Government could publish what it knows now; after all, a lot of research and reviews have been carried out and I, too, have been at meetings where we have been told, “This is just around the corner”. Something must be sitting on a computer somewhere.

The longer we wait, the more money the economy is losing. Businesses are waiting for clear direction. The DECC consultation is due to be launched this month, which means that the action plan will not be published for many months. The bill provides the opportunity to review and amend the energy efficiency action plan based on what happens at UK level, so Scotland should go now with what it has.

The Convener: Does the action plan have to wait for the legislation to be passed, or can it be developed in parallel?

Elizabeth Leighton: There is no reason why it cannot go ahead now.

Chas Booth: I absolutely agree.

The Convener: A couple of comments in the financial memorandum struck me as being quite strange. For example, with regard to the renewable heat and energy efficiency provisions, the Government claims essentially that no additional costs will fall on the public purse. Is there any point in having an energy efficiency action plan that does not result in additional costs to the Scottish Government?

Chas Booth: I have not read the financial memorandum in detail—

The Convener: There is no detail in it.

Chas Booth: The Government might be driving at the fact that energy efficiency has a negative net cost. In other words, you get back the money that you invest as a result of, for example, lower fuel bills. However, there will need to be some public sector investment to deliver the carbon savings set out in the bill.

The Convener: I think that you are being rather optimistic. If that was the case, the financial memorandum would have given some indication of the costs and likely return on investment.

Chas Booth: I might have misunderstood the question.

The Convener: The financial memorandum states that the duty to promote an energy efficiency action plan “is part of current planned activity, is not expected to give rise to additional resources and will be met from within existing Scottish Government administration budgets.” A similar comment is made about the renewable heat provisions.

Fergus Tickell: As I understand it, the suggestion in the DECC consultation is that, as with the renewables obligation, the cost of a renewable heat initiative would ultimately be recovered from the consumer.

Lewis Macdonald: Does that mean that the incentive funds that we have discussed might well be implicitly ruled out before the plans are even published?

The Convener: I suppose that the question is whether the Government should be building into the financial memorandum some up-front funding for all of this, even if it ultimately gets the money back.

Elizabeth Leighton: Even if the Government does eventually get its money back, incentives such as the loans scheme that we talked about would, like the small business loans scheme, involve some up-front provision.

We have also discussed what sort of capacity building would be involved so that area-based schemes could carry out the street-to-street work. Obviously, CERT will not pay for all of that, so we need a real upscale in investment. WWF Scotland has estimated that the current investment in the domestic sector, including CERT, private investment, household investment and Government investment, needs to be doubled.

Finally, going back to our discussion about the use of the terms “improve” and “promote”, I note that paragraph 183 of the financial memorandum says that chapter 3 of the bill “aims to improve the energy performance of non-domestic buildings and improve energy efficiency generally across Scotland.”

Chas Booth: I think I misunderstood the question about resources. Were you referring to resources within Government to deliver the energy efficiency action plan?
The Convener: Yes.

Chas Booth: There is a question about that. I have heard that publication of the energy efficiency action plan has been delayed partly because the Scottish Government’s energy efficiency team is very small. They are dedicated and hard-working and do fantastic work, but they must be underresourced if they are, say, having to brief ministers for budget negotiations with the Greens and negotiations with Sarah Boyack over her bill, and to produce an energy efficiency action plan, all at the same time. Surely they should have the means to chew gum and walk at the same time—or whatever the phrase is. As a result, internal resources in the Scottish Government might well be an issue, especially if—as the previous panel made clear—energy efficiency will be a key delivery mechanism for cutting carbon.

John Stocks: There are number of successful loan funds, including the central energy efficiency fund, which operates in the public sector in Scotland, the Salix fund, which operates with Scottish money in the higher and tertiary education sector, and the small business loans scheme we and the Scottish Government operate. Although those schemes are self-financing, they have had to receive up-front public money. Any thoughts that we might have harboured of getting private sector money to bolster our own loans scheme have been temporarily put on ice with the current situation in financial markets.

The Convener: That concludes questions. I thank the witnesses very much for a very informative and helpful session that will, I am sure, inform our report. If any other points come to mind after you leave, please feel free to send them in writing to the clerks.

At next week’s meeting, we return to our energy inquiry with evidence from the Office of Gas and Electricity Markets and others on issues such as the remit of the regulator and transmission charging.

Lewis Macdonald: We agreed earlier to take evidence from ministers on the matters that we have just discussed. Is it the intention to decide on further steps following that evidence?

The Convener: Yes. We have to prepare a report for the lead committee within the timescale that has been set out, but the clerks and I will discuss how to fit an evidence session with the minister into our programme.

Meeting closed at 12:28.
Scottish Parliament

Economy, Energy and Tourism Committee

Wednesday 4 March 2009

[THE CONVENER opened the meeting in private at 10:04]

10:18

Meeting suspended until 10:33 and continued in public thereafter.

Climate Change (Scotland)

Bill: Stage 1

The Convener (Iain Smith): Colleagues, I open the public part of the eighth meeting in 2009—and the second meeting this week—of the Economy, Energy and Tourism Committee. Today’s main item of business is evidence on the Climate Change (Scotland) Bill from the Minister for Transport, Infrastructure and Climate Change. I welcome him for what is probably his first appearance before this committee. I ask him to introduce his team and to make any brief opening remarks.

The Minister for Transport, Infrastructure and Climate Change (Stewart Stevenson): Convener, I do not intend to make any opening remarks. I am sure that committee members will be able to fill the time with questions.

Members have a list of the officials who are with me. I intend to do the majority of the speaking, but I will draw on my officials for any technical or legal explanations that are required. I am happy to move straight to questions.

The Convener: As the minister will know from the Official Report of our previous meetings, members were concerned about some lack of clarity on the policy direction of the bill. We have asked the minister to come before us today to clarify some of those issues. I ask Wendy Alexander to kick off the questioning.

Ms Wendy Alexander (Paisley North) (Lab): Good morning, minister. As people will be aware, the witnesses who joined us to discuss the energy efficiency provisions in the bill—in chapter 3 of part 5—were concerned that there are no targets on energy efficiency. Chapter 3 contains no provisions on how performance on energy efficiency will be measured, on how progress will be reported or on what contribution energy efficiency might make to the emissions reduction targets for 2030 and 2050. Why was that deemed to be the right approach?

Stewart Stevenson: Sorry, let me write down all those points—although I will be happy to be reminded if I miss out any of them.

We are in a slightly difficult area in relation to the mix of devolved and retained powers, in that energy efficiency is a shared responsibility for the Scottish Government and the Westminster Administration. I do not think that that sharing of responsibility should cause any great difficulties, as I have no indication that people are unwilling or unable to work closely together.

The member asked why the bill does not identify the contribution of a particular sector to our 2030 and 2050 targets. The important thing to say is that all sectors of our economy and all elements of public, business and private life will need to make appropriate contributions. Given that 2050 is a very long time out, successive Administrations—and, I imagine, successive ministers, as I am targeted to be 104 in 2050—will need to develop responses over the period. Clearly, those responses will be driven by the available scientific advice, which must be the key thing that drives us. The moment that we start to impose political decision making that runs at odds with the scientific advice, we go down a very dangerous route that risks damaging the consensus that I hope we will achieve on the principles. Of course, there will continue to be engagement, debate and challenge on matters of detail.

We are doing a number of things on energy efficiency. As members will be aware, building regulations have recently been introduced that will require from 2010 a 30 per cent carbon reduction for domestic and non-domestic buildings. In that respect, we are setting targets for new builds. However, I am quite prepared to acknowledge that current estimates suggest that about 60 per cent of buildings that will be in use for domestic purposes in 2050 will be buildings that have already been built. We will need to develop strategies for those as well.

Ms Alexander: I ask the minister to remain at the highest level in explaining why the bill contains no targets, performance measurements or reporting requirements on
energy efficiency. He seems to have offered the reason that energy efficiency is an area of shared responsibility or competence. Undoubtedly, the European Union has shared competences with national Governments and devolved Governments, but the EU has set a target for improving energy efficiency by 20 per cent by 2020. Let me probe the minister on his implication that the impediment is that energy efficiency is a shared responsibility. Was there any direct discussion with the United Kingdom Government on setting a target, such as the 20 per cent reduction that the EU has adopted?

Stewart Stevenson: Let me go back just a little bit before responding directly to the member’s question.

The bill will require us to produce an energy efficiency action plan, on which we will be required to lay a report before Parliament every year. There is some work there.

I am simply making the rather obvious point that we have some shared responsibilities. Have there been discussions at official level? Yes, of course. Officials work closely with Westminster because approximately—one third of activity in Scotland that will matter to the climate change agenda is the responsibility of Westminster and two thirds is the responsibility of the Scottish Government. It is natural and necessary that we should work together, and indeed that we should work with Europe. We have provided input on a number of European initiatives. Thus far, we have found ourselves in agreement with the responses of the Westminster Administration in that regard.

Ms Alexander: The minister mentioned the energy efficiency action plan. He will have noted some anxiety among witnesses about the timetabling of the action plan. I want to press the minister for clarity on that.

As he will be aware, licensing is a topical issue this week. The secondary legislation arising from the Licensing (Scotland) Act 2005 will not be implemented until autumn 2009. Further, the secondary legislation arising from the Planning etc (Scotland) Act 2006 will not be implemented until at least the end of 2009. What are the precise implications of the phrase “no later than 12 months after the day on which this section”?

section 48—

“comes into force”?

When—roughly—does the minister expect the bill to complete its parliamentary passage? That will be followed by a period before royal assent is granted, then followed by the commencement of provisions, which might be later if the provisions require secondary legislation. Can the minister clarify whether section 48 will come into force following the commencement of secondary legislation, and does he anticipate that that will be at least three years’ hence, which has been the case with the Planning etc (Scotland) Act 2006 and the Licensing (Scotland) Act 2005?

Given that the energy efficiency action plan was first envisaged in 2005, it might be helpful if the minister committed to a date rather than tying its publication to an indeterminate point in the future. Can he offer us any clarity on when we are likely to have the action plan? Is it possible that it could be three years after the discussions in Parliament?

Stewart Stevenson: The member asked me a range of questions. It would be presumptuous of me to anticipate Parliament’s meeting a timetable that I might have in mind for the Climate Change (Scotland) Bill. I would certainly like the bill to be passed around the middle of the year, but I am in the hands of Parliament on that. The co-operation and collaboration of the members present and those elsewhere would be welcome.

We plan to publish the energy action plan shortly after the passage of the bill, and to outline some proposals in that regard without waiting for the passage of the bill. The member can therefore take substantial comfort that the period of three years that she suggested is entirely disjoined from what the Government plans.

Ms Alexander: Why cannot the minister simply put a date on it? This is an executive action; why do you not simply name a date now?

Stewart Stevenson: I come back to the fact that the provisions of the bill as passed will to some extent determine the way forward. It would be presumptuous of me, as a minister—and I think that I would attract some criticism—if I took for granted the parliamentary process. If, on the other hand, the members present, perhaps representing the majority of the members of Parliament, can give me an absolute date for when the
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10:45

Gavin Brown (Lothians) (Con): The time set out for publication of the energy efficiency action plan is 12 months from the date of commencement of section 48. Even in the best-case scenario—if the bill follows your desire and is passed quickly—we could be into the middle or indeed near the end of 2010 before the plan is in place. Given that carbon emissions targets have been set for 2010, I am concerned that if no plan will be in place until the middle or the end of that year, energy efficiency will not make the contribution that it can make to cutting emissions. At our previous meeting, a range of bodies provided good evidence that, because a lot of the work has already been done, 12 months will not be needed to put the plan in place; indeed, it has been suggested that only three months will be required. Is there any way of speeding up the process to ensure that energy efficiency can make a meaningful contribution to the 2010 target?

Stewart Stevenson: We plan to publish our outline proposal in the next few weeks; I cannot give you an exact day at the moment, because a number of processes still have to be gone through. In any case, the proposals will be published very shortly and, as I have said, the plan will be published after the bill’s passage.

The Convener: Before we turn to questions on specific sections, I have a general question that is relevant to the three areas that the committee is considering, including energy efficiency and other energy aspects. Is the Parliament being asked to take too much on trust with the bill? Although an awful lot of work will put flesh on some of the bill’s bones, most of it will be carried out after the committees complete their stage 1 consideration. For example, you mentioned the outline of the energy efficiency action plan, which officials at a previous meeting said would be produced by March.

With regard to the non-domestic sector, the consultation on energy performance certificates closed in November. However, although the report on the consultation was due to be finalised, the committee has not yet received it. We would be interested in finding out the results of the consultation, as they will presumably affect the direction of policy.

As I made clear at the previous meeting with officials, the scenarios outlined in the financial memorandum are vastly different in their costs to local government, central Government and businesses. The committee will not be able to scrutinise any of that properly simply because we do not know the policy direction that the Government will take. In addition, with regard to renewable heat, the renewables action plan will not be published until June.

We are being asked to pass the bill before we see any of that detail. Is that not too much for the committee and the Parliament to take on trust? Should we not have more detail about the Government’s policy direction before we are asked to reach a view at stage 1?

Stewart Stevenson: Let me begin by accepting a pretty obvious point: in every bill, there is a tension between what is contained in primary legislation and what is drawn forward in secondary legislation. It is quite proper that there is a debate on whether in any particular bill the right balance has been struck in that respect.

Given the 2050 target, the Climate Change (Scotland) Bill probably looks further forward than any other bill that the Scottish Parliament has dealt with. Within that timescale are a number of timetables for targets, which have been driven by the scientific advice. The Parliament has processes for dealing with secondary legislation, and that will be the right time to engage with such matters. It would be useful if the specific concerns of committees and committee members were drawn out at stage 1. To be consensual, we will wish to examine what comes out of stage 1 and consider how we might respond at stage 2.

The draft renewables action plan was published as part of the renewable energy
framework at the end of last year. That provides some visibility of what there will be in relation to renewable heat. The committees of the Parliament always have the right to look at anything in advance.

It is not unprecedented to hold further evidence sessions at stage 2, if that is appropriate. If that were the way to deal with some of the issues that we are not able to bottom out just now, the Government would be happy to co-operate and collaborate and to appear at that stage, if appropriate. I would not like to compromise the timetable unduly, but we could certainly appear at that stage.

Of course, the whole point of the bill is to produce a statutory framework to reduce emissions on a long-term basis. There are specific proposals in part 5 of the bill, but we need a lot more than that.

The Convener: The Finance Committee’s report on the financial memorandum states:

"The Committee also considers that in a number of areas insufficient policy direction has been provided, which has made it difficult for local authorities and businesses to be able to assess the financial impact of the proposals."

That is the point that I am trying to make. If there is no clear policy direction, it is difficult for committees to assess whether there are issues. In essence, we are being asked to provide not a blank cheque but a cheque on which we are not quite sure where the decimal point goes in relation to some of the areas, which is a major concern. It is difficult for us to know whether the proposals, such as those on energy performance certificates, will be adequate or whether they will be overburdensome, because we do not know in which policy direction the Government is going. We have not even seen the report on the consultation that we were promised. Do you accept that more detailed work on the policy direction should have been completed before you introduced a bill that gives ministers fairly open-ended powers?

Stewart Stevenson: Energy performance certificates are already part of the landscape. We might be talking about further provisions that will come forward later. I can never remember what ACEP stands for. Will someone remind me?

Gavin Peart (Scottish Government Directorate for the Built Environment): It is the assessment of carbon and energy performance, which builds on the existing system of energy performance certificates.

Stewart Stevenson: We have gone some of the way in drawing forward some of the measures.

In the early stages, one of the interesting things about improving the energy efficiency of buildings is that, for many owners of buildings, there will be quick returns on their investment. When you reduce the energy consumption of a building, whether a domestic or non-domestic building, you reduce the bills that have to be paid for consuming energy. There are a lot of low-hanging fruit out there, which means that there is substantial enthusiasm for improving energy efficiency, regardless of Government policy or legislation.

It is certainly the case that more will come forward. The decimal point is a pesky little thing in certain circumstances. In the financial memorandum, we seek not to give false certainty about what is a framework bill that covers a long period of time but, rather, to give the best possible indication. As we approach many of the interventions, we will of course provide further financial information.

The Convener: I have a final question before we look at the individual sections of the bill in more detail. You said that it is open to committees to take evidence at stage 2 if they feel that it is necessary. Will you give us an assurance that the Government will co-operate with the timetable for stage 2 to ensure that if committees feel the need to take additional evidence at that stage, there will be sufficient time for them to do so?

Stewart Stevenson: It is not for me to speak for the Minister for Parliamentary Business, who represents our interest in such matters. However, I am interested in ensuring that, to the extent that it is possible, we flesh out any policy initiatives that we take and give Parliament the maximum possible understanding of the implications of anything that might be done. Like previous Administrations, the current Administration seeks to support committees’ efforts to understand anything that we do at stage 2.

Gavin Brown: I will follow up one of the convener’s questions. Will the obligations under section 50 fall on the landlords or the tenants of non-domestic buildings?

Stewart Stevenson: The owners will be responsible.

Gavin Brown: You say that people will get money back right away, but, if the tenants pay the cheaper energy bills from saving energy, the owners will not receive a return.
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**Stewart Stevenson:** To an extent, that will depend on the commercial arrangements between the owner and the tenant. In business life, I as the owner of an asset adopted the general principle that I wanted investments that I made to be reflected in revenue. In any event, investment in improved energy efficiency creates an asset that is more valuable in the long term. It is for owners to ensure that they have contracts with their tenants.

**The Convener:** Rob Gibson will ask about section 48.

**Rob Gibson (Highlands and Islands) (SNP):** Good morning, minister. We are interested in the suggestion in the evidence from the Carbon Trust that energy efficiency should be defined as a primary objective in the bill. What is your response to that?

**Stewart Stevenson:** The bill's objective is to reduce carbon and carbon dioxide equivalent gases—the greenhouse gases. Diluting that by establishing other primary objectives would create difficulties, because an energy efficiency objective might be pursued in competition with the 80 per cent target that we are setting for 2050. Such matters are of value and merit and should be judged in the context of how they enable us to progress to the 80 per cent reduction. I am prepared to accept that even the 80 per cent reduction is indirect, since we are actually trying to contain the increase in the temperature on the earth to no more than 2° to 2.4°C from the baseline figure. If we keep moving objectives up, we distort policy making.

**Rob Gibson:** In that case, why do you not consider introducing provisions in the bill that would require energy efficiency measures and improvements as the starting point for your discussion? I am surprised that, at this stage in your discussions with London, the issue has, to date, not been clarified.

**Stewart Stevenson:** There are certain issues. We do not have competence on energy matters as such. However, in the creation of a legal framework, we will work with colleagues at Westminster. After all, we share a common purpose with Westminster, which has increased its carbon reduction targets, based on advice and a consideration of the situation. Westminster's targets encompass what we do, so it is in the UK Government's interests to support the efforts that we will make in Scotland. We are discussing the issue with the UK Government. I believe that we will find a way in which to support the UK Government's objectives and therefore, simultaneously, our objectives. When we have completed those deliberations, the outcomes will feed into the energy efficiency action plan.

**Rob Gibson:** Will we have clarity before we reach stage 2?

**Stewart Stevenson:** Um—yes. The reason why I hesitate is simply that I do not want to anticipate the exact nature of the agreements and outcomes that we will reach with Westminster. I am absolutely convinced that there is good faith on both sides. Both parties want to ensure that we get the outcome that we need and I have a high degree of confidence that we will do so. That might be by persuading Westminster to take action within its competence or by establishing with Westminster what we might do within our
competence that is consistent with its views. We can resolve the problem in a variety of ways, but please accept that we are engaged extremely strongly in ensuring that we do so.

Rob Gibson: It would help us at stage 2 if the issue was clear, as that would reduce the amount of questions that need to be asked.

Stewart Stevenson: We are actively engaged on the matter. I cannot commit another party in the discussions to a particular timetable, but I, too, want the issue to be resolved within that timescale.

Lewis Macdonald (Aberdeen Central) (Lab): I want to pursue the issue. It is a month since we raised the matter with your officials, who assured us that there was no intention to dilute the existing law, although they said that they would have to get back to us on the effect. However, the supplementary evidence that we have received from the Government again refers to intention, but not to effect. There is concern, which was reflected in Rob Gibson’s questions, about the uncertainty. Do you accept the view of many of the witnesses who gave evidence a month ago that your proposal to publish a plan for the promotion of energy efficiency is a dilution in relation to housing, compared with the existing law in the Housing (Scotland) Act 2006?

Stewart Stevenson: There is certainly no intention to dilute. The reason why we are having discussions is to ensure that we provide a legally binding response that ensures that no dilution is possible.

Lewis Macdonald: You will be aware that, when Malcolm Chisholm took the Housing (Scotland) Bill through Parliament, the wording was not raised as a difficulty. Have Westminster ministers directly raised a difficulty with you on that?

Stewart Stevenson: We have identified a potential difficulty and it is agreed that the subject should be discussed with Westminster. I am highly confident that we will achieve a satisfactory outcome. The policy objective is to ensure that we provide no opportunity whatever—I could not put it more strongly—for dilution of what Malcolm Chisholm successfully took through the Parliament. We are simply trying to deal with technical issues and not trying to deviate from the policy in any sense.

Lewis Macdonald: Have you discussed the issues with ministers at Westminster to try to resolve the concerns?

Stewart Stevenson: The discussion is at official level, just to be clear.

Lewis Macdonald: So it is being discussed at that level. Thank you very much.

The Convener: The change is that, in section 48(2), the word “promotion” is used in relation to living accommodation instead of “improve”, which is the wording in the 2006 act. Section 48(2) concerns only a part of the overall plan for the promotion of energy efficiency, so is it not possible simply to repeat the words of the Housing (Scotland) Act 2006 in it, rather than dilute the provision? If we had the competence to include the wording in the 2006 act, surely it is competent to have exactly the same wording in the bill.

Stewart Stevenson: It is certainly our objective to achieve that, but the mechanism by which we protect what has already been passed will need to await the conclusion of discussions. I am not turning away in any sense the concern about the use of one word in one piece of legislation and the use of another word in a different piece of legislation. It is precisely because we accept that a point is properly being raised on that issue that we seek to ensure that we deal with it appropriately, and I am confident that we shall.

Lewis Macdonald: Do you understand that the concern about the wording is merely a reflection of the wider concern about the lack of targets and the lack of precision on what will be included in the energy efficiency action plan?

Stewart Stevenson: I think that I covered that in my previous remarks, but I acknowledge what Lewis Macdonald says.

Marilyn Livingstone (Kirkcaldy) (Lab): Given the important and effective contribution that microgeneration can make to reducing emissions, why has the Scottish Government not included targets on it? I will frame that with a question on fuel poverty. Increased use of microgeneration technologies, such as air-source heat pumps and solar panels, would particularly benefit the 30 per cent of the population who are off the gas supply and who pay really high prices for inefficient oil heating systems. How much of the proposed member’s bill on microgeneration will be taken into account? That proposal has been put on hold until we see what happens with the bill.

Stewart Stevenson: I am not able to
respond in detail on Ms Boyack’s proposed bill because it has not been published. When that bill is introduced, I will be able to make detailed responses on it. However, on the substantive question, power generation is a reserved matter, so we cannot deal directly with it. However, we can remove the inhibitions that make it difficult for people to install microgeneration technologies, and the work that we are doing on permitted development rights is geared to that. It is enabling work.

I am personally entirely familiar with fuel poverty and off-gas heat: fuel-oil heat, in essence. Because we had half a metre of snow, my wife managed to have a day without any fuel, which she did not enjoy much. However, we are changing the fuel poverty programme from April 2009 to allow microgeneration in a new energy assistance package. We are proactively seeking to engage people in that way.

Marilyn Livingstone also referred to air-source heat pumps. We have not yet included those in the changes in permitted development rights because of difficulties that we and the Westminster Administration are experiencing in getting an adequate definition of noise. In the countryside, such noise is probably not a big issue, but in urban settings it could be more significant. Additional work on air-source heat pumps and wind turbines is under way, which I hope will inform further changes that we could—I emphasise the word “could”—make later this year on permitted development rights.

Marilyn Livingstone: I may want to come back to that, but my next question is on skills. We have heard that 16,000 jobs are going to be created, but previous witnesses have told us that there would be skills gaps if we were to move to use of air-source heat pumps. If there are already skills gaps in the industry, how are you working with other departments to ensure that the required skills will be available across the industry?

Stewart Stevenson: The Scottish Higher and Further Education Funding Council has set up a renewables core skills group, which is dealing with that issue. That group includes representatives from the sector skills councils, Skills Development Scotland, the higher and further education sector and the power companies—Scottish and Southern Energy, Scottish Power and Scottish Renewables. In addition, the sector skills councils are doing research for the Government on long-term sectoral needs, which covers all the issues that the member has raised, from installation of microgeneration to wind farm maintenance and marine energy contractors. We are certainly engaged on the issue and working with partners.

Marilyn Livingstone: In the evidence that we have taken, one of the main issues that has been raised with us across the board is the concern around the lack of skills. Something urgent needs to be done on that. What discussions have you and your department had with the bodies that you mentioned in order to press that point?

Stewart Stevenson: I have just spoken of the action that is being taken right now, which is drawing to the table the appropriate people. It is a question of striking the right balance between the increasing demand for the skills and the number of installations, and of getting the timetables synchronised. We expect the number of renewables installations to rise, although it will not rise like a cliff face the moment that permitted development rights are changed, but will ramp up over time. The action that we are taking right now is likely to be fit for purpose in that sense. The skills for the renewables sector will be included in the renewables action plan, which will be published no later than the end of June.

Sarah Boyack (Edinburgh Central) (Lab): I want to pursue the point about the development of microgeneration. I am conscious that, although we have national renewables targets, we do not have any householder renewables targets. The minister might want to consider that such targets would be a sensible way of driving the industry and driving the agenda for all Government agencies. It is now two years since Scottish planning policy 6 was introduced, which is about driving householder renewables and combined heat and power systems for new developments, but no research has been undertaken to monitor the implementation of that policy, nor do we have any research on retrofitting of microgeneration and householder renewables. Would a Scottish Government target help to push the agenda? Do you have an estimate of the contribution that microgen could make to achieving the Government’s aspirations on energy efficiency and renewables?

11:15

Stewart Stevenson: I will step back to a
relatively high level and make a rather obvious point. Microgeneration is one contributor to improving the energy efficiency of dwellings and non-domestic buildings but, of course, it is not the only one. To an extent, we will achieve best success if we set targets for energy efficiency rather than mandate particular interventions that people must make.

That said, SPP 6 seeks to aid delivery of a 15 per cent reduction in CO\textsubscript{2} or other greenhouse gases. Such a reduction should be part of the material considerations in the planning process. Last year, we also issued guidance in planning advice note 84, which is entitled “Reducing Carbon Emissions in New Development”. One general difficulty is the lack of skills in carbon assessment among planning officials. That has been a constraint, but work is being done to address it.

Microgeneration is part of an overall policy framework. It is a key part of the considerations in the planning system.

Sarah Boyack: I know that the minister is enthusiastic about the agenda, so my question is meant to be helpful.

Stewart Stevenson: I will treat it as such.

Sarah Boyack: As one of the authors of SPP 6, I know that our political intention was to drive energy efficiency and use of whatever microgeneration, small-scale renewables or combined heat and power system was appropriate at the time. Two years on, I understand that implementation of the policy is not monitored. Do you even have a sense of how many local authorities have put the policy in their local plans? A survey by Friends of the Earth Scotland identified that hardly any local authorities had made progress.

The technology is well established and is moving ahead in the rest of the UK. The Department of Trade and Industry estimated that we could obtain 30 to 40 per cent of our electricity from such technologies. Do we have an opportunity to set national targets—the Government’s policy intention suggests that we do—for everybody to introduce such measures and to take a much more proactive approach in order to encourage local authorities to sign up to the agenda?

Stewart Stevenson: It is suggested that only eight of the 34 planning authorities are fully engaged in implementing SPP 6. I mentioned some of the difficulties, but we expect the policy to be implemented much more widely.

In a sense, we must be technology blind and not imagine that we can second-guess the developments in a range of microrenewables technologies. Debate continues about whether wind turbines in urban settings have a net carbon benefit—in rural settings, they probably do. On the other hand, it is pretty broadly accepted that photovoltaics and water heating from solar energy take a short time to provide a return on investments—I mean that in financial and carbon terms.

We must support the efforts to develop technologies. There will be technologies in, for the sake of argument, 2030 of which we know nothing today, which is why it is important that we create frameworks within which we can respond.

The challenge is for building designers, particularly in relation to new buildings, to choose what is appropriate for the building and design it to be energy efficient. For example, we know that a building that is a perfect cube offers less surface area for heat to escape than a long, low, single-storey building of equivalent volume does. Many compromises need to be made in building design. It is important that those who are responsible for that have opportunities to be innovative, and that we do not do things that can stifle innovation but create the wherewithal to show what requires to be done, and allow others to determine the appropriate technologies with which to do it.

The Convener: I wonder whether it is hip to be square, then.

Stewart Stevenson: It is now, convener.

The Convener: We need to move on to consider section 50, which is on the energy performance of non-domestic buildings. The Government has announced its intention is respect of building regulations to change the consultation’s target for new build carbon emissions reduction from 50 per cent to 30 per cent. Can the minister outline why the Government has decided on a lower target than was originally intended?

Stewart Stevenson: One of the key things that the Sullivan report said in that regard was that further work should be done on the costings. That work has been done and it informed our conclusion that we should at this stage consider a 30 per cent target for 2010. It may be useful if I quote something that we received in the past few days from Lynne Sullivan, who chaired the panel. She said:
“I’m pleased that the Scottish Government is acting on our report and has undertaken the ‘costings’ research recommendations. Since the Panel met over a year ago, the building and property industry throughout the UK is in a different financial position. The Minister’s announcement of a 30% reduction in emissions for both new housing and non-domestic buildings is still an exemplary outcome, showing leadership in this vital area.”

When she refers to the “exemplary outcome”, she is of course highlighting the fact that we have the most challenging standards. I think that that is welcomed. It is simply a question of getting the right balance in working with the industry on its delivery capability. We would except to see further requirements for improvement in energy standards in subsequent updates of building standards over the three-year cycle.

The Convener: I hear your answer, minister, but does it not suggest a lack of ambition in what we seek to achieve, given that the standards that we are trying to improve are among the poorest in the world? Certainly, compared with Scandinavia, our standards for domestic and non-domestic buildings are pretty poor.

Stewart Stevenson: I would take issue if I may, convener, with the suggestion that we have the poorest standards. On the contrary, we have in many ways led many other jurisdictions to follow our example. One of the interesting things about the panel that was brought together for the Sullivan report was that we brought people from Scandinavia and Austria to participate in it. Interestingly, they were astonished at how much ahead of them we were in certain respects. We had expected much more of a one-way street in that they would be informing us of their progress—they made a substantial contribution—but all three people on the panel took away substantial experience from Scotland. At the moment, we are probably only marginally behind Finland, and our minimum standards for insulation are substantially better than those in Denmark, for example. Far from our standards being poor, by setting the target of 30 per cent on top of what we have already done, we are setting standards that are higher than anywhere else in the British Isles and in the majority of jurisdictions in Europe.

Ms Alexander: Given that this is the only opportunity to legislate on the matter that is likely to arise in the current session of Parliament, should enabling provisions be included in the bill to increase energy efficiency in the domestic sector as well as in non-domestic buildings?

Gavin Peart: Do you mean for existing dwellings?

Ms Alexander: Yes—in relation to section 50.

Stewart Stevenson: I think that we have within our competence the necessary powers to go forward.

Ms Alexander: So, in the Government’s view, the standard is appropriate for non-domestic buildings but inappropriate for domestic buildings.

Stewart Stevenson: Sorry?

Ms Alexander: I am probing the distinction between domestic and non-domestic buildings.

Stewart Stevenson: We have set the same targets for both.

Gavin Peart: That is for new buildings.

Ms Alexander: Yes, but I am talking about the retrofitting of existing buildings.

Stewart Stevenson: We believe that we can make the necessary progress under the existing legislation. Nonetheless, I am always happy to be advised if there is a particular inhibition in our legislative competence or powers that we have not spotted. I would be happy to hear now or later from Wendy Alexander or the committee on that subject. It is certainly not my intention to deprive myself or my successor ministers of powers to take necessary action.

Lewis Macdonald: I have a follow-up question on the separation of domestic and non-domestic buildings in relation to general permitted development rights. You have drafted a provision—albeit a limited one—in relation to the domestic sector, but you intend to address the non-domestic sector separately. Can you explain why? What are the differences that, in your view, justify a separate process for the non-domestic sector?

Stewart Stevenson: Lewis Macdonald must remember that non-domestic buildings will be on a different scale from domestic buildings—and that is, inevitably, a very general statement—and a different process will be needed to make a substantial contribution to changing their energy efficiency. For example, the retail distribution centres in West Lothian are immense, and that would probably be something that we would want to pursue through the normal
planning system. There are successful examples: for example, rainwater recovery systems have successfully gone through the planning system in West Lothian, and the Michelin factory in Dundee has wind turbines that are substantially larger than we would allow through permitted development rights, which have successfully gone through the planning system. A range of things can be done.

To be candid, the scale of what can be done under it makes the provision that we have drafted for domestic buildings of limited value in relation to non-domestic buildings. I am open to ideas about the matter, although we might cross an important line if we were to open up the process to non-domestic buildings. We are seeking to allow people, without their having to go through the planning system, to make changes that will generally not be regarded as a problem by neighbours, or in terms of their visual impact. The things that people might want to do for larger non-domestic buildings would probably fail that particular test.

11:30

Lewis Macdonald: If I understand the answer correctly, it is less encouraging than I had hoped it would be. I had expected you to address the differences and suggest that you would provide general permitted development rights in certain respects for non-domestic buildings, but you seem to be saying that you do not see a case for general permitted development rights for them, at all.

Stewart Stevenson: No—I am just saying that there is less scope for that.

Lewis Macdonald: In some senses, you seem to be implying that there is more scope, because a renewable unit at a large non-domestic building clearly has a much greater carbon-saving impact than one at an individual house.

Stewart Stevenson: I am absolutely happy to accept that point, because it is self-evidently true. If you can cover the south-facing roof of a large warehouse with a photovoltaic array or solar water-heating apparatus, that will make a substantial contribution, and is something that we would wish to encourage. I am simply dealing with the narrow point of whether that should be covered by the planning system or by permitted development rights. I am not in any sense trying to deny that that would be a good thing to do. I absolutely accept that it would be.

The Convener: Turning to my hobby-horse topic of the enhanced energy performance certificates, is the minister in a position to give us an indication of the policy direction of the Government in relation to EPCs? The seven scenarios that are included in the documentation with the bill range from having a fairly limited enhanced EPC that would accompany the sale or rent of larger public buildings, with additional guidance, through to enhanced EPCs for all non-domestic buildings, with compulsory uptake of recommendations. That is a fairly broad scope. Could you give us an indication of what level the Government intends to go for?

Stewart Stevenson: We expect to publish the response to the consultation next week. In the early years, we are likely to think in terms of option 2. However, if we do not make the appropriate progress, we think that a policy that follows the lines of option 5 is likely to be pursued. We are making progress.
in that regard.

**The Convener:** So, if insufficient progress is made under a regime that involves increased guidance and the promotion of the uptake of recommendations for larger buildings, the intention is to move over time to a regime under which there would be compulsory uptake of recommendations for all buildings.

**Stewart Stevenson:** We will be driven by the outcomes that we achieve. In other words, compulsion will be necessary if the outcomes are not achieved. That is rather self-evident. However, this agenda is so important that we would not wish at this stage to rule out for ever and absolutely the use of compulsion.

**Marilyn Livingstone:** Who would police that? Who would the enforcement body be?

**Gavin Peart:** The bill leaves it open, but we have certainly had some dialogue with the Convention of Scottish Local Authorities on that point, and there has been a lot of support for local authorities being involved in the enforcement side of things.

**Marilyn Livingstone:** What would be the cost of that? Has that been discussed?

**Gavin Peart:** We are considering a system of penalty charge notices, which would mean that the cost would not affect local authorities too much, as they could recoup the costs of the actions that they took.

**Stewart Stevenson:** To make the obvious point, until we bring forward a proposal, we are not formally making any response on the issue of costs. However, it is not our intention to create burdens for local authorities that they would be incapable of bearing. That would run entirely against the spirit of the Government's desire to work as equal partners with local government.

**The Convener:** You say that you are considering going for scenario 2. The explanatory notes say that the average annual cost to the private sector of that option could be as much as £9.6 million, and would cover

"the commissioning of building surveys, calculating energy and carbon performance of buildings, formulating action plans and carrying out building work."

Under scenario 5, that cost could rise to £64.7 million. What are the differences that account for that rise? Is the difference to do with additional bureaucracy, or does it involve additional work being done on buildings, which would, presumably, result in better energy efficiency?

**Gavin Peart:** It comes from the work that would be done on the buildings.

**The Convener:** So you would get more bang for your buck from scenario 5 than scenario 2.

**Stewart Stevenson:** Well, you clearly get more bucks for your bang.

In engaging with the issue in detail at this stage, we are attempting to anticipate what we will bring forward. Our position does not represent a commitment on where we will end up. However, it is proper that we inform people of our direction of travel. As I said, we will publish the results of the consultation process next week, and you will then have an opportunity to read what has been said on the subject. The issue of the costs for all the parties concerned will be an important part of determining what direction we end up taking.

**The Convener:** We would welcome seeing a copy of the responses to the consultation, but we would also like to see the impact assessments that have been done and an indication of what energy efficiency improvements you would expect to be made in non-domestic buildings as a result of each of the scenarios in the explanatory notes. It will be hard for us to judge whether the Government’s decision to go for scenario 2 is correct if we do not know how it compares to the other scenarios in terms of improvements to energy efficiency, which is what the bill is about.

**Stewart Stevenson:** As I said, the explanatory notes reflect our thoughts at the moment. In due course, we will announce our definitive position, with the information that committees such as this one will need in order to make the necessary judgments.

**The Convener:** With respect, that information will be necessary if we are to make a realistic judgment about whether what is in the bill is adequate for it to complete stage 1.

**Stewart Stevenson:** Sorry, was that a question?

**The Convener:** It was a statement with an implied question mark at the end of it. Do you accept that we need that information to be able to judge whether section 50 is adequate?

**Stewart Stevenson:** I return to a point that I have made before. The bill is a framework...
The Convener: With respect, it is for the Parliament to decide whether what is in the bill at stage 1 is adequate. An indication of where secondary legislation is likely to go is a key aspect of any stage 1 consideration of a bill.

Stewart Stevenson: I add a tiny wee point. I should have said earlier that we plan to provide the lead committee with a range of draft secondary legislation at stage 2. That is one reason why I said that it would not be a great surprise if there were further committee engagement at stage 2.

The Convener: I repeat the point that the Government has to get the bill past stage 1 before it can get to stage 2.

Christopher Harvie (Mid Scotland and Fife) (SNP): I want to ask about non-residential buildings, with special reference to supermarkets and the bundle of energy issues connected with them. Scotland has seen a revolution in its retail landscape over the past decade. Large out-of-town supermarkets have been reported to contribute more than 5 per cent of Scotland’s energy emissions.

When you consider such buildings, will you be considering only the buildings? These are buildings that have to be warmed and cooled at the same time, but they are also at the centre of a system that emits a great deal of carbon, with freight transport going in and motor car traffic going in and out. Will you be considering alternative methods of organising retail so that it has a less deleterious impact on the atmosphere?

Stewart Stevenson: Today’s evidence session is about particular parts of the Climate Change (Scotland) Bill. I am sure that the member, and other committee members, will have noticed our intention to include international shipping and aviation in our considerations. Clearly, that will address part of the freight issue. We are also investing substantially in the railway network. Continuing the policies of the previous Administration, we have a range of freight grants. If I recall correctly, no Administration so far has been able to spend its entire budget for freight grants. We are therefore encouraging people to come forward with more and better applications.

The member asked about the location of supermarkets and about travel to them. The challenge is undoubtedly large. As far as we are able, we want to ensure that public transport to out-of-town shopping centres is improved.

The member also mentioned heating and cooling, which are taken into account in the national calculation methodology, which has to implement the European Union directive on the subject.

The member has raised some pretty big issues, but he should be content that they are on the radar and come within the range of what we are trying to do.

Christopher Harvie: An almost analogous situation is the consumption of energy in defence establishments. I was recently in St Andrews and heard a tremendous racket coming from the air base at Leuchars, which was a jet engine being tested—God knows what the carbon consequences of that were. With large defence establishments in Scotland, the buildings probably account for only a fraction of the energy use, given the energy demands of transportation to and from the establishments and the testing of equipment. To what extent are you capable of influencing that?

Stewart Stevenson: The carbon reduction commitment applies to defence establishments. Therefore, notwithstanding the potential for matters such as Crown immunity to come into play, at UK Government level—I am not responsible for what goes on in defence establishment territory in general terms—the subject is inside the tent of the broader agenda that is being pursued. I suspect that we might be travelling slightly away from where the committee hopes to go, but I am happy to respond in those terms.

The Convener: It might be encouraging for Christopher Harvie to know that at least the fuel for the Royal Air Force base at Leuchars comes in by train and is then piped into the base. That is one positive aspect.

We will move on to section 51.

Gavin Brown: When the committee considered the bill previously, the issue of council tax rebates for renewable heat and
other efficiency measures was raised. There has been success south of the border with that type of initiative. At that previous meeting, the Government’s position was that the council tax was to be replaced by a local income tax, on which there was to be a great announcement a week later. Given the content of that announcement and the fact that the council tax will remain, certainly for the parliamentary session, will the Government revisit the issue of a council tax rebate?

Stewart Stevenson: We have indicated that we seek to freeze the council tax for the duration of the parliamentary session. The freeze is a huge contribution to the domestic economies of the houses concerned. The member is right that our proposals for a more equitable, income-based way in which to fund local government are merely deferred and not abandoned. It is worth saying that stakeholders have not raised the issue with us. There is a plan to produce a renewable heat incentive, which is probably an easier and more appropriate approach.

Gavin Brown: The council tax freeze is welcome, but it is not linked directly to energy efficiency or renewable heat. The issue has been raised by stakeholders, which is why the Government, via Colin Imrie, the deputy director of the Government’s energy markets division, responded to the committee directly on the matter. I take issue with the point that the matter has not been raised. Given the success south of the border, will the Government at least examine the results there and reconsider the possibility of a council tax rebate?

Stewart Stevenson: I am always happy to consider these matters and work with my ministerial colleagues on the subject. However, the member should accept that, for the time being, we are focusing our efforts on a council tax freeze. The important point is to support people who wish to make their houses more energy efficient or to install micrenewable technologies. We already have a range of measures in place through the Scottish community and householder renewables initiative, the Scottish rural development programme, the energy saving Scotland network, small business loans and the public sector central energy efficiency fund. There are also broad enabling powers in the Energy Act 2008 to establish a renewable heat initiative, and further work is being undertaken on that.

Lewis Macdonald: The Energy Saving Trust has done research that has shown the effectiveness of council tax rebates. Surely you are not saying that because you have accepted a delay in your plans on local government taxation, the opportunity to promote energy efficiency through fiscal incentives should simply be abandoned.

Stewart Stevenson: We can promote energy efficiency in a positive way by supporting changes that can be made. We are considering other options, including loans and cashback offers. There is a variety of ways of proceeding on this agenda. We are quite open-minded but, within a constrained financial position, we have to come to conclusions about which intervention will deliver the biggest bang for the buck, to use a phrase that has already occurred in the meeting.

Lewis Macdonald: The minister will be aware that Northern Ireland has followed England and Wales in going down that track. They clearly regard it as a positive and effective way to promote and incentivise people to take up renewables, micrenewables and energy efficiency.

Stewart Stevenson: It is for each Administration to take its own view. I will look with great interest at what happens in other jurisdictions. From time to time, I meet other ministers and, more often, I discuss with other ministers what approach they are taking.

Lewis Macdonald: It is completely understood that decisions on local government taxation in the next parliamentary session will be taken in the context of that session. In the meantime, would it not show a degree of urgency in promoting energy efficiency to follow the route, for the next few years, that has been taken by those other Administrations in the United Kingdom for the foreseeable future?

Stewart Stevenson: We will look with interest. We have other interventions.

Lewis Macdonald: That does not sound terribly urgent.

Stewart Stevenson: I do not think that I have more to say.

Sarah Boyack: Without great hope or expectation of getting a different answer from the minister after those detailed questions, I ask him to consider the fact that, last week, we had a very good presentation from his officials at the cross-party group on renewable energy and energy efficiency.
Their ideas for the energy efficiency work that will be funded by the Scottish Government look similar to work that is being done by the power companies and local authorities south of the border, which have flexibility to choose from a range of options, including council tax rebates. Will the minister consider giving us similar flexibility here? It would require primary legislation to give local authorities that opportunity. When I consulted on the issue for my member’s bill, I received a strong response from local authorities in favour of having that flexibility and the option of working with power companies. That is, in a sense, a plea to the minister.

I go back to Lewis Macdonald’s point. Primary legislation now would not prejudge any changes that a future Government wanted to make to the taxation system. We have an opportunity to do something now. It would be worth while for the minister to consider the evidence submitted by those organisations that argue that the issue should be on his agenda.

**Stewart Stevenson:** We are pursuing a substantial range of options. This minister, by instinct, is a copyist—if there is a good idea elsewhere, I will grab it with both hands, and both feet as well if that is necessary.

**The Convener:** Section 51(1) says:

> “Ministers must take such steps as they consider appropriate to promote the use of heat produced from renewable sources.”

One of my colleagues described that—perhaps rather kindly—as “a bit woolly”. In response, the official, who is here again today, said that the Government intended, subject to ministerial approval,

> “to turn that into an obligation to produce an action plan and update it regularly.”—[Official Report, Economy, Energy and Tourism Committee, 4 February 2009; c 1541.]

Has the minister approved such an amendment at stage 2?

**Stewart Stevenson:** The process is slightly more complex than the minister simply issuing a fiat on the subject. The consultations on what we will introduce at stage 2 are in progress. I can assure the member that that is one of the issues that are being considered.

**The Convener:** That answer is almost as woolly as section 51(1).

**Stewart Stevenson:** It is the best answer that I am able, procedurally, to give you at this stage.

**The Convener:** I would be grateful if you could update the committee on that as soon as you can. It would be helpful for any recommendations that we wish to make on the matter.

I have a final question, which might or might not relate to this section—I am slightly confused. The issue of combined heat and power does not appear in the sections that we are discussing. Does it fall into those sections, or should one of the duties of the Government under the bill be to promote combined heat and power, whether from renewable resources or otherwise, given the greater efficiency and reduction in carbon emissions that it can provide?

**Stewart Stevenson:** Again, we return to the word “promote”. Of course, energy, as such, is not within our competence. We are engaged with the issue of biodiesel—or biofuels generally. We have been supportive of a number of initiatives, which we expect to see reflected in our action plans.

**The Convener:** I am not sure that that answers my question.

**Lewis Macdonald:** On Monday, the committee visited the Aberdeen combined heat and power plant and saw the benefits for users. That is extremely positive, but an issue that arises is the lack of capital to extend the approach to other areas that did not have the foresight that Aberdeen had six or seven years ago, when the plant was established. In the context of which action plan does the minister expect further steps to be taken in that regard? Will that include a commitment of resources by the Scottish Government to make that possible?

**Sarah Hart (Scottish Government Business, Energy and Enterprise Directorate):** We are currently consulting jointly with the UK Government on heat and energy saving, which includes the issue of combined heat and power. The renewable heat action plan will also look at the renewable heat element. On the steps that we need to take—we are not quite at that stage—as part of the action plan we are considering where we need to go to mainstream that sort of technology where possible.

**Lewis Macdonald:** That is helpful. On the capital funding of schemes and setting resources aside, will there be some adjustment to the financial memorandum to reflect the commitment to put Government
support behind schemes of that kind?

Stewart Stevenson: This is not the time or place for me to anticipate the cost of outcomes or to make any commitments in that regard, but if what we bring forward by working with the UK Government—it is important that there is partnership working on that—has financial implications, of course we will have to share them with Parliament.

Ms Alexander: I want to ask the minister about the accuracy of the financial memorandum. I appreciate fully that the bill is in many respects an enabling piece of legislation, but might there be merit in revising the financial memorandum? The memorandum states currently that the duty to promote energy efficiency in its wide sense is “part of current planned activity” and, as such, “is not expected to give rise to additional resources”.

It seems to me that that sentence is completely incompatible with the number of plans that we expect to be forthcoming in the coming months. We have had a meaningful debate about whether there should be duties in the bill or whether it is appropriate to put those in secondary legislation. However, whichever route is taken, the statement in the financial memorandum that the Government has laid before Parliament that the duty to promote energy efficiency is “part of current planned activity” is incompatible with the evidence that we have heard today.

It would be in the interests of Parliament if you would produce a revised financial memorandum, acknowledging that there are areas that cannot yet be specified but stating that there are actions that will have financial consequences, given the number of new action plans that we envisage. Otherwise, the financial memorandum process is simply a nonsense. As a convener of the Finance Committee in the previous session, I do not think that any of us has an interest in having a financial memorandum that states the situation as it does currently. I invite the minister to go away with his officials and reflect on whether a revised financial memorandum might be appropriate—it might lack specificity, but it would at least be accurate in identifying that future costs would be forthcoming.

12:00

Stewart Stevenson: I do not want to trade words, but I do not think that financial memorandums claim to be accurate. They claim to be estimates, which is a rather different thing. Accuracy is what we see from outcomes. Inevitably, financial memorandums are an attempt to look forward to the implications of what is done. There is judgment, but they are not absolutist. I just make the general point that financial memorandums give the best available figures, or they should do. I am happy to continue to engage.

In general terms, the comment that is being made is simply that there are no costs associated with the development of the action plan. That is all that we are saying. If any costs derive from the implementation of the action plan, we will of course identify them and bring them forward for the usual financial scrutiny. In a strict sense, one is supposed to produce a revised financial memorandum in response to changes that are made to the bill, rather than in response to changes to the view. However, I am entirely comfortable with the idea that we should continue to engage and to consider the financial costs that are associated with what is a framework bill to take us to 2050.

I return to the point that financial memorandums always give us the best available estimates, and in many cases a range of possible outcomes. To pretend that they tell us exactly what the numbers will be when we review them after the event—in this particular case, and probably in the generality—is a little optimistic.

The Convener: When we started the meeting some time ago, I suggested that Nigel Don, who is substituting for another member today, is a utility player. He will take the role of sweeper on the issue.

Nigel Don (North East Scotland) (SNP): Utilities might be fairly close to where I am coming from.

When the bill is done and dusted and our grandchildren are reflecting on what we did, they will see an act of Parliament sitting on the shelf, on bits of paper—maybe we will not even be using paper by then. It seems to me that what they will see around them are structures that were built with less energy, structures that are better insulated, and energy utilities that are more efficient. I will take those things in order.

First, what I heard this morning is that
building regulations are being tightened up to reduce the amount of energy that is used in the process and, presumably, to improve insulation. Am I right in thinking that what you are working on affects both domestic and non-domestic buildings in that regard?

**Stewart Stevenson:** Yes.

**Nigel Don:** Secondly, are you aware of any inhibitor in the current regulations that prevents people from insulating either domestic or non-domestic buildings in a sensible way?

**Stewart Stevenson:** Well, I cannot write a blank cheque on that, because, for example, listed buildings and buildings in conservation areas are subject to particular regulations. In the generality, however, the answer is no. There are no inhibitions that are material. That is a rather qualified answer, but deliberately so.

**Nigel Don:** Thirdly, I return to a point that Lewis Macdonald made. We saw Aberdeen’s combined heat and power system, which has the huge advantage of being a vastly more efficient process thermodynamically. The minister will be well aware of that. Does the bill contain any inhibitions to the development of such systems? Given that I do not think that there are, what does the Government propose to do to maximise the thermodynamic efficiency of our heat generation, in so far as it is within its gift to do so? I recognise that energy production is a reserved matter.

**Stewart Stevenson:** We already have grants for district heating schemes through the community grants scheme, and we have the Scottish business heat scheme. The issues that arise from having power and heat generation close to domestic dwellings are simply environmental ones that are dealt with in the normal way through the planning process. If emissions are closer to domestic dwellings and indeed offices, there are issues that might not be present when they are much further away.

**The Convener:** I am conscious that the minister is constrained by time as he has a flight to catch—I hope that he has paid the carbon offset.

**Stewart Stevenson:** We have.

**The Convener:** I am glad to hear that.

**Stewart Stevenson:** I would prefer to take the train, but on this occasion I cannot.

**The Convener:** We have not been able to get to one or two questions. I presume that the minister would be happy to take those in writing and to get back to us on them as quickly as possible.

**Stewart Stevenson:** Absolutely. I am grateful for your co-operation—my meeting in London is at 3.30.

**The Convener:** You will struggle to get back for decision time.

I thank the minister and his team for their attendance. The committee will continue to take an interest in the bill as it goes through the parliamentary process. We will have a short suspension to allow the minister’s team to depart.

12:05

*Meeting suspended.*

12:08

*On resuming—*

**The Convener:** If members have any outstanding questions that they want me to put to the minister, they should let the clerks have them as soon as possible. I will ask for a single sheet from the Government outlining all the consultations that are currently taking place and the papers that have been produced by the Scottish and UK Governments.

**Ms Alexander:** I would like a matrix diagram. I tried to produce one myself last week with little boxes but failed miserably.

**The Convener:** I was going to say that we might ask for a Jim Mather mind map, but that might be too complicated for all of us.

**The Convener:** I was going to say that we might ask for a Jim Mather mind map, but that might be too complicated for all of us.

We will ask the Scottish Government to outline the timescales for both the UK and Scottish Government consultations, so that we can have a clear picture of what exactly is going on out there, which will also help for our energy inquiry. Please pass any other questions to the clerks.
ANNEXE C: WRITTEN EVIDENCE

WRITTEN EVIDENCE SUBMITTED TO THE LEAD COMMITTEE

In addition to the written evidence set out below, the lead committee for consideration of the Bill – the Transport, Infrastructure and Climate Change Committee – received a number of submissions of written evidence that are relevant to sections 48-51 of the Bill. These can be found at—


LETTER FROM COLIN IMRIE, SCOTTISH GOVERNMENT (DATED 9 FEBRUARY, 2009)

At the evidence session on 4 February 2009, I agreed to provide the Committee with clarification over a number of points which had been raised in relation to the energy efficiency and renewable heat provisions contained within the Climate Change (Scotland) Bill.

Q1: Mock regulations for the non-domestic building energy efficiency regulations

A mock up for regulations for Section 50: Energy Performance of non-domestic buildings will be provided for Stage 2 of the Bill.

Q2: Section 179 Housing Act

The Committee asked for clarity as to why it was necessary to remove this existing provision which is believed to be stronger than the general promotion duty contained within the Climate Change Bill. The aim of the energy efficiency provision is to promote energy efficiency across all sectors in Scotland, not only housing. This provision will cover policy and actions across all Scottish Government directorates. The reason for the choice that the Bill would “promote” rather than “improve” was due to initial concerns raised over the Government’s legislative competence to “improve” energy efficiency across all areas, as this may stray into the reservations set out in the Scotland Act.

It was never the intention that the repeal of section 179 of the Housing Act and its replacement by section 48 of the Climate Change Bill would remove the commitment to “improve” the energy efficiency of living accommodation. This can be discussed further prior to Stage 2, to ensure that the new provision continues to support the improvement of the energy efficiency of living accommodation.

Q3: Why have permitted development rights not been given for non-domestic buildings?

As announced in the parliament by Stewart Stevenson today, the relevant Amendment Order [the Town and Country Planning (General Permitted
Economy, Energy and Tourism Committee, 3rd Report, 2009 (Session 3) —
Annexe C

Development) (Domestic Microgeneration) (Scotland) Amendment Order 2009] was laid before the Scottish Parliament on Friday 6th February 2009. It will now be considered by the Subordinate Legislation Committee and the Local Government and Communities Committee.

Priority is being given to domestic buildings but the intention is to consider non-domestic buildings next. The variety of non-domestic building types, plus the large size of many non-domestic buildings and the consequent scale of microgeneration equipment, indicate that different issues may need to be considered compared to domestic buildings.

Q4: Scottish Planning Policy 6 / Merton Rule

The committee asked:

How is SPP6 being applied on the ground in Scotland?

The policy in SPP6 expects measures to reduce carbon dioxide emissions to be incorporated into building design before the planning application is submitted to the planning authority. Advice has been issued to help applicants do this (see Planning Advice Note 84 Reducing Carbon Emissions in New Development) but applications and decisions are not monitored centrally. It is for planning authorities in their determination of planning applications to apply the SPP policy, taking account of other material considerations. Some authorities apply their own policies to reduce emissions, and these do not necessarily follow exactly the wording used in the SPP.

Q6: Are there any plans to extend the requirements of SPP6? (e.g. to cover developments below 500 m2 or by increasing the 15% CO2 emissions reduction using Renewable Energy)

SPP6 already provides that planning authorities should use the process of preparing their development plans to consider whether local circumstances justify going beyond 15%, below the 500 sq metre threshold, and whether higher standards can be secured for particular developments. The policy target of 15% on-site renewables in SPP6 founds on the 2007 Building Standards and so a review will be necessary anyway when they are revised.

The Scottish Government is rationalising the current series of Scottish Planning Policies, including SPP6, into a single document. This is not a review of established national planning policy but will rationalise policy, expressing it in more concise terms, providing clarity and greater certainty of intended outcomes. This will require a different approach to expressing and explaining national planning policy but the policies will not be altered unless, for an individual topic, some adjustments are considered necessary.

The energy efficiency of all new buildings is addressed through the building standards system, which limits both carbon dioxide emissions and energy demand. Scottish standards are currently the most demanding in the UK. A further review of these standards is presently underway, investigating
improvements recommended in The Sullivan Report – ‘A low Carbon Building Standards Strategy for Scotland’. Research to support the current review indicates that, in the majority of cases, low and zero carbon technologies (including microgeneration) will be essential to meet the next revision to the energy standards.

Q7: Renewable Heat

The issue of Council Tax rebates and other financial incentives for renewable heat was raised. Under current local government legislation, councils in Scotland do not have the same level of discretionary powers to offer council tax discounts as councils in England. To give Scottish councils similar powers would require primary legislation. The Scottish Government is fully committed to the abolition of the Council Tax and therefore this proposal does not sit with our policy intentions. Following the recent consultation exercise, we will outline shortly how we intend to take forward our plans to introduce a fairer local tax for Scotland.

We already offer financial incentives through the Scottish Community and Householder Renewables Initiative, the Scottish Rural Development Programme, the Energy Saving Scotland small business loans and the public sector Central Energy Efficiency Fund. Broad enabling powers are in place in the Energy Act to establish a Renewable Heat Incentive (RHI). The Department for Energy and Climate Change, in consultation with the Devolved Administrations is conducting further analysis on how effective different structures for the RHI might be in encouraging more renewable heat generation. This work will form the basis of a consultation to be launched later this year on the design and delivery of the scheme. It is important therefore that we understand the detail of how the incentive will work before considering whether additional regulatory or financial measures will be required in Scotland.

Colin Imrie, Deputy Director, Energy Markets Division, The Scottish Government

LETTER FROM STEWART STEVENSON MSP, MINISTER FOR TRANSPORT, INFRASTRUCTURE AND CLIMATE CHANGE (DATED

I refer to your letter requesting additional information as a follow up to my appearance before the Economy, Energy and Tourism Committee on 4 March 2009.

The questions and their responses are contained in Annex A. I have also taken the opportunity to provide additional information for the Committee on Stage 2 amendments for Chapter 3 of the Bill and this information is contained in Annex B.

I do hope this information is helpful. I am also copying this letter to Patrick Harvie of the Transport, Infrastructure and Climate Change Committee.

Stewart Stevenson
### Annex A
#### Climate Change (Scotland) Bill – Part 5 Chapter 3
Additional information for the Economy, Energy and Tourism Committee

<table>
<thead>
<tr>
<th>Question reference</th>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
</table>
| General (1)        | What do you consider to be reserved and what is considered to be devolved and where are the boundaries in terms of the policies you wish to pursue? | Energy Efficiency – Sections 48 & 49  
The Scotland Act 1998 devolves powers to the Scottish Ministers concerning “the encouragement of energy efficiency other than by prohibition or regulation”  
Energy efficiency as it relates to energy markets is a reserved matter. This includes demand management/greenhouse gas mitigation measures such as the Carbon Emissions Reduction Target (CERT) and the Climate Change Levy and the proposed Community Energy Savings Programs.  
These programs provide the primary support for households and businesses in the UK to undertake energy efficiency improvements. The Scottish Government’s approach is to maximise action from these schemes in Scotland by deploying its own funds to leverage greater action on the ground. The Scottish Government considers that this is the most cost effective way to make important progress in improving the energy efficiency of existing homes in relation to a reserved area. |
|                    |                                                                          | Energy performance of non-domestic buildings – Section 50  
The regulation of building standards and the assessment of the carbon and energy performance of buildings are devolved matters.                                                                                   |
|                    |                                                                          | Renewable Heat – Section 51  
There is no reference to heat in the Scotland Act 1998. It is considered a devolved area and therefore Ministers have the powers to promote renewable heat.                                                                 |
<table>
<thead>
<tr>
<th>General (2)</th>
<th>Energy Efficiency – Sections 48 &amp; 49</th>
</tr>
</thead>
<tbody>
<tr>
<td>In relation to the above, will it be necessary to restrict the types of</td>
<td>The Scottish Government considers that it is not necessary to restrict the types of initiatives</td>
</tr>
<tr>
<td>initiatives you wish to pursue as a result of certain matters being</td>
<td>it wishes to pursue as a result of certain matters being considered reserved. For example the</td>
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<tr>
<td>considered reserved and if so, what are these initiatives?</td>
<td>Scottish Government is working to improve the energy performance of existing homes through</td>
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<td></td>
<td>working closely with energy supply companies to better deliver CERT measures in Scotland.</td>
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<td></td>
<td>There are constraints on the CERT scheme which can limit its deployment in Scotland, for</td>
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<td></td>
<td>example the Scottish Government is constrained in relation to CERT as it cannot provide</td>
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<td></td>
<td>‘top-up’ funds for those measures where CERT will not cover 100% of the direct costs. Nor</td>
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<td></td>
<td>can the Scottish Government directly change the CERT rules so as to address the specific</td>
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<td></td>
<td>factors that make CERT delivery in Scotland more challenging. As mentioned previously,</td>
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<td></td>
<td>however, the approach the Scottish Government is taking in these instances is to work closely</td>
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<tr>
<td></td>
<td>with the energy companies through the Energy Saving Scotland Advice Networks to systemically</td>
</tr>
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<td></td>
<td>introduce closer working relationship with insulation installers to drive the uptake of</td>
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<td></td>
<td>CERT insulation measures. The Scottish Government has also made representations to the UK</td>
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<td></td>
<td>Government on the differing nature of the housing stock in Scotland compared to England and</td>
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<td></td>
<td>how this therefore impacts upon the uptake of CERT measure in Scotland. The Scottish</td>
</tr>
<tr>
<td></td>
<td>Government is confident that this approach will help to ensure that Scotland gets its fair</td>
</tr>
<tr>
<td></td>
<td>share of CERT activity.</td>
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</tbody>
</table>

Energy performance of non-domestic buildings – Section 50

Because it is considered that the regulation of building standards and the assessment of the carbon and energy performance of buildings are devolved matters, activity in these general areas is not considered to be
restricted by the reservations in the Scotland Act 1998.

Renewable Heat – Section 51

The Renewable Heat Action Plan will cover measures where Ministers have devolved powers, including: awareness raising and consumer information; skills needs, and encouragement.

A regulatory incentive (i.e. an obligation on fuel suppliers) is being developed by the UK Government following the passage of the Energy Act 2008. That Act contains provisions which cover devolved matters. These were subject to a Legislative Consent Motion to enable Scotland to benefit.

<table>
<thead>
<tr>
<th>General (3)</th>
<th>What advice the Scottish Government has asked the UK Committee on Climate Change for in relation to the provisions contained in Chapter 3?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Scottish Government is currently working, through the Committee on Climate Change’s Sponsor Group (which includes the UK Government and Devolved Administrations) to agree the Committee’s corporate plan for 2009-12.</td>
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<td></td>
<td>In the first instance, the Committee will advise the Scottish Government on the levels it recommends for annual emissions targets. Its views will also inform the methodology adopted to specify a “Scottish share” of emissions from international aviation and international shipping.</td>
</tr>
<tr>
<td></td>
<td>The Scottish Government is currently considering the information contained in the Committee on Climate Change’s December 2008 report as it relates to Scotland. We have not, to date, requested any specific advice in relation to the provisions contained in Chapter 3 of the Bill. These areas are being considered as part of the Strategic Overview which is described in the response to question (5).</td>
</tr>
<tr>
<td>General (4)</td>
<td>Given that the Cabinet Secretary for Finance and Sustainable Growth has pledged to generate 16,000 ‘green jobs’, can you specify how this figure was arrived at and provide a breakdown by different types of technology (e.g. wind, wave, insulation installation etc) and the types of jobs that will be created and, therefore, the types of skills needed? Can you also specify the timeframe for meeting the pledge of 16,000 jobs?</td>
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<tr>
<td>The estimate of 16,000 new green jobs in Scotland by 2020 is based on the UK Renewable Energy Strategy consultation document, which cited a figure of 160,000 new renewable energy-related jobs in the UK by 2020. The estimate assumes that Scotland achieves a 10% share of jobs created across the UK. We consider, however, that the Scottish Government’s renewables targets, combined with Scotland’s natural resource, energy infrastructure and skills mean that we can go higher than this estimate. The UK estimate is based on an analysis of the potential expansion in centralised renewable electricity generation, renewable microgeneration and domestic biofuel feedstock and refinery activities necessary to meet the EU renewable energy transport targets.</td>
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<tr>
<td>General (5)</td>
<td>Can the Minister outline what are the expected contributions from energy efficiency, non-domestic buildings and renewable heat in terms of meeting the various targets set out in the bill?</td>
</tr>
<tr>
<td>Through the Strategic Overview project, the Scottish Government is working to build up a picture of how and when emission reductions might take place over the next 40 years, setting out in broad terms the key sectors for abatement in the short, medium and long term identifying where the major carbon savings could be made, highlighting the key milestones and actions in delivering the these savings and the barriers to implementation. A discussion document covering these issues is planned for publication in the summer of 2009.</td>
<td></td>
</tr>
<tr>
<td>Section 48 Question (1)</td>
<td>Apart from living accommodation, which other policies and actions will be covered by the requirement to promote energy efficiency? Will it be necessary to restrict the policy areas covered by the action plan in order not to stray into reserved matters?</td>
</tr>
<tr>
<td>It is envisaged that the Energy Efficiency Action Plan will include Government policies and actions to promote energy efficiency across all sectors. Whether or not it will be necessary to restrict the policy areas covered by the action plan will depend on the exact nature of the policy or action. Further information on the Energy Efficiency Action Plan will be detailed in the forthcoming outline.</td>
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</tr>
<tr>
<td>Section 48 Question (2)</td>
<td>What is the expected added value of the consultation on energy efficiency before the preparation of the plan for the promotion of energy efficiency is published?</td>
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<tr>
<td></td>
<td>A series of energy efficiency measures are already being delivered by the Scottish Government, while others are being developed. The Energy Efficiency Action Plan will bring all these measures together. Consultation is important to ensure that these measures can be considered comprehensively, so that activity can be added in areas in which there are gaps. In addition, consultation will ensure that the final version of the action plan has been subject to critical appraisal from stakeholders.</td>
</tr>
<tr>
<td>Section 48 Question (3)</td>
<td>Whether, in light of the recent decision of the Public Audit Committee to refer Audit Scotland’s report on energy efficiency to this Committee, the Minister thinks there is sufficient leadership shown at the highest levels for energy efficiency in the public sector?</td>
</tr>
<tr>
<td></td>
<td>The Scottish Government considers that there is sufficient leadership shown at the higher levels of the public sector. The Scottish Government’s Leading by Example High Level Groups, and its forthcoming Energy Efficiency Project Board, will raise the profile of energy efficiency in the public sector and enable senior level buy-in. The Scottish Government has provided funds through the Central Energy Efficiency Fund to enable action to happen on the ground. CEEF has provided local authorities, NHS Boards and Scottish Water with £20 million in interest-free loans for capital investment in energy efficiency measures. A further £4 million has been provided to the further and higher education sectors for similar energy efficiency support.</td>
</tr>
<tr>
<td>Section 48 Question (4)</td>
<td>Does the Minister believe there are any conflicts between the regulations and legislation covering social housing and his plans for energy efficiency investments as part of the action plan, such as an emphasis on budgets and resources within investment packages for social housing that are not related to energy efficiency improvements?</td>
</tr>
<tr>
<td></td>
<td>The Scottish Government does not believe that there are any conflicts between the regulations and legislation covering social housing and our plans for energy efficiency investments as part of the Energy Efficiency Action Plan.</td>
</tr>
</tbody>
</table>
| Section 50 | Question (1) | The Climate Change (Scotland) Bill will introduce an important new duty on Scottish Ministers to prepare and publish a plan for the promotion of energy efficiency across all sectors in Scotland. The Plan will highlight the range of Scottish Government policies and programmes that will continue to deliver significant improvements in the energy efficiency of the domestic sector within the existing legal framework. This will include recent announcements on funding for a major area-based home insulation scheme and a commitment to bring forward proposals for a significant loan scheme. New legislation to bring forward these measures is not required.

The Climate Change (Scotland) Bill seeks to introduce a legal framework for the introduction of energy assessments for existing non-domestic buildings. However, the industrial, business and public sectors are used to working within a range of obligations that protect their employees and wider society (e.g., in respect of health and safety, accessibility, fire safety, etc) that do not apply to the domestic sector.

There are currently no plans to introduce requirements for further periodic energy assessments for the domestic sector other than the requirements for Energy Performance Certificates at sale or rent that have just been implemented. As outlined above, this is because we believe that we can continue to make progress in improving domestic energy efficiency within existing legislation.

The introduction of regulatory requirements for the energy efficiency of housing would, in any case, be likely to drive out CERT investment. This would be contrary to current policy which is to seek to maximise CERT activity in Scotland and means that many Scottish householders would be denied access to this support. |

| Whether the Minister has any views on the omission of the domestic sector from the Bill and whether enabling provisions should be introduced to tackle energy efficiency in the domestic sector as well as in non-domestic buildings? |
**Section 50 Question (2)**

<table>
<thead>
<tr>
<th>In light of the Scottish Government’s announcement on building standards on 27 February, whether the Minister has any intention to introduce tougher, statutory building regulations in non-domestic sector, e.g. (i) introducing tougher mandatory building standards for new-builds mandating low- or zero-carbon rating within a decade, or (ii) legislating for energy efficiency in both social housing (introducing a Social Housing Quality Standard) and also in the private rental sector (requiring investments in energy efficiency to be made by landlords at the point of sale etc)?</th>
</tr>
</thead>
</table>
| (i) We have the ambition of low-carbon and eventually zero-carbon buildings. After this current review of energy standards in Scottish building regulations there will be at least a further two reviews. These will both occur within the ten years that follow and significant progress will be made in respect of our ambition.  

(ii) Social housing already has the best energy efficiency standards of any housing sector with two thirds of homes receiving a “good” rating on the National Home Energy Rating scale. A Scottish Housing Quality Standard (SHQS), similar in nature to the Decent Homes standard in England, was introduced in February 2004, though the energy efficiency requirements are more stringent to compensate for more extreme weather in Scotland. Whilst this is not a legislative requirement, social landlords are expected to meet the SHQS by 2015 which will help to further drive up energy efficiency standards in this sector.  
While energy efficiency standards are generally lower in the private rented sector than in the social sector, a number of factors should assist in improving standards within existing legislation and these are set out below.  

- An EPC showing the energy efficiency of the property must now be provided to prospective tenants before a house is let. EPCs should raise awareness of energy efficiency among tenants as well as giving them more information, and landlords should be encouraged by this to upgrade their properties to make them more marketable.  

- Landlords and agents accredited by Landlord Accreditation Scotland (LAS) are required to meet the Scottish Core Standards for Accredited Landlords, one of which relates to energy efficiency, insulation and heating.  

- We are also working with private landlords and their representative bodies to promote greater awareness of new and existing incentives to improve the energy efficiency of the private rented sector. |
efficiency of the homes they rent out.

- These incentives include:
  - Tax relief available under the Landlord Energy Saving Allowance.
  - Provision of loans under the Energy Saving Scotland – Small Business loans scheme.
  - Opportunities under the Carbon Emission Reduction Target scheme.

| Section 51 Question (1) | What steps the Scottish Ministers plan to take to promote the use of heat produced from renewable sources? What forms of renewable heat will be promoted and for what uses (domestic, commercial etc.)? | The measures will include: awareness raising and consumer information; addressing skills needs particularly for installation; highlighting building regulations; and the encouragement of heat mapping at a local authority level.

All forms of renewable heat technologies will be promoted, including: biomass combustion, heat pumps (air, ground and water source), solar thermal, wind to heat, anaerobic digestion, and geothermal. All scales will be promoted from individual households, level to large scale industrial. |

| Section 51 Question (2) | How the Scottish Ministers intend to ensure the delivery of the use of heat from renewable sources, especially in the context of the challenges posed by different types of building? | The introduction of the renewable heat incentive (RHI) at a UK level will play a key role in helping to stimulate the sector in the important period of early growth. The measures taken at a Scottish level will complement the RHI. Therefore activity at the Scottish and UK level should ensure we can meet our target of 11% heat demand from renewable sources by 2020. |
### Economic, Energy and Tourism Committee, 3rd Report, 2009 (Session 3) — Annexe C

<table>
<thead>
<tr>
<th>Section 51 Question (3)</th>
<th>What support will there be for promoting the use of renewable heat? Whether the Scottish Government have any intentions to increase the support available through the Community and Householder Renewables Initiative and the Scottish Biomass Support Scheme?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Financial support for installation of renewable heat technologies and feasibility studies is available from a number of grant programmes, including: Scottish Community and Householder Renewable Initiative, Scottish Biomass Heat Schemes; Scottish Rural Development Programme, and Climate Challenge Fund. In addition the Renewables Obligations support biomass CHP plants. The Scottish Government tripled funding on microgeneration and community renewables. We also announced funding of £2 million for the biomass heat scheme.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scottish Consultations</th>
<th>Energy Efficiency</th>
<th>Future action plan consultation planned.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Energy performance of non</th>
<th>Action on Climate Change: Proposals for improving the energy performance of existing non-domestic buildings:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Consultation ran from 2 September to 25 November 2008</td>
</tr>
<tr>
<td></td>
<td>• Consultation responses published on 22 January 2009</td>
</tr>
<tr>
<td></td>
<td>• Analysis of Consultation Responses Report published on 9 February 2009</td>
</tr>
<tr>
<td></td>
<td>• Scottish Government Response published on 10 March 2009</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Renewable Heat</th>
<th>Making Scotland a Leader in Green energy — draft framework for the development and deployment of renewables in Scotland. This consultation contained a section on renewable heat, including a draft Action Plan.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Consultation ran from 8 October 2008 – to 1 December 2008</td>
</tr>
<tr>
<td></td>
<td>• Consultation responses published on 30 January 2009</td>
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</tbody>
</table>

The responses will inform the Scottish Government’s Renewable Energy Action Plan due to be published later this year.
<table>
<thead>
<tr>
<th>UK Consultations</th>
<th>Energy Efficiency</th>
<th>Renewable Heat</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The UK Government is currently undertaking consultations on the following in relation to energy efficiency:</td>
<td>For information on UK Government consultations on renewable heat, please refer to the detailed list of consultations contained on the DECC website at: <a href="http://www.decc.gov.uk/en/content/cms/consultations/consultations.aspx">http://www.decc.gov.uk/en/content/cms/consultations/consultations.aspx</a> [Link no longer operates]</td>
</tr>
<tr>
<td></td>
<td>- Heat and Energy Saving strategy Consultation (concludes: 8 May 2009)</td>
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<tr>
<td></td>
<td>- Community Energy Saving Programme (CESP) (concludes: 8 May 2009)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Carbon Emissions Reduction Target (CERT) (concludes 14 April 2009)</td>
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</table>
A number of amendments are planned for Part 5 Chapter 3 of the Bill.

### Energy Efficiency

- It is proposed to seek to amend section 48(2) to replace the word “promote” with the word ‘improve’ to change this provision to “improve” the energy efficiency of living accommodation.

- For information the action plan will aim to promote energy efficiency, having particular regard to improving the energy efficiency of housing.

### Energy Efficiency of Non-Domestic Buildings

- Following the conclusion and analysis of the consultation on the proposals for improving the energy performance of non-domestic buildings, Stage 2 amendments are proposed to require, through secondary legislation, mandatory implementation of cost-effective improvements to existing non-domestic buildings. This SSI will be subject to affirmative resolution.

- It is not intended that this provision would be utilised immediately and as announced in the response to the consultation, a voluntary approach will be adopted initially to the implementation of cost-effective improvements to existing non-domestic buildings. This regulation making power is intended for future use if a voluntary approach is considered inadequate for delivering emission savings.

- Draft regulations for this will be provided for the Transport, Infrastructure and Climate Change Committee to consider before Stage 2 of the Bill process begins. These draft regulations will also be shared with the Economy, Energy and Tourism Committee.

### Renewable Heat

- It is proposed to amend the provision to introduce a commitment to produce an Action Plan and to update it regularly.
Finance Committee

Remit and membership

Remit:

1. The remit of the Finance Committee is to consider and report on-

   (a) any report or other document laid before the Parliament by members of
   the Scottish Executive containing proposals for, or budgets of, public
   expenditure or proposals for the making of a tax-varying resolution, taking
   into account any report or recommendations concerning such documents
   made to them by any other committee with power to consider such
   documents or any part of them;

   (b) any report made by a committee setting out proposals concerning public
   expenditure;

   (c) Budget Bills; and

   (d) any other matter relating to or affecting the expenditure of the Scottish
   Administration or other expenditure payable out of the Scottish
   Consolidated Fund.

2. The Committee may also consider and, where it sees fit, report to the
Parliament on the timetable for the Stages of Budget Bills and on the handling of
financial business.

3. In these Rules, "public expenditure" means expenditure of the Scottish
Administration, other expenditure payable out of the Scottish Consolidated Fund
and any other expenditure met out of taxes, charges and other public revenue.

(Standing Orders of the Scottish Parliament, Rule 6.6)

Membership:

Jackie Baillie (Deputy Convener)
Derek Brownlee
Linda Fabiani
Joe Fitzpatrick  
James Kelly  
Jeremy Purvis  
Andrew Welsh (Convener)  
David Whitton

**Committee Clerking Team:**

**Clerk to the Committee**  
Mark Brough

**Senior Assistant Clerk**  
Lewis McNaughton

**Assistant Clerk**  
Allan Campbell

**Committee Assistant**  
Jennifer Bell
Introduction

1. The Climate Change (Scotland) Bill (“the Bill”) was introduced in the Scottish Parliament on 4 December 2008. The Transport, Infrastructure and Climate Change Committee has been designated as the lead committee on the Bill at Stage 1, with the Rural Affairs and Environment Committee being designated as secondary committee. In addition, the Economy, Energy and Tourism Committee considered certain aspects of the Bill.

2. Under Standing Orders Rule 9.6, the lead committee at Stage 1 is required, among other things, to consider and report on the Bill’s Financial Memorandum. In doing so, it is required to consider any views submitted to it by the Finance Committee (“the Committee”).

3. At its meeting on 13 January 2009, the Committee agreed to adopt level three scrutiny in relation to the Bill. The Committee took oral evidence from the Scottish Environment Protection Agency (SEPA) – who also provided written evidence – the Federation of Small Businesses (FSB) and from Scottish Government officials, at its meeting on 10 February. The Scottish Government and the FSB submitted supplementary written evidence after they gave oral evidence to the Committee.

4. The Committee also received written evidence from—
   - Aberdeen City Council
   - East Ayrshire Council
   - Glasgow City Council
   - Fife Council
   - Confederation of Forest Industries
   - East Lothian Council
   - Highland Council

1 Information on the Committee’s three-level system of scrutiny for Financial Memoranda is available at: http://www.scottish.parliament.uk/s3/committees/finance/financialMemo.htm
5. All written evidence received is published as the Annexe to this report. The Official Report of the oral evidence session on 10 February can be found on the Parliament’s website.²

THE BILL

6. The Bill sets a long-term target to reduce Scotland’s emissions of Kyoto Protocol greenhouse gases by 80% by the year 2050. This target will be supported by a framework of annual targets intended to stimulate policies necessary for achieving the long-term target. Many of the policy measures required to meet these targets will not require legislation to implement them. Certain climate change mitigation and adaptation policies have been identified which do require legislation and the Bill contains provisions in Part 5 which will allow these to be taken forward.

7. The Bill is separated into five Parts—
   - Part 1 creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050. To help ensure the delivery of these targets, the Bill also requires that Scottish Ministers set annual targets, in secondary legislation, from 2010 to 2050.
   - Part 2 allows Scottish Ministers to establish a Scottish Committee on Climate Change, or to designate an existing body, to exercise advisory functions.
   - Part 3 requires Scottish Ministers to report regularly to the Parliament on Scotland’s emissions and progress towards the targets set in the Bill.
   - Part 4 allows Scottish Ministers, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.
   - Part 5 is divided into four chapters—
     - Chapter 1 contains provisions relating to adaptation to the impact of climate change. It requires Scottish Ministers to produce a report setting out their objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced. It also contains an enabling power for the Scottish Ministers to vary the permitted times during which muirburn may be made.
     - Chapter 2 allows modification by regulations of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change.

Chapter 3 requires Scottish Ministers to produce an action plan setting out their current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change in regard to energy efficiency. It also contains measures for improving the energy performance of existing non-domestic buildings in order to raise the contribution that those buildings can make to mitigating climate change through reducing energy demand and thereby emissions of greenhouse gases. It also places a duty on Scottish Ministers to promote the use of heat from renewable sources.

Chapter 4 enables Scottish Ministers to make regulations addressing various issues in moving towards a zero waste society, and securing a more sustainable use of resources, thereby limiting the emissions of greenhouse gases which contribute to climate change.

SUMMARY OF COSTS OUTLINED IN THE FINANCIAL MEMORANDUM

8. The Financial Memorandum contains substantial cost information, and explanation of policy background and assumptions underpinning the cost estimates. The nature of the Bill means, however, that the cost information is not presented in a way that allows identification of clear total one-off or recurring costs associated with the Bill’s implementation.

Part 1 – Emissions reduction targets

9. Based on a range of research, the Financial Memorandum estimates that the overall cost to Scottish Government, local authorities, public bodies and Scottish businesses of delivering an 80% reduction in emissions by 2050 would be in the region of 1%-2% of GDP in 2050. In 2006, 1%-2% of Scottish GDP would have been equivalent to £1 billion - £2 billion. These costs would apply across the whole of the Scottish public sector and all business sectors.

10. The exact cost depends on the particular policy measures used to contribute to meeting the target. The Financial Memorandum points out that it is extremely difficult to cost sub-sets of options. However, it outlines one assessment of a set of measures which may, in the year 2050, cost the equivalent of £1.7 billion at 2005 prices.

11. These overall figures do not assess the wider economic costs from implementation or the proportions of costs likely to fall on producers, consumers or taxpayers. However, the Financial Memorandum points out that research estimates the cost to society if no action is taken to alleviate climate change to be 5%-20% of global GDP.

12. The Financial Memorandum states that costing delivery of the 2030 target is also difficult as a straight line reduction trajectory is unlikely. Rather, some more significant emissions reductions are expected to result from step changes in approach.

13. The Bill does not specify the means by which the annual targets are to be delivered, and the costs and efficiencies will depend on many inter-related factors.
Future emissions also depend, at least in part, on the general level of economic activity. Ministers will be required to seek advice on the most cost-effective reductions available when setting annual targets. The periodic statutory instruments prescribing annual targets (which will be instruments subject to the affirmative procedure) will be accompanied by a Regulatory Impact Assessment which details the likely cost implications.

14. In the event of failing to meet an annual target, the Bill includes powers to address this by purchasing carbon units. The cost of this would depend on the extent of any failure and the market price of units (estimated to be at least £15-£30 per tonne of carbon dioxide equivalent), and would represent a transfer of funds from Scotland to the country generating the carbon credit.

15. The Bill allows for the establishment of a carbon tracking and accounting scheme, with an estimated cost on the Scottish Government or a designated public body of £60,000 per annum.

Part 2 – Advisory functions

16. The Bill requires Ministers to seek independent expert advice before setting annual targets. At present, the Scottish Government is committed to providing £275,000 in 2008-09 to part-fund the UK Committee on Climate Change, established under the UK Climate Change Act 2008. The Financial Memorandum states that this is regarded as the most cost-effective option for obtaining advice. In the event that Ministers decide to exercise the Bill’s power to establish a Scottish Committee on Climate Change, the Financial Memorandum estimates a cost of around £2.5 million per annum. In that event, there may be some potential for savings on payment to the UK Committee for work in relation to Scotland.

Part 3 – Reporting duties

17. Various reporting requirements set out in the Bill are estimated to cost a total of £17,000 per annum, with this cost to be absorbed within existing administration budgets.

Part 4 – Duties of public bodies

18. The Bill provides for the possibility of imposing a duty on public bodies to ensure consistent and fair contributions to delivery across the public sector. The cost of doing this will depend on the circumstances. The Financial Memorandum does not outline any estimates, stating that imposing the duty would be part of the cost of meeting the various statutory targets. It states that, if an order was proposed to impose such duties, a Regulatory Impact Assessment would be produced.

Part 5 – Other climate change provisions

Chapter 1 – Adaptation

19. The Bill requires that, where the Secretary of State has laid a report on the impacts of climate change (under section 56 of the UK Act), Scottish Ministers must lay a programme before the Parliament setting out proposals for adapting to
these impacts. The Financial Memorandum estimates staff costs of £30,000 in
each year in which such a programme is required (within three years of the UK Act
coming into force, and thereafter at least every five years).

Chapter 2 – Forestry
20. The Financial Memorandum states that the power to modify the functions of
the Forestry Commissioners in respect of Scotland is intended in the first instance
to allow the Forestry Commission Scotland (FCS) to enter into joint ventures for
renewable energy development, and to let timber cutting rights to fund climate
change activity. Initial costs of establishing joint ventures are estimated at £0.5
million per annum for 2009-10 and 2010-11, to be met from current FCS budgets.
It is estimated that the potential net annual income from joint ventures could reach
£10 million by 2012 and £30 million by 2020.

21. Initial costs of establishing contracts for letting cutting rights are estimated at
£0.2 million per annum for 2009-10 and 2010-11, to be met from current FCS
budgets. No estimate of potential income is given. A Regulatory Impact
Assessment would be prepared for any secondary legislation to pursue this.

22. Initial costs of pursuing the option of establishing an additional body to
pursue woodland creation are estimated at £0.3 million per annum for 2009-10
and 2010-11 – again to be met from current FCS budgets – although detailed
proposals have yet to be developed.

23. For all the forestry initiatives, the Financial Memorandum suggests that, after
the first two years, running costs will be funded from income generated.

Chapter 3 – Energy efficiency
24. The Financial Memorandum states a range of cost scenarios that may arise
from provisions to improve the energy performance of non-domestic buildings.
The total cost to the Scottish Government depends on a number of variables, and
the Financial Memorandum states that detailed estimates cannot be developed
until the Bill is enacted and new responsibilities agreed. The menu of preliminary
estimates results in scenarios with one-off costs ranging from £0.3 million to £0.6
million, and average annual costs ranging from £0.3 million to £12.4 million.

25. The potential costs on local authorities are similarly wide-ranging. The
Financial Memorandum estimates the average annual costs of the scenarios to be
from £2.6-£3.5 million to £27.7-£37 million. Scenarios for the costs on other
bodies, individuals and businesses range from average annual costs of £5.3-£6.2
million to £55.4-£64.7 million. Again, any secondary legislation will be
accompanied by a Regulatory Impact Assessment.

Chapter 4 – Waste reduction and recycling
26. The Financial Memorandum states that this chapter of the Bill contains
enabling powers to introduce a wide range of secondary legislation. The costs
and efficiencies arising as a result of the proposals will vary widely according to
how and when they are implemented and it is, therefore, not possible to provide
exact costings for the proposals which will come forward in secondary legislation.
All secondary legislation will be accompanied by a Regulatory Impact Assessment.
27. The Financial Memorandum includes a table which summarises the potential estimated costs of the provisions in this chapter of the Bill (see Table 8 on page 51).

SUMMARY OF EVIDENCE

Specific issues

Advisory functions (Part 2)

28. Evidence from the UK Committee on Climate Change (UKCCC) supported the assumptions in the Financial Memorandum relating to its advisory functions. It agreed that future Scottish annual contributions to the Committee are likely to be in line with that made in 2008-09, i.e. £275,000. Also, the UKCCC considered that additional funding may be required where it is commissioned to provide advice and the cost of that task is particularly expensive. In fact, the UKCCC considered it likely that such additional funding would be required, but noted that specific costs and the timing of any required funding were yet to be established.

29. SEPA referred to the provision in the Bill to establish a Scottish Committee on Climate Change which would provide the advisory function currently carried out by the UKCCC. SEPA acknowledged that at this stage it was difficult to comment on the scale of additional charges relating to a Scottish advisory function. SEPA expected, however, that the costs of carrying out such a role would be substantial; requiring expertise in climate change science and environmental technology, economic assessment and modelling and understanding of social impacts.

30. In supplementary evidence, the Scottish Government confirmed that its contribution to the funding for the UKCCC is expected to vary year on year. This is partly due to the inclusion in the 2008-09 fees of one-off start up expenditure. Moreover, the Government confirmed that additional funding is also expected to be required for analysis regarding the annual Scottish targets and trajectory. It was suggested that—

"if this work requires, for example, an additional analyst and perhaps some additional research to build on the analysis work already undertaken by the Committee, this could be estimated to be in the region of up to £100,000."

31. The Government also confirmed that the UKCCC is currently considering the resource implications of work in support of the Bill, in addition to reviewing its funding requirements for 2009-10 with the UK administrations.

32. In relation to the estimated cost of establishing a Scottish committee on climate change, the Scottish Government provided further details of how it had arrived at its estimated annual cost of £2.5m. Against the UKCCC’s annual cost of £2.7m, the Government identified a number of possible savings: through an information sharing arrangement with the UKCCC; employing a slightly smaller secretariat; lower remuneration for committee members; and reduced accommodation costs as a result of co-location. In response to the views expressed in evidence to the Transport, Infrastructure and Climate Change
Committee\(^3\) that the cost of a Scottish Committee would be less than estimated in the Financial Memorandum, the Government stated that—

> “While we acknowledge that our estimates are not precise sums, we remain convinced that the figures [presented in the Financial Memorandum] indicate the scale of the cost difference between contributing to the UKCCC and establishing a Scottish Committee.”

**Forestry (Part 5, Chapter 2)**

33. In written evidence, the Confederation of Forest Industries (ConFor) considered that insufficient information is available in the Financial Memorandum to be able to assess the likely impact of the proposals on joint ventures and leasing rights.

34. ConFor stated that there is no information publicly available on which to judge the accuracy of the cost estimates for income from joint ventures. It said that, without specifying the areas proposed to be leased and the terms of the lease, it is not possible to estimate the potential income available, the impact of spending this income on planting new forests, or of the impact on wood processing businesses. ConFor acknowledged, however, that further details on joint ventures and leasing arrangements would be provided alongside forthcoming secondary legislation and that at that point, an understanding of the cost impacts would be better known.

35. In evidence to the Committee, Scottish Government officials provided some explanation of the likely costs under the forestry provisions. Regarding joint ventures for renewable energy projects, officials suggested that the estimated income was based on a 150MW wind farm delivering around £3m per year.

36. In relation to the letting of timber cutting rights, officials indicated that the level of income generated depended upon the area that is let and the terms of the lease. They said, however, that any lease arrangement would have a reserve price that would take into account the value of the assets to the FCS and any additional costs that might be associated with leasing, such as paying grants to the lessee. Subject to these factors, officials suggested that the option of a 75-year lease of 100,000 hectares, as mentioned in the Financial Memorandum, could be expected to generate an income in the region of £150m-£200m.\(^4\)

37. The Government also confirmed that the consultation on the forestry provisions in the Bill has just concluded and that it is collating the responses. In parallel, officials have undertaken work on an options review, on which they will report to Ministers by the end of February 2009. It is understood that the review will provide financial analysis of joint ventures, the leasing of forest land and details of costs associated with setting up a membership-led body to which cutting rights receipts could be transferred.\(^5\)

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Concern was raised in evidence to the Committee about the wide-ranging nature of the enabling powers in the Bill relating to enhanced Energy Performance Certificates (EPCs). In supplementary written evidence, the FSB considered the scope of the Government action to be unclear which, it said, made it difficult to ascertain the potential impact of the Bill. It referred to the seven scenarios for enhanced EPCs as “having severe cost and practicality implications” for business and public bodies (the potential cost to businesses ranges from £5.3m to £64.7m p.a.).

A similar point was made regarding the potential costs to local authorities, which the Financial Memorandum states could range from zero (paragraph 193) to £37m p.a. (Table 6 on page 39). Glasgow City Council criticised the Financial Memorandum and suggested that it did not enable an authority the size of Glasgow, which has in excess of 1000 buildings, to accurately compile the increased level of spending and resources that will be required. In relation to the information that will be included in future secondary legislation and a fully costed RIA, East Ayrshire Council stated that—

“it is not until this information is available that local authorities will be able to comment on whether any financial implications are reflected and whether the costs associated with the Bill can be met or made self-financing through the levy of penalty charges.”

In other evidence, SEPA recognised that the enhanced EPC provisions in the Bill would likely be a much bigger issue for local authorities, due to the size of their building stock compared with that of SEPA. On the cost estimates themselves, SEPA stated that it was difficult for it to comment on the accuracy of the figures given that it does not get involved in areas such as building regulation.

The Scottish Government acknowledged that the seven scenarios for the energy performance of non-domestic buildings covered a wide range of possibilities, which could have significant financial impacts on public bodies, local authorities and businesses. Government officials confirmed that no policy decision had been taken to exclude any of the seven scenarios and highlighted the various factors on which the costs were based. They said that they were currently taking advice on the responses received to their consultation on the different scenarios (which closed on 25 November 2008) with the intention of reporting back to Ministers, and hoped to find a way forward for the next stage of the Bill.

The Government also confirmed its intention to address all costs associated with the chosen policy on enhanced EPCs in a detailed RIA, which would accompany the regulations. It was stated that there is every possibility that the regulations will be included within the first 10 years of annual targets and could come in shortly after the end of the current spending review period which ends in 2011. In addition, the Government explained that it would carry out a rigorous
review of these regulations (within 10 years of the introduction) to assess their impact.

Waste reduction and recycling (Part 5, Chapter 4)
43. SEPA’s view was that, as a first cut, the costs relating to the provisions on waste reduction and recycling (presented in Table 8 on page 51 of the Financial Memorandum) are a reasonable set of assumptions. Despite this, however, SEPA accepted in written evidence that “the cost of the waste provisions cannot be fully anticipated because it is not yet known whether the voluntary agreements will be sufficient, thus rendering the provisions unnecessary.”

44. Other evidence was more critical of the information contained in the Financial Memorandum. The FSB referred to inconsistencies in the presentation of costs in the Financial Memorandum and suggested that it would have been helpful if all of the costs had been calculated to give a total figure for businesses across Scotland.10 (The costs given in relation to waste prevention and management plans refer only to the cost of preparing an individual plan.) Whilst the FSB imagined that it would be asked to contribute to modelling work for any future RIA on these proposals, it stated that it would much rather that the Government had already done this work.11

45. Also, the FSB noted the different types of plans that could be required under the regulations for waste reduction and management plans. The Policy Memorandum describes them as ranging from plans for an individual construction project to plans for waste generated by a business on an ongoing, day-to-day basis (e.g. office waste).12 The FSB considered the cost implications of these options to vary considerably and suggested that until the Government was clear about its chosen approach, it was difficult to be able to judge the likely cost impact of the proposals in the Bill.13

46. Glasgow City Council also found the lack of detail contained in the Financial Memorandum to be problematic. The Council referred to the information on carrier bags, deposit and return schemes and waste management plans and stated that it was difficult for the Council to assess the likely cost of widespread introduction of these initiatives.

47. Other evidence queried certain specific cost estimates contained in the Financial Memorandum. SEPA considered the enforcement costs relating to duties to provide recycling facilities (estimated at £15 per hour) to be insufficient and suggested that a more senior member of staff would be required for such a task. East Ayrshire Council made a similar point in relation to the estimated staff costs of registering waste prevention and management plans (estimated at £15 per plan).

48. Fife Council questioned the appropriateness of the £3.5m p.a. cost of enforcing carrier bag charges on the basis that many large retailers already implement such schemes on a voluntary basis. It also, along with the FSB,

12 Climate Change (Scotland) Bill, Policy Memorandum, paragraph 119.
suggested that Victoria Quay was not a particularly helpful example to use as an indicator of the cost of providing recycling facilities in business premises across Scotland.

49. In relation to the provisions on recycling, the FSB commented on the omission of “the inevitable cost implications to local authorities of providing the necessary infrastructure to support additional recycling.” It suggested that if local authorities – as the main bodies that collect waste from small businesses – do not have the facilities to cope with that task then small businesses will not be able to save money through increased recycling.14

50. In written evidence, the Scottish Retail Consortium (SRC) expressed concern that the waste and recycling provisions would have a very serious impact on the operational costs for retailers in Scotland, irrespective of size or location.

51. The Scottish Government acknowledged that the enabling powers in the Bill relating to waste reduction and recycling could have a potentially significant financial impact on public bodies, local authorities and businesses. However, as officials explained, the Government hopes that voluntary work might achieve a lot of the outcomes sought by the Bill, in which case these powers might not need to be implemented.15 Officials explained that it was conceivable that the backstop of potential secondary legislation (and the related duties that would fall on public bodies and businesses) could encourage people to think more carefully about taking voluntary action to reduce waste. The Government confirmed that if it is decided that regulations are required then the associated financial issues that they raise will be addressed in a supporting RIA.

General issues

Adequacy of cost estimates

52. The Financial Memorandum recognises that, in relation to the action necessary to meet the various emissions reduction targets, there is considerable uncertainty about the cost implications of the Bill. It suggests that where these costs will fall and how they will impact on output by sector will depend upon the paths chosen to deliver the emissions reductions.16

53. SEPA told the Committee that, as far as it could see and given the available information, the cost estimates contained in the Financial Memorandum are appropriate and reflect the likely range of uncertainty associated with the proposals—

“We think that the financial memorandum is a reasonable first stab at some of the costs, bearing in mind that the actual costs will depend on the detail. The devil will be in the detail of how the measures are framed, the scope of the duties and powers, and the enforcement regime that is put in place. With

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16 Climate Change (Scotland) Bill, Financial Memorandum, paragraph 148.
all that in mind, we think that the Scottish Government made a good attempt.”

54. Whilst SEPA recorded a slight hesitation about some of the costs which it considered to be underestimations (relating to carbon accounting and enforcement duties relating to the provision of recycling facilities), it was comfortable that greater clarity would be achieved at the regulation stage.

55. A number of local authorities acknowledged the statement in the Financial Memorandum that the cost assumptions cannot be accurately predicted at this time and that many uncertainties exist. Dundee City Council, for example, considered that it had no basis on which to disagree with the figures.

56. Other evidence from local authorities – whilst recognising the inherent difficulties in making such long-term cost estimates – suggested that the information contained in the Financial Memorandum did not go far enough. For example, Fife Council said that it appreciated the difficulty in making cost projections in the face of changing markets and behaviours and unproven technologies, but called for the Scottish Government to provide more detailed and robust estimates. East Lothian Council highlighted what it referred to as the broad brush approach of the Financial Memorandum and added that it required clearer guidance from Government.

57. Aberdeen City Council went further and described the cost estimates provided in the Financial Memorandum as “too vague” and “merely a best guess based on uncertainties”. The Council also suggested that “the costs are difficult to trust since they are only proxy figures based on disaggregating UK costs” and called for greater transparency in the methodologies used to make the projections.

58. Other evidence highlighted the fact that some of the measures, such as carbon capture and storage (CCS) technologies, would require significant investment in the short term with savings periods not being achieved until later. SEPA stated that many of the technological improvements necessary to head towards a lower carbon infrastructure will bring costs and noted that the Financial Memorandum does not include anything on invest-to-save or funding for the promotion of reduced carbon emissions programmes for public sector bodies. It suggested that this omission could discourage organisations from taking necessary, timeous action.

59. A number of councils considered that the investment required in, for example, carbon reductions projects, would be challenging when other competing priorities and service needs also have to be met. For example, East Lothian Council considered it to be problematic that some of these technologies will not have financial pay back until several years beyond the current council budget and election cycles making it difficult to approve long-term projects.

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19 Highland Council, Glasgow City Council, Dundee City Council
60. Fife Council called on the Government to take a more realistic approach and suggested that some of the costings be revised to separate efficiency savings from anticipated outlay costs. The Council referred to CCS technologies and advocated a more cautious approach to the potential savings that could be derived from them until their value in meeting the annual targets has been proven.

61. In relation to their particular circumstances, Glasgow City Council and Highland Council considered that they could experience greater challenges and costs in meeting the Bill’s targets. Glasgow City Council considered that the predicted impact on Scottish GDP of the Bill would have a disproportionate impact on Glasgow. Highland Council suggested that its unique geography, climatic conditions and transient population could lead to higher costs.

62. In evidence to the Committee, Scottish Government officials stated that they have taken a macro approach to the Bill, but accepted that “this only takes us so far and we are now looking to put in place secondary legislation and a more detailed analysis”.20

63. Officials confirmed that, whilst the costings for delivering the 2050 emissions reductions targets are based on UK figures, work is underway – in the shape of a strategic overview – to consider whether they are appropriate using Scotland-specific data.21 They considered that—

“Many pieces of information are part of the jigsaw, and it is difficult for us to leap-frog over things that are not yet in place. That is why it is a challenging task for the committee to consider the financial memorandum as it stands. We will be more informed as things progress. When the strategic overview is finished and we know what the UK emissions budgets will be, we will have a much clearer idea of the pace of activity that will be needed. We will be able to add another level when we bring forward our annual targets, which we hope will be put in place through regulations in June 2010.”22

64. In response to some of the concerns raised by local authorities about the lack of financial detail in the Bill, officials confirmed that “local authorities will have a contribution to make, but we do not quite know what form that contribution will take.” They said that Part 5 of the Bill, without being overly specific, sets out some of the policies that might in future contribute to reducing emissions.23

65. Government officials also responded to the suggestion that Ministers report to Parliament on the impact of the Bill on GDP. They said that because GDP figures are generally UK based it is difficult to extrapolate to obtain Scottish GDP numbers. They also referred to a further difficulty that could arise in attempting to define (in legislation) exactly what is meant by UK and Scottish GDP.24

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66. The Bill confers various regulation-making powers on the Scottish Ministers, particularly in relation to the provisions contained in Part 5. The Financial Memorandum states that such regulations will be supported by a fully costed RIA.

67. In evidence to the Committee, the FSB said that it was primarily concerned about the nature of secondary legislation enabled by the Bill. In its supplementary written evidence it stated—

“We of course appreciate the benefits of using secondary legislation, however, this should be of a supporting nature; the intention of the legislation having been set out in the primary legislation. We believe that the measures currently outlined are extremely wide-reaching and the scope of government action unclear. This means it is very difficult to ascertain the potential impact of these measures.”

68. The FSB asserted that—

“With some of the proposals having severe cost and practicality implications... for both business and public bodies, we do not think it is appropriate for Parliament to be asked to vote to allow Ministers such a wide range of legislative powers without more detailed intentions and costings.”

69. As well as seeking clarity of approach from the Government to enable judgements to be made on the costs involved, the FSB considered that “better regulation” would allow an opportunity to design a regime that has the most streamlined impact. It suggested that such an approach would increase efficiency, simplify compliance and mitigate the impact on small businesses and other vulnerable groups. The FSB explained that, as the Bill is set out, those opportunities have not been fully exploited—

“For example, if all business premises are to have energy performance certificates—if that is the option that the Government goes for—and waste management plans, that will be an opportunity to consider streamlining such regulations for business premises. In the waste and energy efficiency sections of the Bill, I have counted about six or seven regimes that would require enforcement, paperwork and record keeping. As drafted, the Bill makes it extremely costly both to business and to the public purse.”

70. Other evidence reflected some of the issues raised by the FSB. For example, East Lothian Council commented that it was difficult to comment on the costs of the proposals in the Financial Memorandum ahead of the detailed secondary legislation. Also, Dundee City Council said that it was not possible for it to quantify the likely costs to be contained within secondary legislation.

71. SEPA, however, told the Committee that it was reasonably comfortable for some of the costs to be firmed up by the regulations and accompanying RIAs. It referred to its experience of implementing European legislation and stated that “it

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is not unusual for us to narrow down on costs as time goes on.” SEPA also confirmed that it is reasonably confident that, as progress is made towards the detail of the RIAs, there will be ample opportunity to establish (with the Scottish Government) what the costs might be and to carry out any modelling that might be required.

72. In evidence to the Committee, Scottish Government officials confirmed that the Bill provides a framework and essentially represents the introduction of enabling powers. They stated that it is not possible at the moment to state with precision the cost implications for local authorities and others as this depends on the exact nature of the regulations that may be made 10 or 20 years down the line, if they are made at all.

73. Officials considered that as it becomes more difficult to meet the emissions reductions targets in the next 30 or 40 years, “we might have to turn to more regulatory measures and enforcement action to squeeze out the necessary carbon to achieve the 80% reduction.”

CONCLUSIONS

74. The Committee acknowledges the uncertainty over some of the costs associated with the Bill, particular in relation to the performance of unproven technologies and methods for reducing carbon emissions. The Committee accepts that the Financial Memorandum adequately reflects these margins of uncertainty.

75. The Committee notes the enabling nature of the Bill, particularly regarding the provisions contained in Part 5. Significant concern was raised, however, in evidence that not enough details have been made available on the likely cost impacts of these possible, future regulations. The Committee considers that the Financial Memorandum would have been stronger if modelling work had been carried out on the potential financial impact of the measures on businesses and public bodies. The Committee also considers that in a number of areas insufficient policy direction has been provided, which has made it difficult for local authorities and businesses to be able to assess the financial impact of the proposals.

76. The Committee notes that the Scottish Government is currently undertaking significant pieces of work to finalise some aspects of its policy, namely, the Scottish Government’s strategic overview project, an options review on the forestry proposals and the consideration of energy efficiency scenarios. The Committee considers that this work will provide vital indications of future costs. Given the significant implications of this work, the Committee would have preferred that it had been completed in time for its consideration of the Financial Memorandum to the Bill. As a result, the Committee expects to take an interest in scrutinising the financial impact of the outcomes of this work.

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77. The Committee, nonetheless, welcomes the Government’s commitment that all substantive regulations will be accompanied by a fully costed regulatory impact assessment.

78. Where significant expenditure associated with a bill will only become apparent with subordinate legislation, the Committee has in the past noted that it will track the subsequent statutory instruments and seek to scrutinise the financial implications. The Committee gives notice that it may seek to do so for instruments arising from this Bill.

79. Given the long-term perspective of the Bill, and the wide range of policy streams that may contribute to its implementation, the Committee recommends that the Scottish Government should consider how it will monitor and control the cumulative costs of implementation.
ANNEXE: SUBMISSIONS RECEIVED

This annexe contains submissions from—

- Aberdeen City Council;
- Confederation of Forest Industries;
- Dundee City Council;
- East Ayrshire Council;
- East Lothian Council;
- Fife Council;
- Glasgow City Council;
- Highland Council;
- Scottish Retail Consortium;
- SEPA;
- UK Committee on Climate Change;
- The Scottish Government (supplementary – dated 18 February 2009);
- The Scottish Government (supplementary – dated 25 February 2009); and
- The Federation of Small Businesses (supplementary).

SUBMISSION FROM ABERDEEN CITY COUNCIL

Consultation

1. Did you take part in the consultation exercise for the Bill, if applicable, and if so did you comment on the financial assumptions made?

   Yes, Aberdeen City Council submitted a formal response to the Climate Change Bill Consultation in April 2008.

2. Do you believe your comments on the financial assumptions have been accurately reflected in the Financial Memorandum?

   No, the financial implications were not readily investigated within the original consultation document. Instead there was a greater focus on carbon trading.

3. Did you have sufficient time to contribute to the consultation exercise for the Bill?

   Yes.

Costs

4. If the Bill has any financial implications for your organisation, do you believe that these have been accurately reflected in the Financial Memorandum? If not, please provide details.
The Financial Memorandum document has taken certain issues further than in our original consultation response. For example the issues of waste, energy performance certificates, and ensuring compliance were not previously discussed in great detail.

Also the costs to a Local Authority have been mentioned in the Financial Memorandum but again, not in sufficient detail. For example, it is worth considering that in the future Local Authorities may incur penalties and fines for not meeting legislation e.g. Energy Performance Certificates.

5. Are you content that your organisation can meet the financial costs associated with the Bill? If not, how do you think these costs should be met?

At this time, Aberdeen City Council are uncertain whether the financial costs can be met due to the vague methodologies used and immeasurable financial uncertainties in the document.

Plus, it is stated that it is not possible to predict cost profiles in the period leading up to 2050. Surely this is the most important and most costly period for any organisation given the level of work required to meet the 2050 target of an 80% carbon reduction.

6. Does the Financial Memorandum accurately reflect the margins of uncertainty associated with the estimates and the timescales over which such costs would be expected to arise?

The figures given relating to Scotland’s associated costs are difficult to rust since they are only proxy figures based on disaggregating UK costs.

The estimates provided in the document are vague and the assumptions made are merely a best guess based on uncertainties. There is also very little transparency of the chosen methodology.

Wider Issues

7. If the Bill is part of a wider policy initiative, do you believe that these associated costs are accurately reflected in the Financial Memorandum?

No, Aberdeen City Council believes that the associated costs are too vague and not accurately reflected in the Financial Memorandum.

8. Do you believe that there may be future costs associated with the Bill, for example through subordinate legislation or more developed guidance? If so, is it possible to quantify these costs?

Yes, Aberdeen City Council believe that there will be future costs associated with the Bill, as the role of ensuring compliance and enforcement often falls to Local Authorities. Therefore there will be costs associated with this.
Questionnaire

1. Did you take part in the consultation exercise for the Bill, if applicable, and if so did you comment on the financial assumptions made?

   A. The recently introduced measures for forestry - joint ventures and leasing on the National Forest Estate - were not contained in the original consultation.

2. Do you believe your comments on the financial assumptions have been accurately reflected in the Financial Memorandum?

   A. Not appropriate.

3. Did you have sufficient time to contribute to the consultation exercise?

   A. Not appropriate, so far as the consultation on the original Bill is concerned, but the time allowed for consulting on the newly introduced Sections relating to Forestry Provisions was insufficient, particularly as the period spanned the Christmas holidays.

Costs

4. If the Bill has any financial implications for your organisation, do you believe that these have been accurately reflected in the Financial Memorandum? If not, please provide details.

   A. There may be implications for private sector companies who enter into a joint venture or lease with the Forestry Commission, and there could be an impact on wood processing companies from a change in management of 100,000 hectares of the NFE, but it is not possible to make any estimate of that given the limited information currently available.

5. Are you content that your organisation can meet the financial costs associated with the Bill? If not, how do you think these costs should be met?

   A. As referred to in the answer to the previous question, there is too little information available on which to make any meaningful estimation.

6. Does the Financial Memorandum accurately reflect the margins of uncertainty associated with the estimates and the timescales over which such costs would be expected to arise?

   A. The figure for income from joint ventures is presumably based on information from the Forestry Commission. There is no publicly available information on which to judge the accuracy of the sums quoted, and no mechanism for estimating the impact on private sector businesses.
There is no income figure given for the leasing proposal, simply a recognition that this would depend on a range of factors. Without specifying the areas proposed to be leased and the terms of the lease, it is not possible to make any estimation of the potential income available, the impact of spending this money on increased new planting of forests or of the impact on wood processing businesses.

**Wider Issues**

7. *If the Bill is part of a wider policy initiative, do you believe that these associated costs are accurately reflected in the Financial Memorandum?*

A. The forestry element of the Bill is potentially significant within the context of the future growth and development of Scotland’s forestry and wood using businesses and the role they can play in helping to deliver a low-carbon economy in Scotland.

The sector contributes nearly £1 billion a year to Scotland’s economy, provides employment for 20,000, in particular in rural areas, and has capacity for growth. The sector is one of the few in Scotland that can boast that the more it expands the greater carbon benefit it provides.

The proposal to raise income from joint ventures and leasing of public forests could, at best, provide an important stimulus to the sector, and, at worst, reduce investment in wood processing businesses. Much depends on whether any income raised is spent on supporting new planting of forests and whether effective safeguards are put in place to ensure that the current security of supply provided by the Forestry Commission is retained effectively in any leasing proposal.

If security of supply was ensured and income raised recycled into new planting then there would be no cost to private sector businesses, and indeed the opposite would be the case as the stimulus would deliver greater activity.

If security of supply was not ensured and income raised was not recycled into forestry then there would be a negative impact on wood processing businesses and a likely reduction in investment.

There may be a cost to the Forestry Commission, but this would depend on whether it retained any income from joint ventures or whether leasing income was realised annually and a portion retained by the FC. Present financial information provided is very brief (Forestry Commission Scotland Annual Report and Accounts) and this makes any interpretation of business performance on the national Forest Estate difficult for any outside organisation. Greater transparency and more detailed management cost information would be helpful, and necessary if the further very significant

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30 cebr report for the Forestry Commission and ConFor (2006)
sums of money which might be generated through the Bill’s forestry provisions are to accrue in the accounts of FCS / FES.

8. Do you believe that there may be future costs associated with the Bill, for example through subordinate legislation or more developed guidance? If so, is it possible to quantify these costs?

A. It is understood that the forestry proposals would be delivered through secondary legislation and further detail on leasing and joint ventures would be prepared. At this point an understanding of the impacts would be better known.

Other information

The forestry related proposals contain insufficient information on which to determine their impact on Scotland’s forestry and wood-using businesses. ConFor would wish to reiterate the central message from its response to the consultation, that:

- there is benefit in delivering increased new planting;
- this could be delivered by a variety of mechanisms and requires improvements to the Scottish Rural Development Programme;
- ConFor is keen to utilise both its and its membership’s expertise in developing a way forward that addresses legitimate concerns raised.

In terms of delivering new planting we would note that good information is available on where and how best to establish new forests to maximise carbon sequestration while securing other economic and environmental benefits. Current sustainable management standards provide a firm basis for Scotland to really begin to achieve a target of 25% forest cover.

ConFor recognises the benefit of delivering this within the context of a broad land-use policy. However, there is land currently available and planting a very small part of this now while developing a policy to guide future activity is vital to help secure jobs in the sector at a time of economic downturn.

Internationally agreed climate change targets focus on 2050. If Scotland planted 15,000 hectares a year with 9,000 ha being productive softwood forests then it would deliver the Government’s target of 25% forest cover by 2050 and provide significant, additional carbon benefits - up to 33.5 MtC.

**TABLE**: Estimated carbon sequestration for additional productive and broadleaf forest under new planting regimes of 10,000 ha/yr and 15,000 ha/yr from 2010 to 2050

<table>
<thead>
<tr>
<th>Planting regime over period 2010-2050</th>
<th>Productive softwoods</th>
<th>Broadleaves</th>
<th>Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>New planting (ha/yr)</td>
<td>Carbon sequestration (MtC)</td>
<td>New planting (ha/yr)</td>
<td>Carbon sequestration (MtC)</td>
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</tbody>
</table>
NB On a sustainably managed basis, at 10,000 ha/yr, the total additional forest would continue to sequester 1.1MtC/yr after 2050, and 1.6MtC/yr on a 15,000 ha/yr planting regime.

Such a planting programme would secure significant jobs and investment benefits. For productive softwood forests this is estimated at around 180 new jobs in planting and up to 900 for harvesting, transport and wood processing. Current investment in the sector is running at £100m a year and this would increase significantly.

**Increased use of Scottish wood**

Wood products are low energy materials that can save significant amounts of carbon when substituted for other building materials. Research shows that average savings of 0.8tCO2e can be achieved by replacing 1m3 of concrete/bloc/bricks with 1m3 of sawn timber. Long-term wood products also provide a benefit through their potential storage capacity, estimated at 0.9tCO2 in 1m3 of wood.

ConFor calculates that over the period to 2050 the additional productive forest area achieved from planting 9,000 ha/yr of productive softwoods could provide, based on current proportions, an additional 33.5M m³ timber available to the construction market. This then gives the potential for substitution of materials delivering emissions savings of 27mtCO₂. This would be a tremendous resource for Scotland.

Wood can also be used to generate renewable energy. ConFor has campaigned for this to focus on wood that currently has no market, and to promote its use locally and in generating heat. It has also noted that carbon and jobs benefits are higher in solid wood products, not least because these can be used and re-used, and then be made available to generate energy at the end of their useful life. There is a danger that current and evolving public policy could provide such large incentives to burn wood that jobs are lost and the carbon emissions potential of wood is not fully realised.

**Scottish broadleaves and softwoods**

ConFor represents people who own and work with broadleaf woods. We support efforts to manage broadleaf woods sustainably and to develop markets for hardwoods. It is important, however, when talking about climate change mitigation, jobs and investment to recognise the scale and potential of Scotland’s diverse forest and wood-using businesses.

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32 Dr A Fruhwald, Hamburg University in CEI-Bois (2006) Tackle Climate Change: Use Wood
Including Scots Pine, Scotland produces over 6 million tonnes of softwood each year, while hardwood production, including non-native species, is just over 400,000 tonnes for the whole of the UK with the majority of this estimated to be in England.

Scotland is internationally competitive in growing softwoods and producing wood products that have a large market and where there is scope for significant growth. The businesses in the sector are mainly Scottish owned or headquartered.

The sector is unusual in that it combines successful, modern manufacturing with land management that is governed by environmental standards that are second to none.

The sector suffers from an image hang-over from the planting of last century, driven by the FC which did not deliver the multi-purpose forests that are being established today. Those single-species, forest blocks are now being restructured to improve their biodiversity and visual impact. Using lessons learnt from the past there is scope now for a modern forestry and wood-using sector that all Scotland can be proud of.

Unfortunately Scotland’s broadleaf woods are largely unmanaged and provide limited amounts of timber for wood fuel and for small businesses that produce furniture, flooring, etc. The potential for use in construction is limited by the lack of quality trees and the established, highly competitive operations on mainland Europe that dominate the hardwood market. This will not change in the near future as hardwoods take up to 150 years to grow (against 40 for softwoods).

There is scope for development of the broadleaved resource and of hardwood markets, but by far the largest opportunity for sustainable growth and climate change mitigation sits with the softwood resource, and public policy and its delivery must reflect that.

Jamie Farquhar
National Manager for Scotland
ConFor
February 2009

SUBMISSION FROM DUNDEE CITY COUNCIL

Consultation

1. *Did you take part in the consultation exercise for the Bill, if applicable, and if so did you comment on the financial assumptions made?*

   Comment: Dundee City Council responded to the Scottish Government consultation on 'Proposals for a Scottish Climate Change Bill' in April 2008. No comments were made on financial assumptions.
2. Do you believe your comments on the financial assumptions have been accurately reflected in the Financial Memorandum?

Comment: N/A

3. Did you have sufficient time to contribute to the consultation exercise for the Bill?

Comment: Yes, although limited knowledge curtails detailed comments.

Costs

4. If the Bill has any financial implications for your organisation, do you believe that these have been accurately reflected in the Financial Memorandum? If not, please provide details.

Comment: The Bill has financial implications for local authorities but there is no basis for disagreeing with the figures in the Memorandum or identifying the likely impact on Dundee City Council.

5. Are you content that your organisation can meet the financial costs associated with the Bill? If not, how do you think these costs should be met?

Comment: Local authorities are currently struggling to balance budgets with the level of Scottish Government funding available and any further statutory responsibilities will inevitably lead to savings requirements in other budgets unless further Scottish Government funding is made available.

6. Does the Financial Memorandum accurately reflect the margins of uncertainty associated with the estimates and the timescales over which such costs would be expected to arise?

Comment: The Council has no basis for disagreeing with the estimates and timescales included in the Memorandum.

Wider Issues

7. If the Bill is part of a wider policy initiative, do you believe that these associated costs are accurately reflected in the Financial Memorandum?

Comment: The Council has no basis for disputing whether the costs of a wider policy initiative are accurate or not.

8. Do you believe that there may be future costs associated with the Bill, for example through subordinate legislation or more developed guidance? If so, is it possible to quantify these costs?
Comment: It is to be assumed that there will be future costs through subordinate legislation but it is not possible for Dundee City Council to quantify these costs.

SUBMISSION FROM EAST AYRSHIRE COUNCIL

Consultation

1. Did you take part in the consultation exercise for the Bill, if applicable, and if so did you comment on the financial assumptions made?

Yes – financial assumptions were made in relation to carbon budgeting rather than monetary units.

2. Do you believe your comments on the financial assumptions have been accurately reflected in the Financial Memorandum?

Not applicable.

3. Did you have sufficient time to contribute to the consultation exercise for the Bill?

Yes

Costs

4. If the Bill has any financial implications for your organisation, do you believe that these have been accurately reflected in the Financial Memorandum? If not, please provide details.

It is difficult to comment fully as the memorandum itself states that costs are not fully available due to uncertainty surrounding the exact amount of annual targets, who will be responsible for enforcement, and a lack of evidence to accurately identify what the costs associated with the terms of the bill are likely to be. For example under the provisions relating to “improving the energy performance of existing non-domestic buildings” the estimated costs to local authorities range from £3.4m to £37m depending on how the menu of provisions contained within the Bill is assembled within secondary legislation. Such secondary legislation will be accompanied by a costed regulatory impact assessment. It is not until this information is available that local authorities will be fully able to comment on whether any financial implications are reflected and whether the costs associated with the Bill can be met or made self-financing through the levy of penalty charges.

5. Are you content that your organisation can meet the financial costs associated with the Bill? If not, how do you think these costs should be met?

As per comment under question 4.
6. Does the Financial Memorandum accurately reflect the margins of uncertainty associated with the estimates and the timescales over which such costs would be expected to arise?

Yes - the memorandum does reflect the margins of uncertainty associated with the estimates and the timescales over which costs would be expected to arise.

Wider Issues

7. If the Bill is part of a wider policy initiative, do you believe that these associated costs are accurately reflected in the Financial Memorandum?

In terms of the Council’s ability to meet the financial costs with regards to mitigation and adaptation measures encompassed within the Bill, it is necessary to determine whether there are any resource implications arising. These can only be costed once service departments have established actions to fulfil these obligations.

The Council would contest the accuracy of the costings contained within section 219. By assuming that a full time employee works 2,000 hours per annum, the memorandum fails to account for the employees statutory and annual leave. Further, once on-costs are subtracted from the average salary, the take home wage is unlikely to be commensurate with employees level of responsibility.

8. Do you believe that there may be future costs associated with the Bill, for example through subordinate legislation or more developed guidance? If so, is it possible to quantify these costs?

Given the scope and range of activities contained within the Bill it likely that there will be future associated costs. Again, until these measures are specified it is not possible to accurately quantify potential costs.

SUBMISSION FROM EAST LOTHIAN COUNCIL

Consultation

1. Did you take part in the consultation exercise for the Bill, if applicable, and if so did you comment on the financial assumptions made?

   East Lothian Council sent a consultation response. Officers from the Council were involved in some of the consultation workshop events. There were no specific comments made on the financial assumptions.

2. Do you believe your comments on the financial assumptions have been accurately reflected in the Financial Memorandum?
3. Did you have sufficient time to contribute to the consultation exercise for the Bill?

Yes within the limited knowledge available to the Council on a very complex topic.

Costs

4. If the Bill has any financial implications for your organisation, do you believe that these have been accurately reflected in the Financial Memorandum? If not, please provide details.

Clearly the bill has financial implications for the Council. The substantive matter in the Bill is setting the 2050, 2030 emission reduction targets and providing the framework for annual targets. Other than stating a broad brush approach of 1-2% GDP expenditure (across the Scottish Economy, including local authorities) to meet climate change the financial memorandum is not particularly helpful to local authorities.

East Lothian Council does not know what its costs will be in meeting the proposed emissions reductions. We are working through the Carbon Trust Carbon Management Programme which will assist that process for the Council’s own emissions in the short term, but longer term is an unknown. The memorandum itself makes frequent reference to the uncertainties of predicting costs for example:

“It is not possible to accurately predict when technologies will be introduced or the rates of reductions that will occur from changing behaviours and shifting demand. Overall with all these factors in play, it is impossible to accurately predict what will happen and when. That is why it is not possible to predict cost profiles during the period of change in the years out to 2050. (para 147)”

Council’s require clearer guidance from government than this.

5. Are you content that your organisation can meet the financial costs associated with the Bill? If not, how do you think these costs should be met?

The Council cannot say it can meet these costs. Clearly some costs will be met through existing budgets, but significant investment will be required in energy efficiency measures, renewable energy development, waste management etc to deliver the bill objectives. This will either require a re-alignment of Council budgets to the potential detriment of other Council Services, or increased public expenditure and associated tax increase.

In addition there is uncertainty about the implications of the Carbon Reduction Commitment for Councils – as well as having to find money to invest, some Council’s may also be penalised.
A significant issue for local authorities is that many carbon reduction projects, e.g., renewable energy investment, have financial payback periods several years beyond current Council budget and election cycles, which means that Councils will find it very difficult to approve these longer-term projects which will have to compete with the annual pressures of paying for existing public services within the already tight public finance settlement. This situation is not going to get any easier within the current economic downturn and uncertainties about future public finance settlements.

Investment in Climate change mitigation (and adaptation) is as much about political and societal choices as financial ones.

6. Does the Financial Memorandum accurately reflect the margins of uncertainty associated with the estimates and the timescales over which such costs would be expected to arise?

While there is clearly an imperative to act, and the cost of not acting now will be considerably higher in the future (Stern), there remains considerable uncertainty about estimated costs and timescales for action as identified in the memorandum (see also comment 4 above), other than identify that uncertainty the memorandum is not particularly helpful to Councils in framing financial implications.

Wider Issues

7. If the Bill is part of a wider policy initiative, do you believe that these associated costs are accurately reflected in the Financial Memorandum?

It is not clear what wider policy initiative is being referred to. If it is assumed that this refers to the sections in the Bill about waste management, energy efficiency etc then there will be implications for Councils and local businesses in particular. It is difficult to comment on the costs of the proposals in the financial memorandum ahead of the detailed secondary legislation required to introduce the measures.

8. Do you believe that there may be future costs associated with the Bill, for example through subordinate legislation or more developed guidance? If so, is it possible to quantify these costs?

There are more than likely to be other unidentified costs, but what they are is an unknown at the moment, particularly in terms of broader societal consequences of climate change impact and response.

David Evans
Environment
East Lothian Council
Consultation

1. Did you take part in the consultation exercise for the Bill, if applicable, and if so did you comment on the financial assumptions made?

Fife Council responded to the Government Consultation in April 08, but did not highlight financial implications. We are currently compiling a response to the Transport, Infrastructure and Climate Change Committee’s Call for Views (deadline 27 February), and will highlight financial implications.

2. Do you believe your comments on the financial assumptions have been accurately reflected in the Financial Memorandum?

N/A

3. Did you have sufficient time to contribute to the consultation exercise for the Bill?

The deadline of 2 February for comments on the Financial Memorandum necessitates brief input, as our understanding of financial implications will be further informed through the compilation of input to the policy Call for Views by 27 February.

Costs

4. If the Bill has any financial implications for your organisation, do you believe that these have been accurately reflected in the Financial Memorandum? If not, please provide details.

No, costs that appear to be omitted include:

- The Bill refers to requirements for secondary legislation and regulations throughout, all of which will have cost implications.

- The Financial Memorandum seems to focus on costs incurred by the Scottish Government, for instance referring to the analysis of reports, to the exclusion of the costs associated with the scrutiny, measurement and reporting incurred by those made responsible for compiling reports. Fife Council urges the consideration of full costs associated with the Bill, and not rely on market changes or efficiencies savings making it possible for public bodies (or others) to cover the costs incurred in execution, monitoring and compilation of the reports to be analysed by the Scottish Government.

- The Financial Memorandum contains numerous references to areas of costs which are not possible to predict. While Fife Council appreciates the difficulties in cost projections in the face of changing markets and behaviours, and unproven technologies, we encourage an attempt to include fuller costings, and
a realistic view of technologies such as Carbon Capture and Storage, which will incur considerable costs in advance of any financial savings achieved.

- Inconsistent levels of cost estimates are used across chapters. For example the apparent omission of transportation costs related to carbon emissions reduction, use of standardised costs in energy, and then very detailed (yet not full) costs related to waste. Fife Council requests that such inconsistencies be addressed to provide clarity and consistency across all areas.

- Fife Council also questions the priorities that the Financial Memorandum could be seen to suggest. Again referring to the waste costs, table 8 on page 51 suggests £3.5m for the enforcement of carrier bag charges, while many large retailers are already implementing such schemes voluntarily. Moreover, the emissions reductions to be achieved by such efforts, would not necessarily merit the level of investment proposed, considering the assertion made in paragraph 146 that “the Scottish Government intends to use the cost information… ie 1-2% of GDP in 2050”.

- Implementation costs are excluded from the Financial Memorandum. In meeting the requirements for mitigation, adaptation, monitoring, scrutiny and reporting related to the Climate Change Bill, local authorities face substantial costs, and it is unlikely that any gain from efficiencies will be achieved at a time, or sufficient level to compensate for such costs even if in some cases whole life costs are reduced. The Scottish Government could consider spelling out clearly that tackling climate change cannot be achieved at no cost, even though the cost of inaction will be substantially higher.

- Fife Council is concerned that some costs quoted may underestimate the true costs that would be incurred by Scotland. For example, the waste reduction and recycling costs in paragraph 210 appear to be based on very limited experience of a single office complex in Edinburgh that is unlikely to be representative of the facilities to which this provision may apply. Significantly more work is required to provide credible cost estimates in this area.

5. Are you content that your organisation can meet the financial costs associated with the Bill? If not, how do you think these costs should be met?

The memorandum does not provide sufficient information to assist Fife Council in estimating the costs that it may incur. Accordingly we ask that the Scottish Government provides more detailed and robust estimates to enable the Council to form an objective view on this.

6. Does the Financial Memorandum accurately reflect the margins of uncertainty associated with the estimates and the timescales over which such costs would be expected to arise?

While the Financial Memorandum does make numerous references to areas of costs that cannot be predicted, it excludes consideration of costs incurred should
named technologies not meet the targets yet to be set. For example, referring to carbon capture and storage in paragraph 140 in relation to the decarbonisation of the power sector, assumes that once the technology is developed, trials are undertaken and a monitoring is reviewed, that this will be successful. While Fife Council would support the trial and monitoring of carbon capture and storage once required technology is developed, and support the implementation of such technology once its value is proven, we advocate a more cautious approach to such assumptions.

Similarly, the implementation of efforts to reduce carbon emissions and achieve efficiency savings in related energy costs would require upfront investment. The Financial Memorandum currently appears to omit such costs as would be applied across energy, waste and transport to mitigate climate change. Therefore Fife Council encourages the Scottish Government to revise the assumption of finance ‘freed’ by efficiency savings.

Fife Council highlights the Stern Report’s identification of the cost of inaction, and the necessity of accepting the need for actual investment. While we welcome a range of methodologies to meet the financial costs associated with the Climate Change Bill, Fife Council encourages full and transparent consideration of alternative methods of financing the Climate Change Bill. For example, while it may be financially desirable to promote self-financing carbon reduction schemes, such as the proposed leasing of forestry, other associated costs and impacts may make the financial bottom line less acceptable.

Wider Issues

7. If the Bill is part of a wider policy initiative, do you believe that these associated costs are accurately reflected in the Financial Memorandum?

As mentioned above, Fife Council does not believe that the costs which will be incurred by Scotland’s public bodies, businesses, and citizens in the efforts to meet the requirements of the Climate Change Bill are fully reflected in the Financial Memorandum. The Scottish Government has not yet issued guidance on climate change adaptation, and it is anticipated this will include a new set of roles and reporting for local authorities, all incurring costs and unlikely to lead to efficiencies savings at least in the short to medium term.

8. Do you believe that there may be future costs associated with the Bill, for example through subordinate legislation or more developed guidance? If so, is it possible to quantify these costs?

Fife Council believe there may be considerable costs associated with the subordinate legislation and future guidance related to the Climate Change Bill. However based on the information currently available, we are unable to quantify such costs and would rely on the Scottish Government’s continued efforts with COSLA to redress this.

Sustainability Team
SUBMISSION FROM GLASGOW CITY COUNCIL

Consultation

Question 1 - Did you take part in the consultation exercise for the Bill, if applicable, and if so did you comment on the financial assumptions made?

Glasgow City Council (GCC) took part in the consultation for a Scottish Climate Change Bill responding in April 2008 but did not make any comments relating to possible financial implications. It should be noted that the Bill should contain enabling powers to allow Local Authorities to take specific action on Climate Change.

Question 2 - Do you believe your comments on the financial assumptions have been accurately reflected in the Financial Memorandum?

Not applicable

Question 3 - Did you have sufficient time to contribute to the consultation exercise for the Bill?

Yes, The City Council’s officers attended Scottish Government and SSN’s workshops prior to submitting a response. There was however limited time to respond to these questions on the financial memorandum. Given the lack of detail in the Memorandum it would have been useful if guidance through workshops or briefing sessions had been provided.

Costs

Question 4 - If the Bill has any financial implications for your organisation, do you believe that these have been accurately reflected in the Financial Memorandum? If not, please provide details.

The Bill will definitely have financial implications for GCC. Although the Financial Memorandum attempts to provide the likely costs to Local Authorities these are generic estimates and while it is appreciated that this in itself is a difficult exercise, these do not enable an authority the size of Glasgow to accurately compile the increased level of spending and resources that will be required.

Two examples of this relate to the requirement for enhanced Energy Performance Certificates and the possible introduction of a charge for carrier bags. A number of the other estimates detailed in the memorandum such as those of deposit and return schemes and waste management plans lack detail to afford GCC the ability to assess the likely cost of widespread introduction of these initiatives. This includes those actions envisaged as cost neutral.
The implication of the predicted impact on GDP is also of concern to Glasgow. Given the contribution the City makes to the Scottish GDP any reduction is likely to have a disproportionate consequence for Glasgow. This needs to be taken into account in considering financial implications.

**Question 5 - Are you content that your organisation can meet the financial costs associated with the Bill? If not, how do you think these costs should be met?**

Like all Scottish Local Authorities, the Council is currently facing a significant overspend. The implications of the current economic climate will make it extremely difficult to introduce City wide measures of the kind specified in the Bill and the financial memorandum without additional funding.

The costs associated with the forthcoming Carbon Reduction Commitment are currently being calculated on the basis of incomplete information. Without funding support the range of measures and estimated costs detailed in the memorandum will exert a further severe budget pressure. If these measures are to be implemented then central government funding will be required if cuts to essential services are to be avoided.

**Question 6 - Does the Financial Memorandum accurately reflect the margins of uncertainty associated with the estimates and the timescales over which such costs would be expected to arise?**

The Financial Memorandum notes the uncertainty associated with the 2050, 2030 and annual targets. This is reflected in the lack of precise financial detail in how the targets will be achieved. Glasgow City Council will have difficulty in utilising the current information to establish the likely costs of such a process.

For example, for an authority the size of Glasgow with well in excess of 1,000 properties the memorandum, although providing the indicative expenditure of different scenarios, does not allow the Council to calculate the likely cost of an extension of the current Energy Performance of Buildings requirement.

Furthermore, although it was prudent to provide a range of possible costs, such as £3.5 million for the introduction of carrier bags charges, at this early stage it is difficult to calculate the burden of this overall cost to Glasgow, the second largest retail city in the UK.

**Wider Issues**

**Question 7 - If the Bill is part of a wider policy initiative, do you believe that these associated costs are accurately reflected in the Financial Memorandum?**

Additional information would be required as to the nature or direction of the policy initiative referred to before a response to this question could be provided. It was assumed that the Bill would be the umbrella policy vehicle (enabling legislation) under which other policies would be introduced. Additional policy and regulation is likely to be required and, as such, result in additional costs.
Question 8 - Do you believe that there may be future costs associated with the Bill, for example through subordinate legislation or more developed guidance? If so, is it possible to quantify these costs?

GCC are of the opinion that there will be unavoidable future costs associated with the Bill but also the potential for cost saving if introduced in an effective manner, reflecting the main financial observation contained in the Stern Report. Although attempts must be made to quantify these costs, we suggest that this will be an extensive exercise both for the Scottish Government and local authorities.

SUBMISSION FROM HIGHLAND COUNCIL

Consultation

1. Did you take part in the consultation exercise for the Bill, if applicable, and if so did you comment on the financial assumptions made?

The Highland Council did provide a consultation response to the Bill. Reference was made in the consultation response for the need to take account of economic and social impacts when considering areas including international credits and setting budget periods to develop infrastructure. No direct commentary on financial assumptions was made in the response.

2. Do you believe your comments on the financial assumptions have been accurately reflected in the Financial Memorandum?

Not applicable.

3. Did you have sufficient time to contribute to the consultation exercise for the Bill?

The Highland Council considered the consultation period designated for the Bill to be appropriate.

Costs

4. If the Bill has any financial implications for your organisation, do you believe that these have been accurately reflected in the Financial Memorandum? If not, please provide details.

The Financial Memorandum is largely drafted on the basis of estimated costs on a macro-economic basis. As the Memorandum acknowledges, how these costs will impact on individual organisations, and the profile over years, cannot be accurately predicted at this time.

While there will clearly be financial implications, at this time the Highland Council is not in a position where at this stage it could easily estimate the financial implications of the Bill. One aspect that will be critical for the implementation of the Bill is recognition of the local factors that will have a significant bearing on relative costs of addressing the Bill. In Highland, the
geography, climatic conditions and transient population will all have a bearing on costs relative to other Councils, for example in comparison to urban-based authorities.

5. Are you content that your organisation can meet the financial costs associated with the Bill? If not, how do you think these costs should be met?

The financial costs of the Bill will be challenging for all organisations, and as highlighted in the previous question, Highland’s unique geography and other local factors may result in even greater challenges and cost. Financial support from Central Government, whether direct financial support or through incentivisation, will be critical. While investment should lead to reduced cost, or avoided cost, payback periods can be considerable and therefore the front-loaded investment necessary will be challenging when other competing priorities and service needs also have to be met.

6. Does the Financial Memorandum accurately reflect the margins of uncertainty associated with the estimates and the timescales over which such costs would be expected to arise?

Yes, the Memorandum is clear on the uncertainty that relates to the estimated costs.

Wider Issues

7. If the Bill is part of a wider policy initiative, do you believe that these associated costs are accurately reflected in the Financial Memorandum?

The Financial Memorandum acknowledges that the likely cost and resource implications of the Bill for local authorities are presently difficult to estimate as they will be dependent on secondary legislation. Both the Bill and Memorandum outline potential areas of impact for local government including imposition of duties, improving energy performance, waste reduction and recycling. Costs for the Highland Council are likely to be significant in reduction of greenhouse gases through its role in climate change as a manager of its own estate and practices; as an employer; as a service provider; as a community leader and in partnership with other statutory, voluntary and private sector organisations.

Additional key areas of impact include implementation of the Council’s renewable energy strategy; promotion of higher design standards internally and externally, supporting healthier and environmental transport options, how the Council procures its goods and services and can influence the procurement practices of others and adherence to the Carbon Reduction Commitment (CRC). The projected costs associated with the CRC scheme in particular will have clear implications for the targets and delivery of the Councils Carbon Management Strategy. Based on current figures the Council will have to purchase approximately £500 000 of allowances for each of the first fixed price years of the scheme. Further implications associated with the CRC include the risks associated with failing to meet
targets in the form of financial penalties and the requirement to purchase extra allowances and the removal of fixed price allowances after year 3 of the scheme to coincide with the introduction of the open market auctioning process.

8. Do you believe that there may be future costs associated with the Bill, for example through subordinate legislation or more developed guidance? If so, is it possible to quantify these costs?

There is a considerable amount of uncertainty around costs. The memorandum acknowledges that how the costs will impact on individual organisations cannot currently be accurately predicted. It is likely that further costs may apply. It is not possible to take a view on these costs at this time.

SUBMISSION FROM THE SCOTTISH RETAIL CONSORTIUM

Further to your letter of 15 January 2009 requesting that the SRC complete the Committee’s questionnaire in relation to the scrutiny of the Climate Change (Scotland) Bill, we are happy to provide comments as detailed below. Our comments are limited to the provisions of the Bill that where consulted on as part of the Scottish Government ‘Consultation Paper on Potential Legislative Measures to Implement Zero Waste’ (July 2008).

QUESTIONNAIRE

BACKGROUND:

The Scottish Retail Consortium (SRC) is the lead trade association representing the whole range of retailers in Scotland, from the large multiples and department stores through to independents, selling a wide selection of products through centre of town, out of town, rural and virtual stores.

Retailers are making huge strides in reducing the environmental impact of their operations. The retail sector has, for example, committed to sending less than 50 per cent of waste to landfill by 2013. Retailers recognise their part in achieving a zero waste society but cannot accomplish this in isolation. It is crucially important that Government and customers play their part as well.

Consultation:

1. Did you take part in the consultation exercise for the Bill, if applicable, and if so did you comment on the financial assumptions made?

The SRC took part in the consultation exercise and commented on the financial assumptions (‘Costs and Benefits’) made in relation to the ‘Potential Legislative Measures to Implement Zero Waste’ (July 2008).
In general, the SRC welcomed the positive nature of the consultation, the aspirational quality of the ideas as well as the aim to address the fundamental issue of how the nation regards its waste and resources, and the ambition to achieve a zero waste society.

However we believe that some of the assumptions upon which proposals have been based are flawed, especially in relation to costs to the sector and environmental impact.

2. Do you believe your comments on the financial assumptions have been accurately reflected in the Financial Memorandum?

See above response.

3. Did you have sufficient time to contribute to the consultation exercise?

Yes, however we had a number of concerns on the approach taken by the consultation as follows:

a. Packaging amounts to only 1.5% of total waste to landfill yet the majority of the zero waste consultation proposals focus on packaging.

b. Packaging regulations already exist. If they are not working they need to be addressed rather than introducing new legislation.

c. The proposals seem driven by weight rather than net environmental impact of materials and associated supply chains. For example the impact of minimizing packaging without incorporating food waste into the equation.

d. The consultation fails to assess and address the greatest waste streams in Scotland.

e. The consultation does not feature, as a major proposal, the need for societal education (led by Government) on waste.

f. The impact assessments, as they were presented in their partial state, do not reflect the impact of the proposed measures on the retail sector.

Costs:

4. If the Bill has any financial implications for your organisation, do you believe that these have been accurately reflected in the Financial Memorandum? If not, please provide details.

The provisions of the Bill as they relate to waste (Chapter 4, Waste Reduction and Recycling) will have substantial impact on retailers, large and small.

The impact assessments (and associated costs) as set out in the consultation contained very limited information on which to comment. Furthermore, the ‘Costs and Benefits’ section did not adequately reflect the impact of the proposed measures on the retail sector.
For example, the assumption was made that if targets on retailers in relation to packaging reduction and information were laid down in regulations, there would be no costs to retailers in relation to this proposal and in fact there could be cost savings to retailers. We strongly disagree with this assumption. The ‘Costs and Benefits’ analysis also states that the introduction of waste prevention plans and specifying recyclate would either represent a cost saving to business or would be of no significant cost. Once again we strongly oppose the assumptions upon which these judgements have been made.

5. Are you content that your organisation can meet the financial costs associated with the Bill? If not, how do you think these costs should be met?

If all the provisions of the Bill relating to waste reduction and recycling were brought forward, there would be a very serious impact on the operational costs for all retailers in Scotland, irrespective of size or location.

6. Does the Financial Memorandum accurately reflect the margins of uncertainty associated with the estimates and the timescales over which such costs would be expected to arise?

No. See above response.

Wider Issues:

7. If the Bill is part of a wider policy initiative, do you believe that these associated costs are accurately reflected in the Financial Memorandum?

See above responses.

8. Do you believe that there may be future costs associated with the Bill, for example through subordinate legislation or more developed guidance? If so, is it possible to quantify these costs?

There will undoubtedly be further costs associated with the Bill, however will limited scheme data it is extremely hard to quantify what these costs are likely to be.

Fiona Moriarty
Director
Scottish Retail Consortium

SUBMISSION FROM SEPA

Consultation

1. Did you take part in the consultation exercise for the Bill, if applicable, and if so did you comment on the financial assumptions made?
SEPA provided a full response to the consultation which is available on our website 33 but did not comment directly on the Financial Memorandum.

2. **Do you believe your comments on the financial assumptions have been accurately reflected in the Financial Memorandum?**

3. **Did you have sufficient time to contribute to the consultation exercise?**

The 12 week consultation process provided ample opportunity for SEPA to consider the Bill. SEPA organised several internal seminars to discuss the Bill and its implications; SEPA’s response was also considered by the SEPA Board in April 2008.

**Costs**

4. **If the Bill has any financial implications for your organisation, do you believe that these have been accurately reflected in the Financial Memorandum? If not, please provide details.**

5. **Are you content that your organisation can meet the financial costs associated with the Bill? If not, how do you think these costs should be met?**

The Bill has the potential to have significant financial implications across many, if not all, of SEPA’s business activities. It is not yet precisely clear what additional responsibilities SEPA will have, however some of the estimated costs in the Memorandum do not concur with SEPA’s own experiences and estimates. With that in mind SEPA welcomes the commitment to a fully costed RIA for any new duties. Examining the constituent parts of the Bill suggests the following cost implications.

**Cost of meeting SEPA’s own targets and introducing lower carbon technologies**

Many of the technological improvements necessary to head towards a lower carbon infrastructure will bring costs – sometimes significant costs for SEPA (and for other public or private sector bodies). There appears to be nothing extant in the financial memo on invest-to-save or funding for the promotion of reduced carbon emissions programmes for public sector bodies. This may discourage organisations to take necessary, timeous action.

As an example, SEPA is participating in the local authority carbon management programme for 5 years from 2006-2007 to 2011-2012 and has published a 25% reduction target for CO2. To achieve this target it is necessary to invest heavily in lower carbon technologies e.g. more efficient boilers and plant as well as retro-fitting e.g. insulation on older buildings. SEPA’s strategic implementation plan (SIP) (see table 1), intends to invest

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£790k over five years to reduce CO2 emissions by 537 tonnes annually by 2012. This investment has to come from within existing budgets and is expected to generate savings of c.£62k per year.

There are also costs associated with calculating Energy Performance Certificates (EPC) for non-domestic buildings. These certificates have to be produced by third parties using specialist software. In addition the buildings with lower scores have to be improved over time. The Memorandum only says (at 186 p36) that the Bill will clarify the role of who pays and goes on to suggest seven different future scenarios for EPCs.

Table 1- SEPA’s Strategic Implementation Plan

Short listed actions and emission reduction opportunities

<table>
<thead>
<tr>
<th>SEPA Carbon Reduction Opportunity</th>
<th>Detailed Description</th>
<th>Financial Cost</th>
<th>Carbon Saving (per annum) KgCO2</th>
<th>Date to be implemented</th>
<th>Responsible Owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Improve insulation within 11 owned SEPA Premises</td>
<td>By replacing roof insulation and cavity wall insulation in the SEPA owned premises heat loss can be drastically reduced.</td>
<td>£19,000</td>
<td>14,190</td>
<td>Dec 2008</td>
<td>Head of Procurement, Facilities and Estates</td>
</tr>
<tr>
<td>2. Swap out all existing fluorescent lights and replace with efficient T5 lamps</td>
<td>During annual maintenance of luminaries retrofit existing light fittings to accept T5 energy efficient lamps and replace.</td>
<td>£150,000</td>
<td>77,400</td>
<td>Oct 2009</td>
<td>Head of Procurement, Facilities and Estates</td>
</tr>
<tr>
<td>3. Install voltage regulators across the campus to reduce power consumption</td>
<td>Further to a detailed site survey we have identified a voltage regulator that will meet the requirements of our estate and systems, not impact operational performance and</td>
<td>£175,000</td>
<td>154,800</td>
<td>Dec 2009</td>
<td>Head of Procurement, Facilities and Estates</td>
</tr>
<tr>
<td>SEPA Carbon Reduction Opportunity</td>
<td>Detailed Description</td>
<td>Financial Cost</td>
<td>Carbon Saving (per annum) KgCO2</td>
<td>Date to be implemented</td>
<td>Responsible Owner</td>
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<tr>
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<tr>
<td>reduce power.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Install Building Management System (BMS)</td>
<td>By installing a BMS system we can minute by minute obtain a view of our electrical, gas and water consumption and use this data to manage the estate efficiently.</td>
<td>£173,000</td>
<td>47,700</td>
<td>Dec 2010</td>
<td>Head of Procurement, Facilities and Estates</td>
</tr>
<tr>
<td>5. Replace Gas Boilers at Riccarton</td>
<td>As part of our analysis of the gas usage it was identified that almost 44% of total gas used was at our Riccarton Office and laboratory. By replacing the existing boilers with new, more fuel efficient boilers a 25% fuel saving is anticipated.</td>
<td>£27,500</td>
<td>38,000</td>
<td>Nov 2007</td>
<td>Head of Procurement, Facilities and Estates</td>
</tr>
<tr>
<td>6. Decreasing UK Mainland flights by 50%</td>
<td>A 50% reduction in UK mainland flights for 2007-2008 compared to figures for 2006-2007, and maintaining UK mainland flights at that level going forward.</td>
<td>£000</td>
<td>22,060</td>
<td>May 2007</td>
<td>SEPA Transport Group, Chaired by Dave Gorman Head of Environmental Strategy</td>
</tr>
<tr>
<td>7. Reduce lease cars CO2 ceiling</td>
<td>Reduce the lease car ceiling for new lease cars to less than 150gCO2/Km.</td>
<td>£000</td>
<td>14,574</td>
<td>Dec 2012</td>
<td>SEPA Transport Group,</td>
</tr>
<tr>
<td>8. Increase</td>
<td>Substitute the</td>
<td>£000</td>
<td>10,000</td>
<td>By end 2008</td>
<td>IEPEG</td>
</tr>
<tr>
<td>SEPA Carbon Reduction Opportunity</td>
<td>Detailed Description</td>
<td>Financial Cost</td>
<td>Carbon Saving (per annum) KgCO2</td>
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</tr>
<tr>
<td>9. Replace the proposed heating system in the new Aberdeen office and Laboratory with a biomass equivalent heating system</td>
<td>travel to meetings by increasing the use of videoconference by 20% per year.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SEPA is constructing a new office and laboratory in Aberdeen that is scheduled for completion in May 2009. By replacing the proposed combination of gas boilers significant reductions in CO2 can be achieved.</td>
<td>£250,000</td>
<td>158,000</td>
<td>May 2009</td>
<td>SEPA New Aberdeen Building</td>
</tr>
</tbody>
</table>

| 10. Implement Transport Initiatives | SEPA are currently investigating all modes of transport with a view of reducing CO2 emissions. | Not Known       | To be agreed                     | 2008 – 2013            | SEPA Transport Group       |

| TOTAL | £794,500 | 536,724 |

**Potential Advisory Role**

The Bill makes provision for additional Scottish advisory functions if required. Clearly at this stage it is difficult to comment on the scale of additional charges that might result for such a future decision.

It is also not clear which existing body might be deemed suitable for advisory functions to be given to, though an obvious candidate may be SEPA. SEPA has not had any formal discussions with the Scottish Government on this point, but if asked to carry out such a function, it would expect the costs to be substantial, requiring expertise in climate change science and environmental technology, economic assessment and modelling, and understanding of social impacts.
Carbon Accounting

SEPA warmly welcomes the establishment of the carbon accounting scheme for tracking carbon units and maintaining a database. The costs given on page 28 in the Memorandum, although perhaps a little low, do appear to be of the right order of magnitude.

However SEPA believes that a more fundamental point is the need to establish a more detailed, faster and more accurate picture of emissions of climate change gases within Scotland. SEPA believes that this will need to involve both increased physical monitoring and assessment of some gases (e.g. nitrous oxide) and an increased capacity to assemble, verify and publish data. SEPA has not assessed these costs in any detail, but considers that they could be considerable.

Waste regulation

The cost of the waste provisions cannot be fully anticipated because it is not yet known whether the voluntary agreements will be sufficient thus rendering implementation of the provisions unnecessary. For the same reason, the Scottish Government has not estimated enforcement costs. However, should enforcement be necessary, the Government anticipates that enforcement will be carried out by existing public bodies.

As a first cut SEPA believes the costs presented in table 8 on page 51 are a reasonable set of assumptions.

Scottish Ministers will be enabled to make regulations to require businesses and public bodies to provide information to SEPA about the waste that they produce. The cost to government and local authorities of providing this information is considered to be marginal. However, there may be additional costs for SEPA should enforcement be required and costs to other bodies, individuals and businesses will depend on the detail of the regulations. The Policy Memorandum states that “it will be difficult to move to a zero waste society without much better information”. In addition, the Government and SEPA “currently lack reliable data” to assess compliance with elements of Article 11 of the Revised Waste Framework Directive.

Offices could be required to have facilities to collect paper etc. Section 55 empowers local authorities to issue notices requiring organisers of temporary public events to provide recycling facilities. Both sections require the waste collected to be, as far as practicable, recycled. There will be costs involved for providing the receptacles and for ensuring that the waste is collected and recycled. However, the Financial Memorandum states that costs will “benefit society through the more efficient use of resources and a reduction in waste disposed of by landfill”. Again, should legislation be required there will be enforcement costs for SEPA.

Please note that the staffing costs used in table 8 do not reflect those of SEPA.

6. *Does the Financial Memorandum accurately reflect the margins of uncertainty associated with the estimates and the timescales over which such costs would be expected to arise?*
In general, on the specific policy measures discussed, SEPA believes that the Memorandum reflects the likely range of uncertainty associated with the proposals.

However, based on SEPA’s experience of full cost recovery, it would appear than many of the adopted numbers could lead to a modest underestimate of the costs. For example, for enforcement, SEPA would use a more senior member of staff than that allowed for at £15/hr.

**Wider Issues**

7. *If the Bill is part of a wider policy initiative, do you believe that these associated costs are accurately reflected in the Financial Memorandum?*

There will clearly be implementation costs arising from existing and new policy initiatives required to implement the Bill’s targets. These will arise for the Scottish Government, public bodies, businesses, private organisations and individuals. SEPA is aware of some planned initiatives, but understands that the Scottish Government intends to publish a Strategic Overview in due course, setting out policy costs in more detail. SEPA is also aware of published material that sets out some of these costs in more detail.34

It is important to bear in mind that in addition to direct and policy costs on society, there would be costs arising from not taking action to address climate change. These costs are set out in the reports mentioned above. In addition, SEPA believes that there are clear benefits to Scottish society from taking early action to address climate change- protecting the environment, reducing the costs of adaptation, maintaining biodiversity and ecosystem services, and business benefits from reducing waste and energy use, and seizing opportunities in the green technology and climate change mitigation sector.

8. *Do you believe that there may be future costs associated with the Bill, for example through subordinate legislation or more developed guidance? If so, is it possible to quantify these costs?*

SEPA believes that there are likely to be additional costs depending on its role. The uncertainty of the role and the activities necessary to achieve that role make accurate costing problematic. The fully costed RIA would provide an accurate indication of the most likely cost and SEPA welcomes the Scottish Government’s commitment to using this to quantify and inform funding of any addition to SEPA’s duties.

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[http://www.hm-treasury.gov.uk/sternreview_index.htm](http://www.hm-treasury.gov.uk/sternreview_index.htm)
[http://www.theccc.org.uk/reports/](http://www.theccc.org.uk/reports/)
Consultation

1. Did you take part in the consultation exercise for the Bill, if applicable, and if so did you comment on the financial assumptions made?

The Committee on Climate Change did not take part in the consultation exercise for the Bill; it was operating in shadow form at the time of the consultation.

2. Do you believe your comments on the financial assumptions have been accurately reflected in the Financial Memorandum?

Not applicable.

3. Did you have sufficient time to contribute to the consultation exercise?

Not applicable.

Costs

4. If the Bill has any financial implications for your organisation, do you believe that these have been accurately reflected in the Financial Memorandum? If not, please provide details.

The Financial Memorandum recognises that in order for the Committee on Climate Change to fulfil the advisory functions ‘additional funding may be required if the Committee are commissioned to provide advice and the cost of that task is particularly expensive’. This is likely to be the case, though the costs to the Committee on Climate Change and the timing of any funding required have not yet been established.

5. Are you content that your organisation can meet the financial costs associated with the Bill? If not, how do you think these costs should be met?

The Financial Memorandum identifies that the Scottish Government may be required to supply additional funding to cover the financial costs to the Committee on Climate Change associated with providing advice and analysis relating to the Scottish targets.

6. Does the Financial Memorandum accurately reflect the margins of uncertainty associated with the estimates and the timescales over which such costs would be expected to arise?

Future contributions are likely to be in line with Scotland’s contribution in 2008-09, exclusive of any additional funding required to support the delivery of the advisory functions in the Climate Change (Scotland) Bill.

Wider Issues
7. If the Bill is part of a wider policy initiative, do you believe that these associated costs are accurately reflected in the Financial Memorandum?

No comment.

8. Do you believe that there may be future costs associated with the Bill, for example through subordinate legislation or more developed guidance? If so, is it possible to quantify these costs?

No comment.

SUPPLEMENTARY SUBMISSION FROM THE SCOTTISH GOVERNMENT, DATED 18 FEBRUARY 2009

Part 2 - In written evidence, the UKCCC suggested that it would be likely that additional funding would be required for Scottish-commissioned research and advice. How likely is it that the Scottish Government’s annual contribution of £275k to the UKCCC will be exceeded in future years?

The Scottish Government’s annual contribution to the funding for the UK Committee on Climate Change is expected to vary from year to year. For example, the costings of £275k cover work under the provisions of the UK Climate Change Act and include an element of initial start-up expenditure which is not expected to recur in future years. For information, the Committee is currently reviewing its funding requirements for 2009-10 with the UK administrations as its work programme develops.

As noted in the Financial Memorandum to the Bill, additional funding may be required for the Committee in respect of the Scottish Bill if the Committee is requested to provide advice and the cost of providing that advice is particularly expensive, for example, because the Committee requires to recruit more staff or commission external research in order to develop the advice. Analysis related to the annual Scottish targets and trajectory can be anticipated to give rise to additional work for the Committee and additional expenditure is therefore expected. If this work requires, for example, an additional analyst and perhaps some additional research to build on the analysis work already undertaken by the Committee, this could be estimated to be in the region of up to £100k. The Committee is currently considering the resource implications of work in support of the Scottish Bill.

Evidence received by the Transport, Infrastructure and Climate Change Committee suggested that the cost of establishing a Scottish committee would be less than the FM suggests, i.e. £2.5m p.a. How does the Scottish Government respond to this?

The Scottish Government believes that establishing a Scottish Committee would require considerable funding. The £2.5m estimate for the potential annual costs of a Scottish Climate Change Committee is based on the following assumptions:
A Scottish Climate Change Committee could be expected to have six members (the same number as the UK Committee on Climate Change) – additional members would be anticipated to increase costs beyond those provided in the Financial Memorandum.

A Scottish Climate Change Committee could be anticipated to manage with a slightly smaller secretariat – 20 persons instead of 25.

The nature of the advice required and the range of expertise necessary suggests it would be difficult to save costs by adopting a significantly scaled down operation for Scotland.

The UK CCC conducts a wide range of climate change analysis which would need to be replicated for Scottish purposes. The Scottish Government estimate allows for some scope for efficiencies from an information sharing arrangement and is based on the following considerations:

- The UK CCC has detailed sectoral expertise to address specific economic questions, commission and peer review detailed econometric modelling frameworks and synthesise this work into an economy wide analysis.
- The UK CCC has already built up significant understanding while operating in shadow format and in preparing their initial report, published in December 2008.
- A Scottish Committee secretariat would need to replicate this understanding and further develop models and frameworks to address Scottish specific issues without direct input from the UK CCC.
- The range of sectoral issues is significant and would include energy and power generation, transport including international aviation and shipping, the technology path to the 2050 target, business opportunities, climate change impacts, competitiveness issues, demand side responses, social research and development of modelling and methodologies.
- It would be important also to consider the international dimension including likely future climate change agreements, market developments (financial and carbon), international aviation and shipping negotiations and technology transfer scenarios.

The scale of fees generally paid to Scottish NDPB members is lower than the current rate for the Committee on Climate Change therefore some efficiencies can be anticipated in terms of remuneration for members of a Scottish Committee.

Accommodation costs could be reduced by locating a Scottish Committee on the government estate.

The Scottish Government has concluded that utilising the expertise of the UK Committee on Climate Change is likely to be the most cost effective option for obtaining expert advice on climate change for the Scottish Ministers, but would reconsider the arrangement if it should be demonstrated otherwise.

While we acknowledge that our estimates are not precise sums, we remain convinced that they indicate the scale of the cost difference between contributing to the UK Committee and establishing a Scottish Committee.
Part 5 - Considerable costs will be associated with subordinate legislation under the Bill, which will have significant financial impacts on public bodies, local authorities and businesses. How does the Scottish Government intend to monitor the costs arising from the large number of future regulations?

The two subject areas in Part 5 which could have significant financial impacts on public bodies, local authorities and businesses are considered to be the waste provisions and the non domestic energy efficiency provisions. In terms of the waste provisions, costs will arise only if subordinate legislation is actually enacted under the powers in the Bill, and then the nature of those costs, and the bodies on whom they will fall, will depend on the regulations themselves. As is always the case with regulations, the financial issues they raise, including monitoring would be addressed in a Regulatory Impact Assessment (RIA) specific to those regulations.

In respect of the non domestic building energy efficiency provisions, the costs associated with subordinate legislation will also be addressed in a detailed RIA specific to the regulations. A rigorous review (in the form of a Review RIA) will be carried out within 10 years of the introduction of the regulations and will consequently be able to provide an accurate assessment of the impact.

It may be helpful to take this opportunity to clarify that the one-off costs for the Scottish Government for the non domestic building energy efficiency provisions include staff costs to develop secondary legislation, impact assessments and guidance, media campaigns to create public awareness, training and research and vary depending on the scope of the secondary legislation. There are no one-off costs envisaged for local authorities as enforcement is intended to be self financing based on penalty charges.

The average annual costs for Scottish Government, local authorities and other bodies, individuals and businesses are identified in respect of implementation of the policy - i.e. commissioning of building surveys, calculating energy and carbon performance of buildings, formulating action plans and carrying out building work. The wide variation in the annual costs relates to the type and size of buildings covered, whether operational ratings are included, the trigger points for assessments, the lifespan of the certificates and whether implementation of the recommendations is discretionary or mandatory.

Philip Wright  
Deputy Director  
Climate Change Division

SUPPLEMENTARY SUBMISSION FROM THE SCOTTISH GOVERNMENT,  
DATED 25 FEBRUARY 2009

Advisory body – Can the Scottish Government clarify its earlier comment on deriving efficiencies?
My earlier letter referred to the estimates of the potential costs of operating a Scottish Climate Change Committee allowing for 'some scope for efficiencies from an information sharing arrangement'. The UK Committee on Climate Change (UK CCC) built up significant understanding while operating in shadow form to December 2008 and continues to develop this now that it has constituted statutorily. If a separate Scottish Committee on Climate Change were to be established in the future we envisage that arrangements may be made whereby the Scottish Committee could draw on the UK CCC’s knowledge of data and research sources, modelling methodologies and analytical output. The precise arrangements for information sharing would, of course, have to be agreed with the UK Committee and the other sponsor administrations at the appropriate time.

The extent to which information sharing would aid a Scottish Committee would also depend on the nature of the issue as well as the structure and approach of a Scottish Committee. It is therefore not possible to place precise estimates on the extent of efficiencies. For example, a Scottish Committee could be helpfully informed by any analysis undertaken the by the UK CCC on what is an appropriate global climate objective. Beyond specifics, it can be expected that information sharing would also be useful more broadly.

Forestry – Can the Scottish Government confirm whether the options review on forestry will include financial information on joint ventures?

The options review on forestry will include financial information on both joint ventures and the leasing of forest land, but with more detail on the latter issue.

Energy Efficiency – can the Scottish Government confirm if local authorities will be given enforcement duties in respect of the non-domestic building energy efficiency provisions?

In terms of Section 50 (3) of the Bill, no decision has been taken yet as to whether enforcement will be carried out by local authorities or “such other person or body”.

Philip Wright  
Deputy Director  
Climate Change Division

SUPPLEMENTARY SUBMISSION FROM THE FEDERATION OF SMALL BUSINESSES

Thank you for allowing the FSB in Scotland the opportunity to present our concerns about the Financial Memorandum of the Climate Change Bill to the committee. As discussed at the evidence session, we are pleased to provide some additional written evidence. I hope you find these comments helpful.

As outlined at the committee meeting, the FSB in Scotland is primarily concerned about the nature of the secondary legislation enabled by the bill. Issues relating to waste, recycling and energy efficiency are clearly of interest to a large number of our 20,000 members.
We of course appreciate the benefits of using secondary legislation, however this should be of a supporting nature; the intention of the legislation having been set out in the primary legislation. We believe that the measures currently outlined are extremely wide-reaching and the scope of government action unclear. This means it is very difficult to ascertain the potential impact of these measures. With some of the proposals having severe cost and practicality implications (e.g. Energy Performance Certificate options range from £6.7m pa to £64.7m pa) for both business and public bodies, we do not think it is appropriate for parliament to be asked to vote to allow ministers such a wide range of legislative powers without more detailed intentions and costings.

In addition to our concern about the nature of the legislation, please find below comments on the Financial Memorandum.

1. Impact Assessment
   The development of the Regulatory Impact Assessment (RIA) alongside the Financial Memorandum would have been helpful. The partial RIA was completed at the time of the government’s consultation, however it would be a useful tool to aid scrutiny and development of the legislation. We would also like to see some mention of the use of the Business Impact Assessment (BIA) as recommended by the Regulatory Review Group. Where differences appear in information in both the Financial Memorandum and RIA, it is unclear which is the most up-to-date. References to costs which, in the absence of any detail, vaguely conclude ‘benefits are likely to outweigh costs’ are simply unhelpful in a Financial Memorandum.

2. Assessing Costs
   Costs to business are assessed under the ‘agencies, other bodies’ section of the Financial Memorandum. Since SEPA is a key agency, much of this section focuses on costs to SEPA and there is not enough focus on costs to business. For example, the summary cost table relating to waste data returns lists £250,000 under the ‘other bodies’ section, but this only relates to costs to SEPA. Using more case studies would be a helpful way to illustrate the impact of proposals. While we appreciate the intention and understand it is representative of a large office complex, Victoria Quay is probably not representative of most business premises in Scotland and is therefore not the ideal example with which to illustrate costs of providing recycling facilities to staff.

   We do appreciate the difficulties involved in estimating cumulative costs, however this is key to understanding the impact on business. Where a number of different regimes are mentioned (and currently there is potential for at least six different sets of paperwork, monitoring and inspection with no mention of cost recovery through fees), it would make sense to look at the potential to streamline regimes thereby increasing efficiency and simplifying compliance. If we are to achieve better regulation, discussion of these ideas at an early stage is important e.g. if waste plans and energy efficiency plans are both required for business premises, why not have one combined plan? If there is to be improved waste data returns from business, can the existing regime be removed to prevent duplication? The
differentiation of roles between SEPA and local authorities has clearly yet to be decided – here too there are opportunities to ensure duplication and overlap does not occur.

There is also little reference to the difference between policy and administrative costs in the Financial Memorandum. In assessing costs, it is important to understand where there are opportunities to reduce administrative costs, as outlined above, and where there are unavoidable policy compliance costs.

3. Infrastructure & Resources

As discussed at committee, we see no reference in the Financial Memorandum to the inevitable cost implications to local authorities (and to private waste industry who require certainty of government intentions if they are to invest) of providing the necessary infrastructure to support additional recycling. In the 2007 mapping exercise into local authority provision of recycling services to SMEs, carried out by SEPA, lack of resources was frequently cited as the main reason for not improving services to small businesses. At that time there were still four local authorities offering no recycling services to business. This clearly presents difficulties if we are looking at legislation which will place duties to recycle on businesses. In addition, a threat to the financing of existing kerbside recycling schemes has been highlighted by many in relation to the introduction of a deposit and return scheme – this cost implication should be reflected in the Financial Memorandum.

Andy Willox OBE
Scottish Policy Convener
FINANCE COMMITTEE

EXTRACT FROM THE MINUTES

4th Meeting, 2009 (Session 3)

Tuesday 10 February 2009

Present:

Jackie Baillie (Deputy Convener) Derek Brownlee
Joe FitzPatrick James Kelly
Alex Neil Jeremy Purvis
Andrew Welsh (Convener) David Whitton

The meeting opened at 2.03 pm.

Climate Change (Scotland) Bill: The Committee took evidence on the Financial Memorandum of the Climate Change (Scotland) Bill from—

Dave Gorman, Head of Environmental Strategy, Scottish Environment Protection Agency;

Susan Love, Scottish Policy Manager, Federation of Small Businesses;

Scottish Parliament
Finance Committee
Tuesday 10 February 2009

[THE CONVENER opened the meeting at 14:03]

Climate Change (Scotland) Bill: Financial Memorandum

The Convener (Andrew Welsh): Good afternoon and welcome to the Finance Committee's fourth meeting in 2009, in the Scottish Parliament's third session. I ask everyone to turn off mobile phones and pagers.

Agenda item 1 is oral evidence on the financial memorandum to the Climate Change (Scotland) Bill. The committee agreed to adopt level 3 scrutiny of the memorandum, which means that, as well as seeking written evidence, we will take oral evidence from affected organisations and the Scottish Government's bill team. The written evidence forms paper FI/S3/09/4/2.

I welcome Dave Gorman, the head of environmental strategy at the Scottish Environment Protection Agency, who forms the first of three panels of witnesses. He will make a short opening statement.

Dave Gorman (Scottish Environment Protection Agency): Thank you for the opportunity to give evidence. I remind members that SEPA is the national environmental regulator for Scotland. We do two principal tasks. We monitor and report on the state of the Scottish environment, and we use our regulatory powers, along with our submissions to the planning system and support to businesses, to protect and improve the environment. As part of that, we have an interest in climate change.

The Convener: I invite questions from members. Alex Neil and David Whitton have been designated to lead on the bill, but other members are of course welcome to ask questions.

David Whitton (Strathkelvin and Bearsden) (Lab): Mr Gorman, were you responsible for the written submission from SEPA?

Dave Gorman: Yes—I produced it along with my colleagues.

David Whitton: That is fine—that makes life a lot easier, because you will know what is in the submission.

SEPA's written evidence says that the financial memorandum contains nothing on invest-to-save programmes or funding to promote programmes to reduce carbon emissions. Is that a startling omission?

Dave Gorman: We thought that it would be useful to describe in our submission some of the plans that we have in place, so we provided figures on what we are doing. However, that work is not driven by the bill. SEPA feels that it needs to lead by example, so we have joined the Carbon Trust’s local authority carbon management programme. Our evidence shows the targets and costs that result from that.

I am not sure whether we are saying that a huge problem exists, but we wanted to draw the issue to people's attention. Much of the investment to drive down carbon emissions makes sense for energy costs, too. Sometimes, the issue for us—we do not know whether it applies to other organisations—is finding enough money as quickly as we would like to invest to make such savings.

We are not necessarily saying that a big problem exists; we are simply pointing out that, for organisations such as ours, the numbers that we are talking about are fairly chunky.

David Whitton: It could be argued that if SEPA cannot set an example for the rest of Scotland, no one can.

Are the costs that you mention those that are detailed in table 1 of your submission for activities such as replacing roof insulation and cavity wall insulation in your buildings?

Dave Gorman: That is right. We call that our direct environmental impact, which we are trying to find ways to reduce. As you say, if we cannot do that, we are not in a position to lecture others. The costs are for reducing our own carbon emissions.

David Whitton: SEPA's evidence says that some estimated costs—for carbon accounting and so on—do not concur with its experience. Will you say a bit more about that? How far out are the figures?

Dave Gorman: We said that the figures look reasonable, as far as we can tell and given the difficulties of making firm estimates at this stage. However, our experience is of being responsible for implementing several regulatory regimes under the Government's policy of fully recovering from business the costs of operating those regimes. We point out that the costs in the memorandum look like a modest underestimate—some of the figures look like marginal costs rather than full cost recovery.

David Whitton: How do you react to Aberdeen City Council’s submission that the memorandum is “vague” about costs, East Ayrshire Council’s comment that cost estimates are needed for secondary legislation and East Lothian Council’s comment that the memorandum is not helpful?
Dave Gorman: I can give our view, which is that the memorandum is helpful. The difficulty for the Scottish Government is that the bill sets out the framework, but the annual targets have not been finalised. The pathways and some of the policies that are needed have also not been finalised. It is reasonable to have first-cut estimates as part of the financial memorandum.

David Whitton: So you are a wee bit out of step with some other organisations, whose evidence talks about vagueness.

Dave Gorman: I think so, but perhaps that is because we have a lot of experience of implementing European legislation that comes to the United Kingdom and Scotland, when the devil is often in the detail. The costs of different approaches to implementing regulation can be wide ranging. Only as the approaches are narrowed down over time do we produce reasonable cost estimates. It is not unusual for us to narrow down on the costs as time goes on.

David Whitton: The financial memorandum estimates the cost of administering a carbon accounting scheme at about £60,000 per annum. Is that estimate still reasonable, or should it be higher or lower?

Dave Gorman: We have gone out on a limb slightly in that regard—the Scottish Government might want to comment on that. We think that the estimate is a little on the low side, although it is not extraordinarily out of sync with what we would expect. We tried to be helpful by pointing out that some of the costs look a little on the low side. However, the issue is marginal in the scheme of things. Given that we are talking about 1 per cent of gross domestic product, the estimated costs are in the right ballpark.

David Whitton: I think that the £60,000 per annum is a figure for a salary as much as anything else—you will correct me if I am wrong about that. Will no costs be associated with the carbon accounting task other than the salary of the person who does the work?

Dave Gorman: I am sure that the Scottish Government will have more detail. We tried to be helpful on that, too. In our experience, associated costs, such as software costs, are often needed when systems are set up. As I said, the estimate looks a little on the low side, but it is not outrageously low.

The Convener: We are considering 2050—that is futurology. Who knows what will happen next year, never mind in 2050? Are we talking about margins of uncertainty or margins of certainty? Vagueness and uncertainty are surely in-built in the bill, by its very nature.

Dave Gorman: You are right. I alluded to that. I understand that although we have targets for 2030 and 2050, the pathways whereby we will meet the targets have not yet been set. Much of the discussion at macro level is about the right balance between early expenditure and early cost. I understand that the Scottish Government must do much more work to get a handle on some of the costs.

We are not alone in Scotland and the UK in trying to understand the costs; reports that try to do that are constantly coming out. However, there is so much uncertainty about the technology that will prevail, for example, that it is difficult to look forward and decide that one option will be better than another. You are quite right, convener.

David Whitton: I might be putting you on the spot by asking you this. Does Scotland need an independent scrutiny facility? Could not that be done through the UK?

Dave Gorman: What aspect of scrutiny do you mean?

David Whitton: It is suggested that either we get advice from the UK Committee on Climate Change or we set up a Scottish committee. There is a huge difference in cost between opting to be part of the UK set-up and establishing our own committee. The financial memorandum says that being part of the UK committee would cost us £275,000 per annum, whereas setting up a separate Scottish committee would cost £2.5 million per annum.

Dave Gorman: We do not have a direct relationship with the UK committee, but we have been impressed by the quality and thoroughness of its work and by its publications to date. We have seen nothing that suggests that anything is wrong with the process. It is for other people to decide whether the advice that they are getting is adequate for the purposes of the bill, but from our point of view the UK committee has made an impressive start.

The Convener: There are different demographic factors in Scotland and there could be a problem with ensuring that the UK committee can take account of Scottish conditions. Can you guarantee that there will be adequate Scottish input to the UK committee?

Dave Gorman: It is not for SEPA to give such guarantees. The advice will come through the Scottish Government. SEPA can consider what comes in and make a judgment on it privately, but the responsibility for commenting on the adequacy of the advice lies with the Scottish Government. You would have to ask the Government about that.
**Alex Neil (Central Scotland) (SNP):** East Ayrshire Council said that the lack of detail in the financial memorandum is problematic and referred to the wide range of estimates of the potential cost to local authorities of improving energy efficiency. Will you comment on that?

Although energy efficiency measures require up-front investment, after a period the investment starts to pay for itself, because energy costs are saved. That is a major benefit. Have you estimated the net impact on costs, or the net benefits, over a five or 10-year period?

**Dave Gorman:** Your second question is easier for me to answer because we have put such information in our evidence about the local authority carbon management programme, which we have joined. The Carbon Trust runs that scheme. The name gives away the fact that it is principally aimed at local authorities, but we were able to join it. It provides a structured way of considering the opportunities and balancing the costs against the benefits. We considered the measures that we could take on the SEPA estate to get our energy costs down, assessed their cost effectiveness and feasibility and came up with an action plan—which you have—that outlines which actions look feasible and how quickly we can deliver them. We absolutely agree that there are substantial energy efficiency opportunities. If SEPA cannot show leadership in that regard, we should be concerned.

It is much more difficult for me to comment on the first point, as my local authority days are behind me—for the moment, at least. SEPA has 30 buildings if it is lucky, but local authorities may have 500 or more, so managing the direct building stock is clearly a much bigger issue for them than it is for us.

**David Whitton:** I will take you back a step to the climate change-related duties of public bodies. The bill provides for the Scottish Ministers to impose such duties on public bodies and to identify an appropriate body to monitor whether the duties are being fulfilled. Should SEPA be the monitoring body? If it was, would it require additional funding?

**Dave Gorman:** We have not given that specific question a lot of thought, to be honest. We found it helpful that the Scottish Government’s consultation last year outlined three levels of scrutiny. The first was advice on what the targets and pathway should be. The UK Committee on Climate Change currently provides that. The second level was the reporting on, analysis of and bringing together of physical data. We certainly thought that SEPA could have a role in that regard, and we commented on that. The third role was the assessment of performance. We are less certain that we are the right body for that work because we may be subject to some of the duties that we would be asked to report on.

**David Whitton:** If you are not sure about that, I guess that I might get the same answer to the question whether SEPA should be the body to monitor whether organisations are achieving their waste reduction and recycling targets.

**Dave Gorman:** The answer to that question is probably much closer to yes. We might be in the frame for such activity. Although I started out in the waste industry some years ago, it is a while since I was directly involved in it, so I might need to write to you with a bit more detail. Certainly, SEPA has a lot of experience in waste of setting up systems, reporting on data and inspecting and taking enforcement action.

**David Whitton:** How difficult would it be for local authorities and other organisations to set up monitoring of their waste management plans?

**Dave Gorman:** It would not be too difficult. As I understand it, the purpose behind the plans is to try to make bodies think through the consequences of, for example, big construction projects in which they might engage. The trick is to include environmental consideration up front. When we do that and people look for the opportunities up front, the costs and difficulties are often not as great as they would be if such aspects were not considered until later in the process.

We do not envisage huge difficulty in putting waste management plans together. The trick will be ensuring that they have an impact as they are written.

**David Whitton:** Glasgow City Council reckoned that doing away with free plastic bags would cost £3.5 million. How would you monitor whether a local authority was doing away with free plastic bags?

**Dave Gorman:** I find it difficult to comment on that specific point. The general point is that SEPA has a fair amount of experience of trying to find ways to require businesses that have duties on them to meet those duties, often through education and support. Yes, things have been made statutory and therefore people need to comply, but often the best starting point is to make people aware of the requirements, to publicise them and to try to make people think about them early in their decision making rather than after the event.

**David Whitton:** Under the various powers in the bill, all sorts of regulations are to be introduced for waste prevention and management, recycling facilities, deposit return schemes, waste data
returns, reduced packaging, carrier bag charges and so on. I return to Aberdeen City Council’s point that the financial memorandum is "vague" on the costs of introducing all that stuff. I think I am right to say that every local authority that provided evidence is worried about the possible future financial implications. Do you really think that the Government has got the financial memorandum right?

Dave Gorman: I can only give SEPA’s point of view, which we tried to make explicit in our submission. We think that the financial memorandum is a reasonable first stab at some of the costs, bearing in mind that the actual costs will depend on the detail. The devil will be in the detail of how the measures are framed, the scope of the duties and powers, and the enforcement regime that is put in place. With all that in mind, we think that the Scottish Government made a good attempt.

We would be concerned if we could not home in on the detail at the regulation stage, but our experience has been that, as we move towards the regulation stage—as opposed to looking at what is in the statute itself—some costs will be firmed up by the regulatory impact assessments. At present, we are reasonably comfortable. As far as we can see, the estimates are good ones, given the available information.

The Convener: You said that the financial memorandum is a reasonable first stab at the costs, but the bill will involve extra monitoring, enforcement and other duties. How well equipped is SEPA for the role in terms of staff and resources? Do you have any thoughts about the resources that will be required for the extra duties that you will be given? Have you estimated the costs that will arise for your organisation if you take on those duties?

Dave Gorman: I am not trying to dodge the question, but again it is difficult to comment without knowing the detail. There are two ways in which SEPA recovers its costs. One way is through the grant in aid that we get from the Scottish Government, but the more common way in the case of regulatory regimes is through the setting up of a charging scheme. There is a process to be gone through at that stage to establish what the costs might be. That usually involves a discussion between SEPA and the Scottish Government about what we think we will need to deliver the measure and whether the costs will be acceptable to the businesses that will pay them. That is a well-understood process that ends up with Scottish ministers approving the charging scheme.

We are reasonably confident that, as we move into the detail via the regulatory impact assessments and then to a charging scheme, that will give us ample opportunities to argue our case.

Jeremy Purvis (Tweeddale, Ettrick and Lauderdale) (LD): Given that the Government has decided to confer on SEPA responsibility for carrying out some of the regulatory functions, have you done any modelling of potential charging frameworks?

Dave Gorman: We have not done so yet, but that will certainly be the next step for us.

To give a specific example, we are the enforcing authority for the pollution prevention and control regulations. Whenever a new process or industry is added to those regulations, we go through a pretty detailed financial modelling exercise to work out what we think the costs might be. There is subsequently a consultation on those costs, and a charging scheme is put together for ministers’ approval.

There is a whole process to be gone through. The problem for us at this stage is that it is difficult to do anything to that level of detail without knowing exactly what our duties and the design of the systems will be.

Jeremy Purvis: The reason why I ask is that it does not seem from the financial memorandum that SEPA has done any modelling. It seems that the Government does not have many options for the regulatory body, unless it wishes to establish a new climate change regulatory body. The role can be performed by SEPA, by the local authorities or by the Government itself. With previous legislation, indicative levels have been provided at the financial memorandum stage, but in this case it seems that we are doing unnecessary work, because we are told that all the information will be in the regulatory impact assessments, which will not come to the Finance Committee.

Has the Government asked SEPA to do any work? A range of costs is provided for the options that are laid out, but it does not seem to be informed by information that SEPA has provided as a result of modelling work that it has carried out.

Dave Gorman: I would need to check with my waste colleagues exactly what conversations they have had with the Scottish Government, but I know that extensive discussions have been held. We commented on last year’s consultation, and in preparing our submission we talked to waste colleagues. Do the figures look like a reasonable first assessment? In our view, they do. Have we done a lot of modelling at this stage? No. However, I reiterate that if, in due course, the duties in question become our responsibility, we will carry out modelling at that stage.
Jeremy Purvis: I have a specific question on SEPA’s interesting point about energy performance certificates. In your submission, you say that the Government should “clarify the role of who pays” for the costs associated with the production of energy performance certificates. My question is about the range of costs in the financial memorandum. You refer to paragraph 186 of the financial memorandum and identify some of the on-going costs, in which there are huge variations. Depending on the option, the potential cost to the Scottish Government—the cost to the Administration, not the cost to those who will pay the charges—ranges from £0.3 million to £12.4 million. Were you involved in the work that the Government did to produce those figures? There is a colossal variation in the annual cost, which, over the first 10 years following the bill’s implementation, could amount to more than £100 million.

Dave Gorman: The simple answer is that we tend not to have direct involvement in building regulation, so we have not done any work on that.

Jeremy Purvis: But we are talking about the cost to the Scottish Government of the administration of an assessment regime. You do assessment work for the issuing of licences and you also do checks, so you have the infrastructure for operating a charging regime. As I understand it, the part of the financial memorandum that we are discussing deals with cost of the administration of an inspection regime, rather than with the costs that could be charged to building owners.

Dave Gorman: Although we can comment on issues that we are familiar with, such as the waste provisions, SEPA does not get involved in areas such as building regulation. Local authorities are responsible for planning and the building warrants system, and the Scottish Government is responsible for the building standards side. It is therefore difficult for us to comment on whether the figures in question are right.

However, you are correct to say that our submission hints at the fact that, as one moves out of areas that we understand, such as waste, to the costs associated with energy performance certificates, there is a great deal of variation in the costs, as the local authorities said. That needs to be considered.

The Convener: We might ask the bill team whom it consulted. That would help.

You are almost off the leash now, Mr Gorman. Do you wish to make any final comments?

Dave Gorman: I have one final comment. I have said several times that the devil will be in the detail. That is the key point for us.

I do not need to tell the committee that the case for taking action is clear. At present, we are still at the framework stage. There will be much greater clarity as we move into the next round of the process, which will involve the setting of pathways, targets and policies. At that stage, organisations such as ours will come back with much clearer information. We have done our best to give you our sense of the financial memorandum, but it has been difficult.

The Convener: The committee knows only too well that the devil is indeed in the detail. We look forward to finding out more of that detail. Thank you for your written and oral evidence and for attending the meeting.

We will have a short suspension to allow the next witness to take her seat.

14:30
Meeting suspended.

14:31
On resuming—

The Convener: I welcome Susan Love, Scottish policy manager with the Federation of Small Businesses. I believe that you wish to make a short opening statement.

Susan Love (Federation of Small Businesses): For the committee’s understanding, it might be helpful if I clarify that our primary interest in the bill is in part 5, chapters 3 and 4, which relate largely to what will be secondary legislation.

David Whitton: It certainly simplifies matters if you want to be asked only about part 5, chapters 3 and 4. Before I get there, however, I have a general question. Do you share the concerns that have been expressed in the written evidence about the vagueness of the estimates of the costs of the bill?

Susan Love: I am happy to take wider questions about the bill but, from a small business perspective, it is only the practical implications of chapters 3 and 4 on which we are able to comment.

I am not sure whether the committee has had sight of our response to the Scottish Government’s consultation last year, particularly on waste. We made some critical comments about the information on costings that was provided at that stage. We are disappointed with the subsequent level of information that is in the financial
memorandum. It is inconsistent, not enough attention is given to the impact on business, I am not sure where partial regulatory impact assessment feeds into it because there appear to be differences in the two sets of information given, and I do not see a separation between policy and administration costs. I am sure that we will go into those points in more detail but, generally, we felt that a lot more could be done at this stage.

David Whitton: I am sure that you heard Mr Gorman’s evidence about how SEPA is putting its own house in order on the environment front. How much of that will your members do? I assume that any small business will be trying to keep its energy bills as low as possible and will be doing things such as insulating its premises. That sort of thing is not included in the costs, is it?

Susan Love: Absolutely. It is important to understand that most small business people try to act in their business in the same way that they do in their home. As citizens, they are keen to do that. Our most recent survey evidence suggests that 40 per cent of our members have changed the operation of their business in recent years as a result of climate change. When asked about motivations for making environmental change to their business, the biggest factor that was cited was care for the environment, rather than penalties or regulation. It is clear that there is motivation to change among businesses. You can already see change happening in several areas that are covered in the bill, for example carrier bags.

David Whitton: I am not sure that I share your view that most of your members are doing it because they care for the environment—perhaps that is the kind of box that they tick when they get a wee survey because it looks good on paper. I would have thought that the bottom line is of more interest to any small business than caring for the environment.

Did the earlier evidence that you mentioned say anything about the likely impact on your members of caring for the environment, such as the potential costs of building surveys and calculating their energy performance and so on?

Susan Love: We made the general comment that, until the Scottish Government decides exactly what it wants to do, it is difficult to come up with exact costs. Until we have a policy proposal on the table, it is hard to start examining the different options for different sectors. The bill proposes waste management plans. That appears to refer to site waste management plans, which are primarily for construction—that is the example that is most frequently given in the financial memorandum, whose costings relate to the option that is in force down south.

However, according to the policy memorandum, that could be anything from construction-managed site management plans to complete waste management plans for all business premises. Clearly, those are two completely different things, with hugely varying costs, so until the Government indicates to us which one it wants to go for, it is hard to come up with a precise cost. If the Government goes for the latter option, and every business premises in Scotland has to have a waste management plan, it then has to decide whether it will enforce the recommendations in the plan. Obviously, there are different implications for different groups of our members.

David Whitton: That would bring in the issue of extra regulation. I imagine that you have misgivings about the quantity of new regulation that may flow from the introduction of the provisions in the bill.

Susan Love: That is one of our major concerns about the bill. We would like the Government to be clear about its intentions for regulations for small business, and business generally. That would allow us to design a regime that has the most streamlined impact. What we sign up to is better regulation. We want to ensure that if the Government has a commitment that is in everyone’s interests in Scotland, we introduce it in a way that mitigates the impact on small businesses and other vulnerable groups.

As the bill is set out, those opportunities have not been fully exploited. For example, if all business premises are to have energy performance certificates—if that is the option that the Government goes for—and waste management plans, that will be an opportunity to consider streamlining such regulations for business premises. In the waste and energy efficiency sections of the bill, I have counted about six or seven regimes that would require enforcement, paperwork and record keeping. As drafted, the bill makes it extremely costly both to business and to the public purse.

David Whitton: Do you think that the bill is good or bad for business?

Susan Love: It is good for business to think about how it can approach environmental issues. Waste is a key issue for us. We would support any drivers that helped and encouraged small businesses to recycle. The problem is that there is no point in introducing the stick unless there are ways for small businesses to comply with the legislation. One of the major problems associated with many of the duties to recycle is that the facilities simply are not there.

I have been involved in other evidence sessions on the bill, and the consistent message is that unless resources are put into tackling the major
infrastructure issues for waste, particularly in local authorities, which are a major waste source for small businesses, there is nothing that small businesses can do. You can give them a duty to recycle, but they will not save money if they cannot do it. Infrastructure costs relating to waste do not appear to be mentioned anywhere in the financial memorandum.

**David Whitton:** Will you give us a flavour of your membership’s experiences of waste collection and management across the country?

**Susan Love:** The evidence that we have suggests that most small businesses’ waste streams are fairly similar to households’ waste streams. Most small businesses are not throwing out toxic or hazardous waste; they tend to throw out small amounts of fairly run-of-the-mill general waste and paper. Our evidence suggests that about 80 per cent recycle some of their waste. That figure was 40 per cent four years ago, so there has been progress. The evidence also suggests that local authorities are still key, because they are the main bodies that pick up waste from small businesses. That is a critical point. I know that local authorities are keen to get out of it, but the bottom line is that they are the only ones who will pick up waste from small businesses. If they do not have the facilities to cope with that, I do not see how small businesses can recycle.

**David Whitton:** In its evidence, the Scottish Retail Consortium was concerned that the waste reduction and recycling provisions would have a serious impact on operational costs for retailers, which reinforces what you have said. From your previous answer, it is clear that the FSB shares the Scottish Retail Consortium’s concerns about whether you can offset some of those costs, for example.

**Susan Love:** My reading of the SRC’s evidence is that it has particular concerns about the packaging aspects of the bill, which I suppose is obvious, given its perspective. We have a slightly different take on that. We are not as concerned about packaging in relation to the production and sale of the goods. Most of our members buy in goods that are already packaged, so there will not be the same supply chain-pressure issues for them.

The issues for our members in retail in particular are to do with the practicalities of measures such as requiring all businesses to supply recycling receptacles for customers and employees. I am thinking particularly of small grocers who are already going to have to change their premises because of licensing and tobacco measures and who will now also have to find room for different recycling receptacles in their shop.

**David Whitton:** If you could make one suggestion to the Government about the bill, what would it be?

**Susan Love:** My suggestion would be that it should just decide what it wants to do. There has been a lot of consultation on various options, particularly in relation to waste. It should just decide which options it wants to take, put them into the bill and ensure that the assessment is done so that parliamentarians know what they are voting for and what the costs will be. If it does that, decisions can be taken and everyone can move forward together.

**The Convener:** I am well aware that small businesses are, by definition, cost and time sensitive and that they are wary of extra burdens being placed on them. How can small businesses play a positive part in climate change measures? What strength can they add to such measures?

**Susan Love:** Small businesses can do a lot, but they will need support. Many small businesses will come up with the technology that would help other businesses. I know of many businesses that are keen to trial microgeneration of renewable energy. They are also keen to play their part in recycling, but the infrastructure is not always there to enable them to do so. We have worked closely with our members over the past few years to encourage them to play their part. We have produced an energy toolkit for small businesses to take around their business premises and consider how they can become more resource efficient. Small businesses can do a lot and they are interested in playing a role. However, all policy that is directed at the public and small businesses has to be manageable.

**Jeremy Purvis:** I see that the information on estimating the cost of drawing up a waste management plan is based on information from the Department for Environment, Food and Rural Affairs. Was the FSB consulted, in advance of the Government drawing up the financial memorandum, about the potential costs to businesses of drawing up a waste management plan?

**Susan Love:** No, although we work closely with officials in the relevant department.

14:45

**Jeremy Purvis:** The Government information appears to show that the indicative cost of between £350 and £1,600 per waste prevention and management plan is the same no matter whether the Government, a local authority or a sole trader draws up the plan. That is patently absurd. To me, table 8 on page 51 of the explanatory notes looks like a cut-and-paste exercise. What are your thoughts on it?
Susan Love: On the table as a whole or on that point?

Jeremy Purvis: The Government appears to have taken the information from DEFRA. It says that cost depends on project size. How then can the cost estimate for businesses and the Government be the same?

Susan Love: It is fairly obvious that the costs are purely indicative. The table shows costs for three different sizes of building project. Clearly, the size and complexity of the project will affect the development costs.

Jeremy Purvis: Every business may be required to have a standing waste prevention and management plan and not simply to draw up a plan for individual construction projects. One can understand the need for such a plan in the case of major construction projects—indeed, I think that SEPA requires that for some projects. Has the Government given you an indication of the form that these plans might take?

Susan Love: No. As I said earlier, all that we know is what the Government has said in the bill. The duty may apply only to construction-related projects or it may be a general duty on all business premises. My understanding of the costs in the table is that they relate only to site management plans in England and Wales. I understand that no estimate has been done of the cost of requiring all businesses to draw up a general waste management plan. Again, the costs involved in doing that would vary hugely, given that we are talking about businesses that range from a one-person small business to one with numerous and complex sites.

Jeremy Purvis: I guess that the figure could be extrapolated by taking the average cost and multiplying it by the number of businesses in Scotland. How many members does the federation have?

Susan Love: There are 20,000 members in Scotland.

Jeremy Purvis: We would therefore multiply by 20,000 the average cost of between £350 and £1,600 per plan. Surely the total would represent a colossal sum for small businesses.

Susan Love: A cumulative cost for Scotland is given for some but not all items in the table. For example, there is only a cost per business for waste prevention and management plans, which you mentioned; no simple calculation has been done from that of the cost for all businesses. That is what I meant when I spoke about inconsistencies. It would be better if we were to look at the cost for each of the measures across Scotland.

Jeremy Purvis: But the Scottish Government has neither carried out that work nor asked the federation to become involved in modelling costs across the country.

Susan Love: No, but I imagine that we will be asked to contribute to the regulatory impact assessment. However, I would much rather that the Government had already done that work. If it had done that, the committee could have considered the detailed evidence before reaching its judgment.

Jeremy Purvis: It is too late for that.

I turn to chapter 3 on energy performance. Again, we do not know whether the Government will place the requirement on all non-domestic buildings. In table 7 in the financial memorandum, which is entitled, “Potential costs for other bodies, individuals and businesses for each energy performance scenario”, the average annual cost varies between £5.3 million and £64.7 million. That is a fairly extraordinary difference. Has the Government told you which scenario is most appropriate for businesses?

Susan Love: No. We have had signals that de minimis exemptions may apply on some measures. We were told that it may not be worth while for small businesses to be included in some of the measures—the benefits may not outweigh the costs. In our view, option 5 of the seven options for environmental performance certificates is the only one that covers all businesses. Most of the other options are for large businesses. I cannot say where the cut-off is; I have not been asked.

The Convener: You may want to follow up in writing on some of the more specific questions.

Susan Love: Sure.

The Convener: Do you want to make a final statement?

Susan Love: No. I may reflect on some of the points that were raised and give the committee a further written response. I think that that might be helpful to the committee.

The Convener: That would be excellent. I have a long-standing interest and connection with small businesses. I thank you for your attendance at committee and for your evidence.

Susan Love: Thank you.

14:51

Meeting suspended.
On resuming—

**The Convener:** Our third and final panel of witnesses is made up of members of the Scottish Government’s bill team. The panel is larger than normal, which reflects the wide-ranging nature of the bill. I welcome to the committee Philip Wright, Fiona Page, Jonathan Dennis, Alec Millar, Colin Imrie, Kevin Philpott and David Henderson-Howat.

I invite Philip Wright and Fiona Page to make opening statements.

**Philip Wright (Scottish Government Climate Change and Water Industry Directorate):** The main aim of the bill is to introduce a target to reduce Kyoto protocol greenhouse gas emissions by 80 per cent by 2050. Part 1 of the bill introduces the 80 per cent target and an interim target and establishes a framework for annual targets to be brought forward in secondary legislation. Parts 2 to 4 cover the advice and reporting aspects and provide a power to apply duties to the public sector. Part 5 covers a number of adaptation and mitigation topics that would benefit from new and updated legislation.

Jonathan Dennis, Fiona Page and I are involved in the central climate change policy area, so we will deal with questions on parts 1 to 4; David Henderson-Howat will respond to questions on forestry provisions; Colin Imrie will respond on energy efficiency and renewable heat; Alec Millar will answer questions on non-domestic building provisions; and Kevin Philpott will respond to questions on waste provisions.

Before we take those questions, however, given the interests of this committee, I will say something about the financial and economic aspects of the bill.

There is a need for climate change to be tackled at a number of levels. First, there is a need for continued global action at an international level. We are awaiting the agreement that we hope will be reached in Copenhagen later this year, which will set the scene for future emission reduction efforts and set the pace for action by developed countries. We hope that that agreement will bring in the countries that are not covered by the Kyoto protocol and its emissions reduction targets.

Secondly, as part of the UK, Scotland is bound by what is happening at the European Union level and the measures that the EU introduces to drive forward action to reduce emissions. That is a key issue for the committee to take into account, and we will probably refer to it later in our responses. For example, the EU emission trading scheme is a key part of our regime for reducing emissions as it covers up to 50 per cent of our CO$_2$ emissions.

Thirdly, we are partners in the Climate Change Act 2008, which requires effort by the UK Government and the three devolved Administrations to reduce emissions.

Finally, we have the Climate Change (Scotland) Bill, on which we are focusing today. The bill represents Scotland’s opportunity to drive forward the actions that we need to take to meet the Scottish Government’s ambitious target to reduce greenhouse gas emissions by 80 per cent. That will involve effort at different levels by central Government, local government, individuals and, as you heard in the previous evidence-taking session, small businesses. It is important that there is interaction between the EU, the UK, the Scottish Government, local government, the public sector and individuals.

It is important to bear it in mind that parts 1 to 4 of the bill contain a framework for future action. It is obvious from the earlier panels’ evidence that a lot of detail still needs to be filled in, but we are happy to do what we can to help.

**The Convener:** Does Fiona Page wish to add anything?

**Fiona Page (Scottish Government Climate Change and Water Industry Directorate):** I think that Philip Wright covered it all.

**The Convener:** Thank you for your assistance in organising your responses according to subject responsibilities and expertise.

**David Whitton:** I presume that Mr Wright will answer this question. How do you respond to the comments in the submissions from Aberdeen City Council and others about the vagueness of the estimates of the costs that they will face?

**Philip Wright:** To be frank, I was surprised by Aberdeen City Council’s response. There is a more balanced view in the other local authorities’ responses, and a better appreciation of what we are setting out to do with the general provisions of the bill. Climate change is a complex area. When you ask us specific questions about the costings and the economics, we will address those, but I do not think that Aberdeen City Council’s response was helpful.

**David Whitton:** To be fair to Aberdeen City Council, it is not alone. East Ayrshire Council, East Lothian Council, Glasgow City Council and Fife Council, which are not all under the same party’s control, all made much the same comment that things are a bit vague.

**Philip Wright:** I was certainly not making a political point. I agree that some other local authorities picked up on the point about detail, but a number of them had a general appreciation of the complexity that is involved in providing detailed
costings for the implementation of the general provisions of the bill.

**David Whitton:** What steps is the Government taking to try to alleviate the local authorities’ concerns?

**Philip Wright:** We are taking a number of steps. We now have the Committee on Climate Change’s advice, which came out in December. That relates to the UK act, but it will help to inform our contribution. That committee identified a range of abatement options, considered their cost effectiveness and examined a range of other factors in coming forward with its advice.

We also commissioned research from a firm of consultants to identify the abatement options that will be available to Scotland in the next 40-odd years. That report is now in the public domain. Using it as a starting point along with the Committee on Climate Change’s advice, we are producing what we call a strategic overview of the available abatement options in Scotland. However, we also recognise that contributions will come from EU and UK policies. The process is under way.

15:00

**David Whitton:** When will the strategic overview be available to local authorities?

**Philip Wright:** We hope that it will be available towards the end of the first half of the year—around about June or July.

**David Whitton:** This year?

**Philip Wright:** Yes.

**David Whitton:** I am sure that you are aware that the Parliament will debate the local government settlement tomorrow—it might or might not get through; who knows?

**Joe FitzPatrick (Dundee West) (SNP):** Is that a threat?

**David Whitton:** No, no, far from it.

In their submissions, Glasgow City Council mentioned the contribution that Glasgow makes to Scotland’s GDP, and Highland Council said that the unique geography and climatic conditions of the Highlands might give the council more problems. How will the various costs on local authorities be accommodated in their funding allocations?

**Philip Wright:** Do you mean in the context of the bill?

**David Whitton:** Yes.

**Philip Wright:** I cannot give specific information. We have not considered the issue at such a level of detail. For parts 1 to 4 of the bill, we have tended to consider the macro level, with the exception of some points of detail on additional costs.

**David Whitton:** That explains why local authorities are a wee bit worried. If they do not know what assistance they will get from central Government, they will be reluctant to follow procedures that you are laying down.

**Philip Wright:** You are focusing on local government, but there will be a broad sweep of measures and not only local authorities but the power sector and the manufacturing sector will contribute to reducing emissions. Local authorities will have a contribution to make, but we do not quite know what form that contribution will take. In part 5, we set out some policies that might in future contribute to reducing emissions, but there is nothing overly specific in the bill.

Highland Council commented in its submission that the carbon reduction commitment would cost £0.5 million. Other councils mentioned such costs, too. However, that is only part of the story. The carbon reduction commitment is an interesting measure in that it is fiscally neutral. Highland Council might pay out £500,000 for allowances, but there is every possibility that the council will recover that a year later, when it has performed on energy efficiency and achieved emissions reductions. The approach could be cost neutral to the likes of Highland Council.

**David Whitton:** You said that the strategic overview will be available in June or July. Have the costs of delivering the 2050 target been revised in light of the overview?

**Philip Wright:** We are working on the matter with colleagues throughout the Scottish Government, given that there will be an amalgam of abatement effort in the energy, transport and agriculture sectors. Work is in progress and the overview will be published by the summer.

**Jonathan Dennis (Forestry Commission Scotland):** It is fair to say that, so far, we have tried to consider the bigger picture first. We accept that considering the macro level takes us only so far and we are looking to put in place secondary and more detailed analysis, such as the work around the AEA Technology report, which Philip Wright mentioned, and other pieces of work. We are considering more detailed costings, but we thought that it was important first to try to box in the probable costs in a macro sense and then to consider more detailed information as we go forward.

**The Convener:** We have been told that the estimated costs are only proxy figures, which are arrived at by disaggregating UK figures. In studies that you have done, how do your figures compare with the estimated costs of meeting the 2050
target, which are based on disaggregating UK costs?

Jonathan Dennis: It is fair to say that the work is based on UK figures. The Stern review considered costs in the global context. Work that has been undertaken at UK level has considered UK aggregates, as you said. Beyond that, we instigated a couple of pieces of research on Scotland-specific data. We realise that, in certain policy areas, such as transport, housing stock and agriculture, there are significant differences in Scotland. So far, we have undertaken two pieces of work that examine Scotland-specific data. Both of those have been published and further work is now under way to consider in more detail not only the 2050 target but the mid-range targets around 2030.

It is all part of a jigsaw. We considered whether the costs look okay from a UK perspective and then whether they are appropriate from a Scottish perspective. Now we are undertaking more detailed work on costs using Scotland-specific data.

The Convener: The trouble with the forward planning is that, as we get closer to the reality, we do not want to continue with figures that do not appear to fit into the Scottish pattern. However, getting a better picture for Scotland will depend on whether you can roll out other figures. I presume that that work is under way.

Philip Wright: I will fill in some of the detail again. The bill sets out the general trajectory through to 2050, but a key provision is the requirement on the Scottish ministers to introduce annual targets. If the bill is passed, ministers will be required to do that by some point next year. When we produce those annual targets and that work is under way to consider in more detail not only the 2050 target but the mid-range targets around 2030.

The Convener: The trouble with the forward planning is that, as we get closer to the reality, we do not want to continue with figures that do not appear to fit into the Scottish pattern. However, getting a better picture for Scotland will depend on whether you can roll out other figures. I presume that that work is under way.

James Kelly (Glasgow Rutherglen) (Lab): I have questions on the figures that are in the financial memorandum and the work that is being done on the strategic overview. Has the Government made any projections of the likely energy mix between now and 2050 and the likely costs per megawatt hour?

Jonathan Dennis: The work that has been undertaken on the likely 2050 energy mix has now been published, and we are happy to point the committee towards that information. That work involved the consideration of various options for the renewable energy strategy, such as carbon capture and storage and the place of coal and gas in the energy mix, as well as the potential additional costs of introducing more renewables or carbon capture and storage.

Having had that overarching consideration, we are now trying, as part of the strategic overview, to drill down into the specifics of the options to identify how deliverable and achievable each is and the timescale under which it could be delivered. As part of the bill process and the production of the annual targets, it is important to know when the options might come on stream.

James Kelly: Are there different scenarios in the energy mix projections, or do you have a specific set of energy mix targets for the run-up to 2050?

Jonathan Dennis: Two complementary reports have been published. One, which is more specifically about energy, examined the range of options from heavy coal to heavy renewables and the introduction of carbon capture and storage. It tried to capture the range of energy mixes that are available to us. We did not focus deliberately on one scenario but considered the range of options.

James Kelly: To be topical, how did nuclear power feature in that?

Jonathan Dennis: We included the existing nuclear power stations to the end of their lives. From that point onwards, no additional nuclear capacity was included; after the end of their lifespans, the existing nuclear power stations were replaced with renewables and carbon capture and storage. We tried to capture the realities and consider the longer-term picture of the energy mixes.

James Kelly: I appreciate that it is a complex matter. You said that a couple of pieces of work are going on. How has that work fed into the calculation of the cost of delivery as £1.7 billion at 2005 prices?

Jonathan Dennis: That costing relates to a piece of research that was undertaken and which has now been published. We considered all sectors in the Scottish economy—not just energy, but agriculture, transport, housing and so on—so that we could start to drill down and consider whether what has been widely proposed in the UK context is achievable in a Scottish context, what the cost might be and how everything might come together to deliver the wider targets in the bill. That overview exists; in the strategic overview that we are undertaking we are moving on from initial costings to the next level, to ascertain whether what is proposed is achievable and whether the costings are appropriate.

James Kelly: I want to be clear about this. The £1.7 billion figure in the financial memorandum was derived from a particular piece of work, but
other work is going on and the figure will be updated as that work develops.

Jonathan Dennis: That is the case. The financial memorandum reflects the most up-to-date published work that we had when the bill was introduced. The strategic overview will give us a finer level of detail and will provide a credibility check on the costings in the financial memorandum. We will consider whether the costings are appropriate and whether there are alternative options.

Fiona Page: Mr Kelly made a valid point. Much work is going on. The Scottish Government has been leading on a number of studies, which Jonathan Dennis and Philip Wright talked about. We have also been waiting for the publication of key reports and advice, such as the report of the UK Committee on Climate Change. That report was published in December and is a very important empirical piece of work, which will set many of the ground rules, not just for the UK legislation but potentially for what we do in Scotland.

It is a case of getting everything lined up. First, we needed a number of things, such as the UK committee’s report. We need the UK Government to respond to the report and to agree the emissions budgets to which it will sign up under the Climate Change Act 2008. Work on our strategic overview builds on the report that we published in November. That report, which is referenced in the financial memorandum, is where the £1.7 billion figure came from.

Many pieces of information are part of the jigsaw, and it is difficult for us to leap-frog over things that are not yet in place. That is why it is a challenging task for the committee to consider the financial memorandum as it stands. We will be more informed as things progress. When the strategic overview is finished and we know what the UK emissions budgets will be, we will have a much clearer idea of the pace of activity that will be needed. We will be able to add another level when we bring forward our annual targets, which we hope will be put in place through regulations in June 2010.

The Convener: You describe challenging work, which is being approached in logical steps.

Joe FitzPatrick: David Whitton talked about the allegations of vagueness in the financial memorandum. Susan Love told the committee that the FSB would have preferred details on waste to be in the bill rather than in secondary legislation. By how long would the bill’s introduction have been delayed if there had been an attempt to include all the secondary detail on that huge area?

Kevin Philpott (Scottish Government Environmental Quality Directorate): I do not know, but the delay would have been considerable. There are things in the bill that are not without precedent. For example, on waste data, there are currently regulations in secondary legislation; site waste management plans exist in England and are based on secondary legislation; and there are deposit and return schemes elsewhere—one in Denmark was introduced in 54 pages of secondary legislation, doubtless written in deathless Danish prose. It would not be proper to reproduce such stuff in the bill, and doing so would have delayed the bill’s introduction considerably.

The other point to make is that we are not doing things once and for all. Regulations on waste provision, for example, will have to be amended from time to time. Also, if markets for recyclates improve, we might be able to add more of them to plans. It would be inconvenient—to say the least—to have to take such action through primary legislation every time. We need the power to do it through secondary legislation.

Fiona Page: On the climate change targets, we would probably have had to delay the bill by about 18 to 20 months if we wanted to bring forward the annual targets at the same time as the bill. At the very earliest, you would have received the bill in September or October 2010.

15:15

Joe FitzPatrick: Would that have made it difficult for us to achieve the 2050 target?

Fiona Page: It would, but we are talking about a longer-term trajectory. Through the bill, we are trying to set the long-term framework and to recognise that the Scottish Government is serious about climate change and wants to have specific Scottish legislation on it. We could just have sat back, given that we are covered by the UK Climate Change Act 2008 through the legislative consent motion that was agreed in the Parliament about 14 months ago. It is a bold step to introduce Scottish legislation that goes further than the UK act in recognising the important role of international aviation and shipping emissions.

More important, we are getting the legislation on to the statute book and getting you talking about climate change. We hope that that will get the public more engaged, because climate change is a very serious issue for you and for future generations. Introducing our own legislation gives us the opportunity to open up the debate, have the discussions that we need to have and acknowledge that we all have to play our part in tackling climate change.
Philip Wright: I want to reinforce something that I said at the outset. This is a difficult time for us to introduce the bill, because the global position is in a state of flux. We are waiting for an international agreement to be reached at Copenhagen. The EU has already committed to a 20 per cent reduction in emissions across the EU. If agreement is reached at Copenhagen, that will increase to 30 per cent.

That is reflected in the advice from the Committee on Climate Change, which offers two budgets: an interim budget and an intended budget. One is based on the 20 per cent target and the other is based on the 30 per cent target, and they reflect the measures that will be developed at EU level to deliver either a 20 per cent or 30 per cent reduction. That will impact on the UK and on Scotland. The level of ambition at EU level is key to the level of effort that will be required in the UK and Scotland. For example, transport emissions are problematic. We will rely on car technology standards to bring about emissions reductions—the main reductions will come from that area. Product standards are EU driven. We need the EU to deliver the potential transport emissions reductions.

The Convener: We are seeking islands of knowledge in a sea of complicated uncertainties.

Derek Brownlee (South of Scotland) (Con): We all appreciate the uncertainties that you are dealing with and understand the difficulties that you faced in drawing up the financial memorandum. Obviously, we face the converse difficulty, as we are trying to scrutinise the financial memorandum. The most material number is the impact on GDP—the £1.7 billion, or whatever it is. In drawing up the bill, did you consider regular reporting on the impact of its measures on GDP?

Fiona Page: That is a fair question. We have set out in detail in the bill the kind of information that ministers would want to be reported on, which generally is performance driven in relation to reducing greenhouse gas emissions and related activities around energy and electricity. We did not consider regular reporting on the impact on GDP because it is quite difficult to determine Scottish GDP. My economist friend Jonathan Dennis will be able to keep me on track with this, but GDP figures are generally UK based, and it is very difficult to extrapolate to obtain Scottish GDP numbers. I suppose that it would be possible to measure Scottish GDP, which is what we would report on and refer to, but I think that our solicitors would be worried about placing an obligation on the Scottish ministers in primary legislation to report on it, because we would have to define exactly what we meant, given that UK GDP would be different from what we would view on the Scottish side.

I do not know whether Jonathan Dennis wants to say anything about the challenges.

Jonathan Dennis: No, the challenges are fair. The Committee on Climate Change will examine the impact of emissions on GDP as part of its annual report, and we will rely heavily on its advice. We have seconded an economist to work with the committee to input into the Scottish elements. Undoubtedly, we will look to the committee to see the impact in a UK sense, but we will also seek to identify whether the impact is likely to be different in Scotland.

Fiona Page: We will have the power through some of the provisions to amend what ministers are obliged to report on. If it were felt in future that it would be beneficial to assess the impact on GDP, ministers could bring that forward.

Derek Brownlee: I appreciate that it is technically difficult to produce the figures, but if the impact on GDP is the largest cost of the bill, and if it is difficult to extrapolate the data for reporting purposes, it is difficult to assess the potential impact of the bill. We need a methodology for extrapolating the data in the first place. We have all the very laudable reporting regimes for carbon units, which are fair enough, but if we do not try to measure the bill’s impact on GDP, it will be difficult to form a view on whether we are pursuing the most cost-effective way of reducing carbon emissions or whether we are missing opportunities.

It is difficult to measure the potential cost to the economy. By your own admission, the biggest impact will be on GDP. This is not an academic exercise; it is relevant to the cost of the bill to Scotland plc and the private and public sectors. Should not the impact on GDP be part of the reporting mechanism, even if we are only taking a best stab at it? Should we not at least try to measure the impact not only of carbon emissions but of the year-on-year costs of reducing them?

Philip Wright: I will try to answer that. When we set annual targets, which will be the subject of a statutory instrument under the affirmative procedure, part of the process will involve a set of policies to deliver those targets. When we come to look at the targets in a bit more detail, we will give more information about costs, which will give a much better picture of the cost implications, certainly for the first 10 years. After that, the path is still open, although we will have started to narrow it down. A lot more information will be available between now and 2020, but the picture will be fuzzier after then, because the pathway is not clear. However, you will have a lot more information about costs after summer 2010.

Fiona Page: It is important to recognise that section 4(4) details all the key criteria that the
Scottish ministers will have to be aware of when setting the annual targets. Many of those criteria are fiscal and economic, but they go further and require ministers to take account of, for example, Scotland’s special circumstances, such as our remote and rural communities, which go far beyond what the rest of the UK experiences. The criteria include a wide range of circumstances and ministers will have to take account of them. As a result, the advice and expert guidance that ministers will be required to obtain before they set the annual targets will have to consider those criteria.

Jeremy Purvis: I want to go back to some of the information that we received from previous witnesses. I was struck by the information about energy efficiency and waste management, and some of the requirements on local authorities and businesses. Just so that I am clear in my mind, when did the consultation conclude and when did you start making policy decisions about what was going to be in the bill?

Fiona Page: The consultation on parts 1 to 4 ran between January and March 2008. If I recall correctly, we published the analysis of the responses around 20 August and ministers published their response to the consultation with their views of what was likely to be in the legislation on something like 27 October.

Jeremy Purvis: I am looking at the seven scenarios for the EPCs and the scenarios that will affect waste management—

Fiona Page: I am sorry to interrupt, but I should let you know that there were separate consultations on the provisions that you are about to talk about. A consultation on the energy efficiency of non-domestic buildings was run separately from the consultation on the bill. There was also a zero waste consultation, which again was separate from the consultation on the waste provisions in the bill. If you would like to know the dates of those consultations, my colleagues can give them to you.

Jeremy Purvis: It would be helpful to know when they were concluded.

Alec Millar (Scottish Government Directorate for the Built Environment): The consultation on improving the energy performance of existing non-domestic buildings was opened on 2 September and closed on 25 November last year. The report is being completed, and we are currently analysing the responses.

Jeremy Purvis: So nothing would have been held up if further work had been carried out with the Federation of Small Businesses, for example, on the cost to small businesses. The Government has not actually concluded its work, so it is a bit of a red herring to say that further work would have delayed the bill considerably.

Fiona Page: It depends on what you are asking. If you are asking us to engage more with stakeholders on a specific provision, such as the energy efficiency of non-domestic buildings or the waste provisions, that work would be separate from further work on parts 1 to 4, which contain the main targets and purpose of the bill. There will be opportunities for further engagement when we get the additional advice and finish the strategic review, when we know what we are doing under the UK emissions budget, which we are part of, and when we propose our annual targets.

Jeremy Purvis: This committee is considering the financial implications of the bill. The bill presents seven policy options with hugely variable costs, without any modelling having been carried out of the potential impact on the economy or the efficacy of the options in relation to the environment. There are seven policy options, but no policy decision has been taken about whether any of them could be excluded.

Fiona Page: You mean the seven scenarios for the non-domestic building energy efficiency provision in chapter 3 of part 5.

Jeremy Purvis: Yes. As I understand it, the provisions on waste prevention and management plans could apply to every business in Scotland annually or they could exclude almost all businesses in Scotland in perpetuity. The secondary legislation provisions are so broad that there seems very little point in them being in the bill. However, I want to return to the huge variation in the seven policy options, because they have caused local authorities and businesses considerable concern.

Alec Millar: The costs that were established in the consultation and brought in to the financial memorandum were prepared by the Building Research Establishment for those scenarios that we set out. They cover the one-off costs to the Scottish Government of setting up each scenario, but they also cover the annual costs, which depend on the scenarios. The scenarios range from covering only larger buildings to all public buildings or all buildings. They also cover the variation between carrying out certificate assessments and just recommending measures that could improve building performance or making the uptake of those recommendations compulsory. The scenarios cover quite a wide range of possibilities, and they gave those whom we consulted a broad picture of the alternatives. We are taking advice on what we got back and reporting to ministers on how we should progress. We are hoping to find a way forward for the next stage of the bill.
Jeremy Purvis: Was the information provided by the Building Research Establishment public, and was it provided to all local authorities and business organisations?

Alec Millar: It was placed in the partial regulatory impact assessment within the consultation document.

Jeremy Purvis: Was it the full information?

Alec Millar: Yes.

Jeremy Purvis: So why did businesses feel that they were not consulted on the potential impact and the variations? No modelling was carried out for businesses on the variation in costs, which, depending on the policy position that the Government takes, range from £5.3 million to £64.7 million.

15:30

Alec Millar: That is correct—the information was in the partial regulatory impact assessment.

Jeremy Purvis: I have one further question on the information that has been presented on the potential secondary legislation on waste prevention and management plans. I presume that the secondary legislation will clearly state which body will act as the enforcement authority.

Kevin Philpott: Yes, it will. With regard to the waste prevention and management plans—and all the waste provisions—not only have we not decided on the exact form that the regulations will take, we have not yet decided whether they will be made at all. The cabinet secretary, Richard Lochhead, made that point at the Rural Affairs and Environment Committee last week. At this stage, we hope that voluntary work might achieve a lot of the outcomes that we seek. At present, Scottish planning policy 10 encourages people to make site waste management plans, although the uptake so far seems to have been disappointing.

It is conceivable—the cabinet secretary was quite open about this—that the backstop of potential secondary legislation will encourage people to think more carefully about voluntary action. If we make regulations, they will establish which body will act as the enforcement authority.

Jeremy Purvis: So the proposed secondary legislation is, in effect, a threat.

Kevin Philpott: I would not use that word.

Jeremy Purvis: Part of our work involves considering the impact of the bill on the public purse and on those whom it will affect. There might as well be a blank cheque, given that one aspect could relate to every business or no business in Scotland, and another major aspect might never happen at all. We have been asked to scrutinise the bill and its financial memorandum. I am sure that we could have used our time for other activities, given that the legislation might not actually be used at all.

Kevin Philpott: I agree that it might not be needed at all, but if it is not, it will be because voluntary action has succeeded. If voluntary action does not succeed, we will need to do something, which is why we need the powers. It is no good for us to say in five or 10 years' time, "We need the powers—where is the bill?"

Jeremy Purvis: Would that not be for Parliament to decide at that stage?

Kevin Philpott: It is certainly for Parliament to timetable its bills, and Parliament has timetabled the Climate Change (Scotland) Bill. I think that most people accept that waste and resource use is closely linked to climate change, and the bill is therefore an appropriate vehicle to take forward waste provisions. There is not, at present, another vehicle that can take forward the type of waste provisions that we might need.

Jeremy Purvis: Mr Wright, do you really believe that local authorities have a full and accurate estimate of the cost that will fall on them when the bill is enacted?

Philip Wright: Considering the bill as a whole, and the response that you have received from the panel so far, you would probably be correct in thinking that I do not. The cost depends on the exact nature of the regulations that may be made 10 or 20 years down the line, if they are made at all.

We know for a fact that towards the end of the 40-year period it will be much more difficult to squeeze carbon out of the system. We will go for the easy and cost-effective hits over the first 10 or 20 years, but as we move towards 30 and 40 years it will become more difficult. We might have to turn to more regulatory measures and enforcement action to squeeze out the necessary carbon to achieve the 80 per cent reduction. The bill provides a framework and some building bricks that we might use in the future, but it is not possible at the moment to state with precision the cost implications for local authorities and others, because we are introducing enabling powers.

Fiona Page: It is also fair to say that the bill should not be the only thing that drives forward action in public bodies, local authorities, businesses and homes across Scotland. At the individual level, people can change their behaviour and take simple energy efficiency steps, which, frankly, they should be doing now. The bill may act as a stimulus and encourage people to do those things, but action will need to be taken at different levels in the future.
Local authorities are busy bodies, and I have full confidence that they have asset management plans in place, that they take facilities management seriously and that they will develop upgrade plans for certain equipment, where necessary. For example, they could introduce low-carbon technologies and invest in better boilers when they need to replace them. That kind of thing can be done now, at very little cost, and does not require primary legislation.

It is important that we take early action on climate change now. Besides setting the targets, the bill contains a number of other measures that make part 5 quite long and protracted. I appreciate that it is difficult for everybody to consider the bill to the level of detail at which we would like it to be considered. We are introducing measures now to address certain things that we hope will happen voluntarily but which may not. We will probably need a powerful stimulus at later stages, when things become harder to do, which is why the bill contains the waste provisions that Kevin Philipott talked about and the public sector duty provisions. It is all part of the big picture and aims to ensure that everybody plays a fair part. Nevertheless, Mr Purvis raises some reasonable questions.

The Convener: I presume that there is no model that you can follow in the work that you are doing. The same problems that arise at the Scottish level and at the UK level would be faced by anybody who tried to deal with the complexities that you are addressing.

Fiona Page: Absolutely. We are learning and will be part of the UK model through the emissions budgets approach. However, we are going a step further in Scotland. Frankly, we are doing something an awful lot harder and much more challenging for ministers. We are setting annual targets that are much more challenging and that we are much less likely to achieve if we do not ensure that the right things happen. We will learn from what is happening at the UK level—we will take the same steps as the UK and be bound by the UK Climate Change Act 2008—but we will have to do additional things in Scotland, because we are taking a slightly different and, frankly, more demanding but potentially more successful approach.

The Convener: Can you give us an approximate timetable for the implementation of the energy efficiency measures?

Alec Millar: Once the bill is enacted, subject to ministerial approval we will produce regulations covering particular types of buildings, which will be based on research to ensure that the regulations are robust. We will then give the organisations whose buildings are affected around two years to obtain an assessment certificate and then perhaps a further two years to implement any measures that the certificates require. Such measures will be mandatory rather than recommended. We are probably talking about four years. Time is of the essence.

The Convener: Will those measures be included in the first batch of annual targets, in 2010, and will they be funded through the current spending review?

Philip Wright: It is intended that the first of the annual targets will kick in in 2010. There is every possibility that, if ministers decided to proceed with the regulations on non-domestic buildings, they would be caught within the first 10 years of annual targets. The targets would reflect the emissions reductions that we expect from buildings, and the regulations would be part of that package. The current spending review continues to 2011, and the measures would come in shortly after that.

David Whitton: In case you thought that your afternoon had been wasted, Mr Henderson-Howat, I would like to turn to forestry. I believe that you are the forestry expert.

The financial memorandum refers to transfers from the Forestry Commission. On joint ventures, the estimated costs are £0.5 million this year and £0.5 million next year, with a potential net income of £10 million by 2012 and £30 million by 2020. I am sure that you have seen the evidence from the Confederation of Forest Industries, which questions those income figures. Will you give us a bit more detail on how you reached those estimates?

David Henderson-Howat (Forestry Commission Scotland): At present, the Forestry Commission has power to lease land only for renewable energy projects. At current gross bundled electricity prices, a 150MW wind farm could deliver about £3 million of income per year, if 7 per cent of the gross income was paid on the lease. A lot of research has been carried out into the potential use of Forestry Commission land for renewables developments, particularly for wind farms, but also for hydro. It is reckoned that, at present, about 1.3GW of developments are either committed or subject to option agreements and that there is scope for considerably more development. That is the basis of those numbers.

The point about leasing versus joint ventures is that, as I said, at present, we can only lease land and we do not have powers to set up joint ventures. Our colleagues south of the border in England and Wales can set up joint ventures, which means that, when they are in negotiations with developers, they have more strings to their bow, as they have the option of leasing or a joint venture. At present, developers know that we can only go down the leasing route.
David Whitton: The financial memorandum refers to the intention to release capital from the forest estate by letting timber-cutting rights, the income from which would depend on a variety of factors. As paragraph 180 points out, one option that is being evaluated is a 75-year lease of 100,000 hectares. Will you clarify how much of the £850 million of national forest estate it is intended will be released for timber cutting?

David Henderson-Howat: As you will be aware, a consultation exercise on the forestry provisions in the bill has just concluded. Many representations have been made to the Scottish Government about the terms and conditions that might be included in such a lease. Clearly, the income from a lease will, to an extent, depend not only on the area that is let but on the terms of the lease and other issues, such as what might or might not be said about future timber marketing agreements. Another factor affecting the value of a lease, if leasing were to go ahead, would be the lessee's anticipation of future timber revenues or development values. As with anything looking ahead, there is a degree of uncertainty. Subject to those factors, we are talking about a sum in the range of £150 million to £200 million.

David Whitton: Has a business plan been prepared by the Forestry Commission on that?

David Henderson-Howat: Ministers launched the consultation exercise on 4 November. In parallel, we were asked to carry out what they call an options review, on which we will report to ministers by the end of this month. As part of that exercise, Forest Enterprise has considered in detail the sort of areas that might be suitable for leasing, bearing in mind that the intention was to identify areas that had relatively less value for recreation and conservation but good commercial value. The process has identified about 100,000 hectares or so in Argyllshire and the south of Scotland. That is being considered as part of the options review.

David Whitton: I am a bit confused. Is there a business plan or is it just an options review?

David Henderson-Howat: The options review will include the type of financial analysis that one would expect in a business plan.

David Whitton: So we should see some hard numbers on expected income from such a lease.

David Henderson-Howat: As I said, the problem with expected income from a lease is that we are always in the realm of uncertainty. If someone takes on a lease for 75 years, the amount that they are prepared to pay for it depends on their expectations of timber prices over the period. One need only look at how timber prices have moved even in the past five years to see how much they fluctuate.

David Whitton: Does the options review predict what such a lease would do to the Forestry Commission's financial viability?

David Henderson-Howat: The need to take a view on that is an important element in considering a lease. Before entering into any lease, it would be essential to set a reserve price, which would be the bottom line. In effect, we would set that by valuing how much the assets are worth to the Forestry Commission at present and factoring in additional costs that might be associated with leasing, such as paying grants to the lessee.

15:45

David Whitton: The financial memorandum also says that consideration is being given to "transferring cutting rights receipts to a membership-led body".

but that you have not yet developed any detailed proposals. Do you have any further information on the consultation that is taking place on that?

David Henderson-Howat: That is part of the consultation exercise that I mentioned. I cannot recall any consultees who gave unconditional support for the idea of a trust.

David Whitton: No, indeed. I suppose that the options review will include any associated costs of setting up such a body.

David Henderson-Howat: That is right.

David Whitton: Sorry, but will you remind me when you are expected to get back to ministers? Is it the end of this month?

David Henderson-Howat: The deadline for the options review is the end of the month.

The Convener: I will draw the proceedings to a conclusion. We have rightly covered in detail a substantial range of topics. Any issues that have not been covered can be followed up in writing. Do our witnesses have any final comments?

Fiona Page: I have no specific comments, but I want to thank the committee. I appreciate that the financial memorandum is particularly challenging for you. It has taken us into a new arena. I thank members for their patience in taking us through the questions.

The Convener: The committee likes a challenge. I thank all the witnesses for their expertise and evidence.

I suspend the meeting for a moment to allow our witnesses to leave.

15:47

Meeting suspended.
The Scottish Parliament

RURAL AFFAIRS AND ENVIRONMENT COMMITTEE

Stage 1 report on the Climate Change (Scotland) Bill

The Committee reports to the Transport, Infrastructure and Climate Change Committee as follows—

Introduction

1. The Rural Affairs and Environment Committee (“the Committee”) specifically requested that it be appointed as secondary committee on the Climate Change (Scotland) Bill\(^1\) to scrutinise provisions which fall within the Committee’s remit, namely forestry (section 47), waste recycling and reduction (sections 52 to 61) and muirburn (section 46).

2. The Committee would wish to begin by thanking all those who provided written evidence or gave oral evidence to the Committee on these provisions in the Bill.

3. Before considering each set of provisions in turn below, the Committee wants to highlight some issues on the enabling nature of this legislation, the content and timing of the Bill and its impact on parliamentary scrutiny.

Parliamentary scrutiny

4. Before commencing evidence taking on the Bill the Committee wrote to the Scottish Government to express its frustration at the late stage at which a number of consultations on the provisions were undertaken\(^2\). The letter focused specifically on the forestry consultation which closed on 27 January. Given the need for this Committee to report to the lead Committee in advance of its evidence session with the Minister for Transport, Infrastructure and Climate Change as the final session of evidence taking at Stage 1, this Committee has had to scrutinise these provisions without copies of the responses to the Scottish Government’s consultation being available.

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\(^1\) Climate Change (Scotland) Bill (as introduced). Available at: [http://www.scottish.parliament.uk/s3/bills/17-ClimateChange/index.htm](http://www.scottish.parliament.uk/s3/bills/17-ClimateChange/index.htm)

5. The Committee acknowledges that the Minister for Environment at that time, Michael Russell, offered an apology for the late introduction of the consultation, and the Committee also appreciates that the Government provided a preliminary analysis of responses to a short timescale. Regardless of this, introducing a Bill in advance of the conclusion of consultations on its contents is not appropriate. Parliamentary committees should be afforded the right to undertake scrutiny of legislation with all of the relevant information at their disposal.

6. The Committee is also concerned that a number of areas of uncertainty remain about the specifics of the Government’s proposals that the Bill’s provisions would enable. Limitations in the accompanying documents and in the supplementary information provided by the Government creates a perception that the Government’s proposals are still evolving despite the Bill having been introduced a number of months ago.

7. The Committee wishes to express its frustration that it has been asked to scrutinise and potentially endorse broad enabling powers to a relatively tight timescale and with a lack of sufficiently detailed information at its disposal.

8. Furthermore the Committee is concerned that a number of the Bill’s provisions provide for new powers that are notably broad. This is not the first time that enabling powers have been proposed within primary legislation with the intention of the detail being provided within subordinate legislation. However, some of the powers, while limited to dealing with climate change, might still be seen as broad enough to be used in a different way to those proposed by the current administration. This concern is exacerbated when the specific proposals, such as the leasing of Forestry Commission land, are proving contentious.

9. This committee or its successor would of course have the opportunity to scrutinise the necessary subordinate legislation required to allow Scottish Ministers to use these powers. However there are limitations to the scope of the Parliament to scrutinise secondary legislation. For example the timetable for consideration once laid is considerably shorter than for most bills (40 days) and once laid committees are unable to amend this form of legislation.

10. There are a number of provisions where, although the powers have been criticised for being too broad, the policy direction behind these powers has received wide support from stakeholder groups, such groups are relatively relaxed about subordinate legislation being used to flesh out the detail of these proposals following passage of the Bill.

11. However, for the most controversial proposal, specifically the forestry leasing proposal as detailed in the Policy Memorandum, it is clear to
the Committee that the principle behind the provisions does not have a body of support, the Committee’s preference would be that this proposal should not be permitted by the wording of the Bill.

12. Notwithstanding paragraph 11 relating to leasing, in addition the Committee invites the Government to give serious consideration to amending the Bill to place limitations on the scope of secondary legislation stemming from it where powers are particularly broad. The Committee has flagged up specific suggested amendments to this end later in this report.

13. The Committee also considers that all secondary legislation stemming from these broad enabling powers should be subject to ‘super affirmative’ procedure. This effectively provides the committee likely to be referred the relevant instrument additional time to scrutinise it by allowing the committee to view it in draft. Importantly, scrutinising an instrument in draft affords the Committee the opportunity to take evidence on its provisions and to propose amendments to it before it is laid before Parliament. To allow committees maximum opportunity to take evidence on these draft instruments the Scottish Government should notify committees at the earliest opportunity that any such instruments are approaching a state of readiness to be laid before Parliament.

Forestry

14. Section 47 of the Bill provides for subordinate legislation to allow Forestry Commissioners within the Forestry Commission Scotland to form or participate in corporate bodies or trusts. In addition Commissioners would have the power to provide loans and act as an officer of a body corporate, or a trustee of a trust. The detail of the proposals behind section 47 are described in the Policy Memorandum, which states that the Government is proposing two specific policy areas. The Forestry Commission would be allowed to enter into joint venture arrangements for renewable energy developments. Such provisions on joint ventures replicate provisions already in force in England and Wales. The second proposal is to release capital by leasing up to 25% of Forestry Commission Scotland land for up to 75 years with the intention of using the funding gained to implement measures to contribute towards mitigating climate change. In this context the Committee agrees with successive governments’ stated objective of increasing the acreage of forestry in Scotland, within the context of an integrated land use policy.

Themes arising from evidence

15. The Committee issued a call for evidence on the forestry provisions. The Committee then held a roundtable discussion involving: Stuart Goodall, Chief Executive, Confederation of Forest Industries (ConFor); Allan Mackenzie, representative of Forestry Commission Trade Unions; Dr Calum Macdonald, Forestry Commissioner and Chairman of the
National Committee for Scotland, Forestry Commission Scotland; Lisa Duggan, Landscapes Manager, Loch Lomond and the Trossachs National Park Authority; Angus Yarwood, Convener of the Woodland Task Force, Scottish Environment LINK; Janice Cassidy, Policy Officer, Scottish Rural Property and Business Association; and Gavin Ellis, Director, Scottish Tourism Forum.

16. This session was immediately followed by evidence from the Minister for Environment at that time, Michael Russell MSP, and his accompanying officials Anne Cairns, Solicitor, Rural Affairs Division, Scottish Government, Jo O'Hara, Head of the Natural Heritage Management Team, Scottish Government, Bob McIntosh, Director, Forestry Commission Scotland, and David Henderson-Howat, Policy Adviser, Forestry Commission Scotland.

Leasing
17. All of the submissions received in response to the Committee’s call for written evidence that commented on the leasing proposal either opposed the proposal or raised concerns about it.

Consultation
18. ConFor suggested that the timescale of the development of the proposal has been challenging stating that—

“It would have been ideal to have had a longer timescale and an opportunity to consider how forestry can contribute to tackling climate change in the context of a wider land use policy and the wider benefits that forestry provides.”

SE LINK added that—

“…we would like a longer discussion and more opportunity for all the stakeholders to get involved. We would prefer it if a later legislative opportunity was taken to introduce specific powers, once it has been determined what they should be.”

Loch Lomond and the Trossachs National Park Authority supported this position stating that—

“Although we support providing more land for forestry, there has been limited consultation on the proposals in the climate change action plan, so we have not explored other mechanisms for doing

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that...We are just concerned about how quickly the proposal is going through.”

19. The Minister argued that the consultation on the forestry proposals was a genuine consultation and that on that basis alternatives to the leasing proposal were welcome. The Minister was also clear in evidence that the timing of the consultation is not ideal but that it is imperative that the Government acts at the earliest opportunity on climate change, and that this Bill makes provision for this to happen.

20. The Committee appreciates that consultations should not have a preconceived outcome and is concerned that consultation was undertaken during Stage 1 on a proposal already contained in documents supporting the Bill. There is sufficient concern about the leasing proposal for the Committee to be unwilling to recommend that the Bill allow this proposal to go ahead.

21. As detailed below the leasing proposal is contentious for numerous reasons and the consultation process for this proposal is considered to be inadequate by key stakeholders.

22. The Committee recommends that the Government does not progress this leasing proposal and amends the enabling section in the Bill.

Funding

23. On the issue of how any funding generated by this policy would be used, Dr Calum Macdonald from Forestry Commission Scotland stated that—

“...I would be keen for any money that is raised from joint ventures or by the commission to be spent on achieving forestry strategy targets.”

24. ConFor stated that its members were concerned that there had not been definitive reassurances from the Government that the money raised from the leasing proposal would be channelled back in to forestry based measures to improve carbon sequestration as opposed to being redirected into other Government initiatives to mitigate climate change. The Committee notes however that the Policy Memorandum does specify that funding generated would be used for woodland creation.

25. The SRPBA raised concerns from its members that any organisation or organisations leasing land could access funds from the Scotland Rural Development Programme which is already considered to be insufficient to support existing organisations and difficult to access funding from.

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The SRPBA also suggested that, if there were only one or two leases, a company or companies with a large proportion of the land could “outcompete” all of its members.

26. The Committee is aware that one of the appeals of the leasing proposal is the potential to provide the Government with a substantial sum of money up front as opposed to over a prolonged period, as is likely to be the case with the release of funding from joint ventures proposals. Members also raised concerns with the Minister that, should the leasee tap into SRDP funds at a rate of £2m per annum then over a 75 year lease £150m of support would be provided, leaving the Government with a net profit over that time of £50m. This figure of £50m does not reflect any loss of income or expenditure to the Forestry Commission Scotland and assumes that £200m is still the market value of the lease once the Bill is enacted.

27. If the Government proceeds with the leasing proposal in the Bill the Committee considers that it should clarify, before the end of Stage 1, how it envisages the mechanism for allocating funding released towards woodland creation working in practice, and to what extent the leasee will be able to call upon SRDP funds. The Government should also provide further detail on the calculations upon which the proposal’s viability has been assessed.

28. Finally, the Committee recommends that the Government should provide, as part of its reporting duties under Part 3 of the Bill, details to Parliament on which budget lines the funding generated from the leasing of land has been allocated to and for what purpose.

29. Concern was raised by some witnesses that, if the most profitable parts of the forest estate are leased off, there may be funding issues regarding the delivery of multi purpose and climate change benefits in the remaining 75%, which would by definition, be less profitable. Suggestions were made that the most profitable 25% would remove around a third of the commercial income of Forestry Commission Scotland.

30. If the Government proceeds with the leasing proposals, the Committee considers that detailed costings showing the economic viability of the remainder of the national forest estate should be provided to Parliament.

31. The Bill and Accompanying Documents contain little information on a proposed not for profit trust, with the Financial Memorandum stating:

“Detailed proposals have yet to be developed, and will include consideration of State Aid issues”
32. The Minister\(^9\) in evidence seemed sceptical about the idea, stating:

“Although the proposal for a trust is interesting and would offer certain advantages, I see little overall advantage. It might be overbureaucratic. That is my personal view, although I have not come to a final view on all the submissions on the subject. However, very few submissions were in favour of the trust.”

33. The Committee notes and shares the Minister’s reservations on a not-for-profit trust. Should the proposal for a trust proceed by way of secondary legislation, the Committee requests that an explanation of potential state aid issues be made available to Parliament, as well as a convincing justification for the inclusion of such a proposal.

Employment

34. Forestry Commission Trade Unions\(^10\) oppose the leasing proposal, in evidence Allan Mackenzie explained that—

“…our opposition is focused first and foremost on the effect that leasing might have on staff members who are transferred from the public to the private sector. Staff are frightened about issues such as their future employment prospects and long-term pension provision.”

35. Members raised concerns that forestry workers were coming to them on a private basis saying that when they attend workshops they are being told that if they do not accept the proposed transfer they will be deemed to have resigned and will not receive redundancy payments. The Minister assured the Committee that there would be no compulsory redundancies and that the Government would seek to ensure that affected employees are offered alternative employment.

36. The Committee expresses its concern at this interpretation of the Government’s message that there will be no compulsory redundancies. The Committee seeks assurances from the Government that if employees refuse to transfer to the private company leasing the land, that this will not impact on their employment rights and therefore they should not be deemed to have resigned.

37. The Committee also seeks assurances from the Government and the Forestry Commission that there will be no compulsory redundancies and that they will seek to secure that transferred employees’ contractual obligations include conditions of service

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equivalent to those adopted by the Forestry Commission. Finally, the Committee seeks assurances that the Government and Forestry Commission will take steps to ensure longer term security for affected staff, improving on the short term security provided by TUPE regulations.

**Conditions attached to the lease**

38. The possibility of writing into the lease conditions for the private company leasing the land to adhere to was regularly raised in written submissions. Essentially such conditions would seek to ensure that, as far as possible, a private company would perform many of the functions currently undertaken by the Forestry Commission Scotland.

39. ConFor suggested that the leasing conditions would need to be suitably robust to ensure that the use of the land by any private company would incorporate measures to mitigate climate change. For example, it should be required to give consideration to planting particular types of trees in particular areas to achieve maximum carbon sequestration. As noted above, funding is available via the SRDP for forms of planting which are sustainable but not necessarily self-financing, such as planting native broadleaf forests. Presumably without Government funded support or stringent conditions attached to the contract a private company would be more likely to plant more productive species of trees to maximise return.

40. A number of submissions made to the Committee raised concerns that the Forestry Commission’s valuable current role of ensuring supply to sawmills and other industries reliant on timber is maintained regardless of the market value of such timber and would not be carried by a private company with financial motivations. If sawmills are not assured of a steady supply of timber they may not be prepared to invest in expensive new infrastructure and may be vulnerable during downturns in the market. Stuart Goodall, ConFor\(^{11}\) acknowledged in evidence that—

“...the Forestry Commission provides long-term production forecasts, which it is pretty good at meeting. The private sector is not able to do that in quite the same way.”

41. In evidence Gavin Ellis, Scottish Tourism Forum\(^{12}\), raised concerns about the potential conflict of interest “that is inherent in the commercial realities of private enterprise” and praised the role the Forestry Commission has taken in integrating recreation, health and education benefits with Scotland’s forests. A number of written submissions also highlighted the value of the Forestry Commission’s focus on managing its land in a sustainable way, including promoting biodiversity.

\(^{11}\) Scottish Parliament Rural Affairs and Environment Committee. *Official Report, 11 February 2009, Col 1436*

42. Lisa Duggan, Loch Lomond and the Trossachs National Park Authority\textsuperscript{13} added, in relation to access to land within the Park, that the welcome onto private land that visitors get is not as positive as on Forestry Commission land—

“…they are told ‘if you want to come in, you can. We are not going to lock the gate.’ That contrasts with the Forestry Commission approach, which is one of saying, ‘you are welcome to walk here. These are the signs for you to follow. Here is what we have put in place for camping’.”

43. Stuart Goodall, ConFor\textsuperscript{14}, noted that the private sector already works closely with the Forestry Commission and has set standards which it self-polices. For example, he explained that the private sector is currently working with the Forestry Commission to produce a standard that takes account of carbon stating “that is not a principal concern about the effect of private sector planting on carbon capture. It is minor." He later added that “We have spent a lot of time over the past 25 to 30 years developing standards and ways of identifying where to plant to avoid a flow country situation.”

44. Members presumed that even if the private sector does not self-police in this and other respects conditions could be attached to the lease and raised questions on possible conditions with the Minister. The Minister\textsuperscript{15} responded in relation to whether current requirements on the Forestry Commission would be placed on the private company stating that—

“There are statutory protections that the Forestry Commission observes and which a private owner would have to observe too…conditions will have to be attached to the lease, and they will refine the planting carried out by the private sector.”

45. The Committee appreciates assurances from the Minister on the importance the Scottish Government would place on contract conditions for any private company leasing land. However placing restrictions on the private investor would reduce the attractiveness of the lease and the likely income available from it. If the proposal goes ahead, the Committee believes that Parliament must have the opportunity to view and comment on the draft contract or a summary of its requirements before it is finalised.

\textsuperscript{13} Scottish Parliament Rural Affairs and Environment Committee. \textit{Official Report, 11 February 2009, Col 1435}
\textsuperscript{14} Scottish Parliament Rural Affairs and Environment Committee. \textit{Official Report, 11 February 2009, Col 1430}
\textsuperscript{15} Scottish Parliament Rural Affairs and Environment Committee. \textit{Official Report, 11 February 2009, Col 1454}
Capping scope of subordinate legislation

46. As the powers within the Bill which would allow leasing to take place are so broad witnesses suggested there was a need to refine the scope of these powers on the face of the Bill. SE Link\(^\text{16}\) stated that—

> “…the powers in subsection (1) and (2) are very broad. We support the Subordinate Legislation Committee’s suggestion that the nature, scope and extent of the modification powers should be restricted.”

47. The written submission from Jean Balfour suggested that the 75 year lease period sat awkwardly with planting cycles. Stuart Goodall, ConFor\(^\text{17}\), suggested there is no ideal length of lease as—

> “We are talking about 100,000 hectares of Forestry Commission land, not all of which will have the same planting periods. It will always be the case that for some forests, two rotation periods will be involved whereas for others, only one will be involved. Almost any period could be chosen.”

48. The Minister was clear in evidence that this length of time was set as an upper threshold for the length of lease and that he or his successor may well be amenable to an amendment to the Bill that reflects this upper threshold. The Minister suggested that the Government could also be receptive to the idea of an upper threshold on the proportion of forestry commission land that could be leased at any one time to 25%.

49. At present the provision in section 47 of the Bill would enable both leasing and joint ventures but does not specifically refer to either policy intention. The specifics of the Government’s intended uses for the powers in section 47 are detailed in the Policy Memorandum. The Minister confirmed in evidence that the enabling nature of the existing provisions would not preclude amendments to the Bill to restrict the maximum length of the lease or the proportion of land leased. The Committee appreciates that in order to amend the Bill in these ways the express intention to lease land would need to be referred to on the face of the Bill. The Committee considers that having the policy intention explicitly referred to in the Bill would also aid Parliamentary scrutiny as it would aid members of Parliament seeking to lodge amendments on this matter.

50. **Should legislating for this policy in this Bill remain the Government’s position, the Committee recommends that the Bill be amended to cap the scope of the powers provided to reflect the specific policy proposal behind these powers. In doing so, the Committee recommends that the Bill be amended to make the distinction between provisions enabling joint ventures and**

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provisions enabling the leasing proposal, as at present the same provision enables both proposals.

51. The Committee specifically recommends that an upper threshold on the length of the land lease should appear on the face of the Bill as should a maximum threshold for the proportion of land to be leased at any one time.

Community leasing

52. In the Minister’s opening statement Michael Russell noted that wide support has been given in consultation responses to the idea of leasing Forestry Commission Scotland land to communities as opposed to private interests. The Committee supports community leasing as a concept but understands that community leasing proposals could not necessarily be put on the face of the Bill perhaps without skewing the proposal to angle it towards potential benefits from community leasing that would mitigate climate change. It would seem more sensible to include provision for community leasing in future legislation which can take into account the social benefits and other environmental benefits stemming from community leasing.

53. The Committee recommends that the Scottish Government incorporates provisions to allow for community leasing in future legislation.

Joint ventures

54. All of the written submissions received supported the idea of the Forestry Commission Scotland entering into joint ventures with private companies for the development of sustainable energy such as wind farms and hydroelectric infrastructure. A lack of detail on the specifics of such proposals within accompanying documents was raised as an issue in a number of these submissions but the general principle of pursuing joint ventures for this purpose received wide support.

55. Members of the Committee explored the possibility of funds released from joint ventures being sufficient to remove the requirement for the leasing proposal considered above. Janice Cassidy from the SRPBA\(^\text{18}\) stated that—

“Our members’ view is that joint ventures would generate enough money without having to introduce leases, which would be complex and very long term. Our members felt that they did not receive sufficient information about the leases to back them as they stand. They thought that joint ventures would produce sufficient benefits.”

56. In response to the same line of questioning, specifically whether he accepted that the potential income stream from joint ventures would be

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sufficient to meet the Government’s planting objectives, the Minister stated—

“I do not dispute it. Both possibilities are desirable, and the short-term imperative makes it necessary to do both. However, the situation is not certain. Much will depend on what happens with the renewables market, and much will depend on the Forestry Commission’s ability to enter into sustainable joint ventures. I do not dispute what you suggest, and I do not want to fall out with you about it.”

57. The Committee is well aware that the joint ventures proposals are not just intended to generate funding, they would have other benefits including allowing the Forestry Commission Scotland to take a more strategic overview and control of developments such as wind farms on Commission land.

58. The Committee is keen, given the wide support for this method of harnessing renewable energy, that the full potential for income from joint ventures should be explored. The Committee recommends that joint ventures be encouraged. However the Committee appreciates from the Minister’s evidence that there is an issue about the timing of funding generated, with joint ventures beginning to generate funds in 5 to 10 years as opposed to potentially £200m being generated within two years for the leasing proposal.

59. The Committee also appreciates that beyond requiring the powers in the Bill to be enacted to enable such joint ventures, receiving the relevant planning permission and meeting the environmental regulation criteria set out by SEPA is also a requirement for such renewable energy developments and this can be a time consuming and potentially unsuccessful process. There are therefore practical issues to be considered when estimating the likely potential income and timing of realising that income from joint ventures.

60. The Committee acknowledges that joint ventures may not generate the same level of funds as the leasing proposal, or generate funds to the same timescale. However given the notable support for the joint ventures policy the Committee recommends that, in considering alternative approaches to leasing, the Government should explore the full potential of encouraging and supporting the establishment of joint ventures schemes.

Power to modify functions of the Forestry Commissioners

61. Section 47, which enables both leasing and joint ventures, includes a subsection which provides Scottish Ministers with the power to modify

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the functions of the Forestry Commissioners where they consider it expedient or necessary in meeting the targets set out in sections 1 to 3 that aim to mitigate the effects of climate change. To use this power would require subordinate legislation to be approved by Parliament under the affirmative procedure.

62. The Committee questioned in evidence whether this power could be used to remove over-arching duties imposed upon the Forestry Commissioners in other pieces of legislation, for example the duty to further the conservation of biodiversity in the exercise of their functions in the Nature Conservation (Scotland) Act 2004. The new Minister for Environment, Roseanna Cunningham MSP, provided written clarification on this issue following this session confirming that the Government does not consider that the duty in the Bill could override duties imposed in other legislation.

63. The Committee considers that there may be other legal interpretations of how widely this power could be used but appreciates that the Parliament will have the opportunity to scrutinise any Government proposals to use section 47 (2) within secondary legislation.

Waste reduction and recycling

64. The provisions on waste reduction and recycling are intended to contribute towards the Scottish Government’s zero waste policy. The Policy Memorandum says that zero waste is about—

“...reducing the unnecessary use of raw materials, sustainable design of products, preventing waste, and recovering value from products and materials when they reach the end of their lives through recycling, composting or energy recovery.”

65. The Government has capped the extent to which certain techniques can be used to contribute towards the achievement of zero waste. For example, no more than 25 per cent of municipal waste should be treated as energy-from-waste by 2025.

66. The Government expects that the amount of waste sent to landfill will reduce as a result of the policy levers currently in place. These levers are various voluntary agreements, for example, on reductions in packaging and in the use of plastic carrier bags, and fiscal measures such as the Landfill Tax accelerator. In addition, as noted in evidence to the Committee, the noticeable cultural shift towards practices such as recycling municipal waste and reusing carrier bags has aided efforts to reduce waste sent to landfill.

67. The Cabinet Secretary wrote to the Committee in response to a request for information on the likely timescale for subordinate legislation on each of the waste provisions. The response is annexed to this report. The Government anticipates that should any of the
measures in the Bill be implemented then this could increase the rate of reduction and therefore the Government could use all of the enabling powers in the Bill on waste reduction and recycling. However, when asked whether the Government would not use the provision on plastic carrier bag tax unless voluntary agreements did not work the Cabinet Secretary replied “That is fair comment. I would not expect to use the provisions if we achieved the same objective outwith legislative routes.”

68. The Scottish Government took the requirements of the EU Revised Waste Framework Directive into account when considering the waste provisions in the Bill. The Bill does not transpose the Directive (which must be transposed into domestic legislation by 12 December 2010). The Directive requires that all EU countries must recycle 50 per cent of their household waste and 70 per cent of construction and demolition waste by 2020. The Directive also re-iterates the waste hierarchy, which is a priority order for waste prevention and management legislation in member states. The hierarchy is a) prevention, b) preparing for re-use, c) recycling, d) other recovery e.g. energy recovery, and e) disposal.

Policy intention section by section

69. Section 52 would enable the Scottish Ministers to make provisions requiring certain persons to prepare plans for the prevention, reduction, management, recycling, use and disposal of waste produced by or otherwise associated with their activities. The Policy Memorandum cites the construction industry and general office-type businesses as being likely to be affected by this section.

70. Section 53 would enable Scottish Ministers to make regulations to require businesses and public bodies to provide information to SEPA about the waste that they produce. The cost to government and local authorities of providing this information is considered to be marginal. The Policy Memorandum states that ‘it will e difficult to move to a zero waste society without much better information.’

71. Sections 54 and 55 are intended, according to the Policy Memorandum, “to encourage recycling by providing people with opportunities to deposit waste for recycling when they are not home”. The Explanatory Notes state that section 54 could be used to require offices to have facilities to collect paper etc. Section 55 empowers local authorities to issue notices requiring organisers of temporary public events to provide recycling facilities. Both sections require the waste collected to be, as far as practicable, recycled.

72. Section 56 would give Scottish Ministers the power to set binding requirements on businesses and public bodies so that specified items procured or constructed by them must include or contain a certain amount or proportion of recyclate. The Financial Memorandum states that this provision is unlikely to add additional costs to government, public bodies or businesses because the type of materials likely to be
specified are traded widely, likely to be priced competitively and that the replacement of virgin materials with recycled ones is unlikely to increase costs.

73. Section 57 would give the Scottish Ministers powers to set binding targets for overall reductions in packaging. The Policy Memorandum states that the duty is likely to fall primarily on retailers but may also fall on those who supply packaged goods to retailers. There are a number of different ways of achieving a reduction in packaging and the Policy Memorandum suggests a number of them, including encouraging the use of refills, buying in bulk or supplying concentrated products.

74. Section 58 would give the Scottish Ministers powers to set up a statutory deposit and return scheme. The Financial Memorandum cites the experience in Denmark and Norway as an indicator of costs to bodies (other than for local authorities and government) individuals and businesses and estimates the costs at £15-20 million per annum. The Financial Memorandum states that costs would have to be recovered, for example, via deposit fees and the sale of recyclate. In addition, the Policy Memorandum states that any scheme may have financial benefits by reducing the amount of waste that local authorities are required to handle.

75. The purpose of section 59 is to reduce the number of carrier bags in circulation by making regulations about charging by sellers of goods for the supply of carrier bags and for requiring that the net proceeds of such charges be applied to environmental good causes. This is an area where there is already a voluntary agreement in place with many major retailers for carrier bag reduction initiatives. It is estimated that the cost of enforcement of regulations requiring charges would be in the region of £3.5 million per annum. Depending on the nature of the regulations, income is estimated at £8.14 million whilst publicity campaigns would cost in the region of £750,000.

76. The Bill also details the penalties which could be used in the enforcement of the waste provisions within subordinate legislation. These penalties are set out in section 61 of the Bill. Local authorities and SEPA could therefore incur costs if appointed as enforcement bodies.

Evidence taking
77. The Committee heard evidence from three panels of witnesses on the waste proposals. The panel on 28 January involved Professor Jim Baird, Glasgow Caledonian University; Pauline Hinchion, Chief Executive, Community Recycling Network Scotland; Susan Love, Policy Manager, Federation of Small Businesses in Scotland; and Dirk
Hazell, Chief Executive, Scottish Environmental Services Association\textsuperscript{20}.

78. A further panel on 4 February involved John Ferguson, Unit Manager, Sustainable Energy and Resources, SEPA; Iain Gulland, Director, WRAP Scotland; Dr Colin Clark, Head of Waste Management, COSLA\textsuperscript{21}. This panel was immediately followed by evidence from Richard Lochhead MSP, Cabinet Secretary for Rural Affairs and Environment and his accompanying officials Kim Fellows, Deputy Director for Waste and Pollution Reduction, Louise Miller, Solicitor, Food and Environment Division, Kevin Philpott, Waste Regulator Senior Policy Officer, and Simon Stockwell, Waste Strategy Team Leader, Scottish Government\textsuperscript{22}.

\textit{Issues emerging from evidence taking}

Zero waste

79. The Committee discussed whether zero waste was achievable during both of its evidence sessions on the waste reduction and recycling provisions. All witnesses agreed that zero waste was desirable and a number of witnesses noted that there were encouraging statistics emerging to suggest that in the future it may be achievable. For example, Iain Gulland, WRAP Scotland\textsuperscript{23}, stated that “there is growing evidence that more than 90 per cent of what is in the waste stream can be recycled.” The Cabinet Secretary acknowledged the ambitious nature of the target in evidence stating that “a zero-waste policy is an ambitious policy. It is also an aspiration.”

80. It would appear to the Committee, from representations made to it and in response to the Scottish Government’s zero waste consultation, that stakeholders do not contest that the policy directions set out within sections 52 to 61 of the Bill will contribute towards achieving zero waste, with the possible exception of the proposal on carrier bags in section 59. To what extent these policies contribute to achieving this depends upon the progress made under voluntary agreements, the timing and approach to using the powers in the Bill, and if need be their effective enforcement.

Infrastructure

81. One of the main barriers to making good progress towards zero waste highlighted to the Committee was a lack of infrastructure, particularly

\textsuperscript{23} Scottish Parliament Rural Affairs and Environment Committee. \textit{Official Report}, 4 February 2009,
for use by small to medium sized businesses. Susan Love, FSB, stated that—

“The FSB has been involved in the issue of recycling waste for several years, investigating possible further options for small and medium sized businesses, but we keep coming back to the same problem that there are no facilities for SMEs to use...it will not be remotely possible to implement many of the bill’s measures unless we make progress with facilities.”

82. Dirk Hazell, SESA, noted that, irrespective of the aspiration to achieve zero waste, there is an issue with meeting existing targets—

“...there is nowhere near enough waste infrastructure anywhere in the United Kingdom to comply with existing European obligations. We need to accelerate our transition from a disposal to a recycling society but to do so requires more infrastructure.”

83. John Ferguson, SEPA, also noted the need for improvements in existing infrastructure and entirely new developments but noted that the rate at which infrastructure will require to be developed to meet the various Government targets will be a “challenge to the planning system”.

Carrier bags

84. This Committee has received numerous written submissions opposing the policy behind this section of the Bill. This opposition is in large part based on evidence to suggest that proceeding with this policy may not necessarily deliver the intended environmental benefits. A similar proposal was considered by the Environment and Rural Development Committee in Session 2 during its scrutiny of the Member’s Bill introduced by Mike Pringle MSP entitled the Environmental Levy on Plastic Bags (Scotland) Bill. That Committee noted that “the net environmental impact of the proposed levy is an issue of considerable dispute in a range of areas”. The conclusion section of its Stage 1 report reflected the complexity of the issues raised by the Bill (reproduced at annexe A). The report’s final conclusion was as follows—

“The Committee reiterates its support for the Bill’s stated objectives. To achieve these objectives, the Committee urges the Executive to include ambitious measures to address plastic bag use in its waste prevention strategy. The Committee is not persuaded that the levy as currently proposed in this Bill is an effective means to achieve

these objectives. The Committee, therefore, recommends that the Parliament does not agree to the general principles of the Bill.”

85. Following publication of the Stage 1 report the Bill was withdrawn by the Member. The Committee appreciates that there has been movement on this issue since the publication of the report in 2006, through the voluntary agreement with retailers and also by the cultural shift amongst the public towards bringing reusable bags to shops with them instead of using carrier bags once. However the considerable scrutiny undertaken by the previous committee should be used as a valuable assessment of the issue and this Committee draws the contents of the Stage 1 report to the attention of the lead committee on this basis.

Current market conditions

86. A number of witnesses explored the idea of the current market downturn representing an opportunity to develop certain waste based markets in Scotland. For example Iain Gulland, WRAP\(^\text{27}\), noted that—

“When I met people seven months ago to talk about market development, they were interested in this country but, as long as the Chinese were paying high prices, materials were going straight from local authorities, through brokers, to the far east. It was difficult for Scottish industries to gain a foothold in the marketplace, because they could not compete. Now the markets are depressed and the Chinese are no longer offering the same prices—so there is a great opportunity for us to build an industry in Scotland for the future.”

Non-municipal waste

87. A clear theme arising from evidence taking was the need for commercial and industrial waste to be subject to the same legislative requirements as municipal waste. For this reason the provisions in the Bill requiring businesses and public bodies to provide information to SEPA about the waste that they produce were very much welcomed as measuring the extent of the problem was seen as the first step to addressing it.

88. SEPA and WRAP went further than the Bill’s existing provisions suggesting that commercial and industrial waste, such as biomass, should be banned from being sent to landfill. Dr Clark from COSLA\(^\text{28}\) noted the anomaly between the requirements for the limitation of municipal waste sent to landfill and commercial and industrial waste stating—


“A huge rump of commercial waste just gets landfilled. It is outwith the context of the landfill directive, but if I landfill it, I am subject to that directive...The municipal waste data are excellent, because the concentration has been on municipal waste, of which there is less than 4 million tonnes in Scotland. Commercial and industrial waste has been left to blow in the wind, frankly.”

**Definition of recycling**

89. Dirk Hazell, SESA, suggested in evidence that the definition of “recycling” adopted in the Bill differs from that specified in the Directive as the Bill definition includes forms of re-use and other processes that the Revised Waste Framework Directive does not define as recycling. Mr Hazell suggested that this definition makes the targets easier to achieve. In response to this criticism the Cabinet Secretary clarified in a letter to the Committee that the basis for the definition of recycling being used as more of an umbrella term under the Bill was for drafting purposes. The Committee notes both sides of this argument and considers that the key point is that Government policy direction under the Bill, including those outlined within subordinate legislation should always seek to align with the waste hierarchy as set out in the Revised Waste Framework Directive.

**Social and economic factors**

90. Some unintended consequences of prioritising lowering carbon emissions, including in remote and rural areas, were highlighted to the Committee. Pauline Hinchion CRNS29 gave the following example—

“We have members in Shetland who collect, recycle and reprocess glass into really nice glass awards. Theirs is a small business, but Shetland is a small place and they do great work. Under the bill, it would probably be better for the climate if they just put the glass on to a ship and sent it down to Alloa to be processed. We have to be careful that the powers do not become too instrumental and that some of the other factors that may have to be taken into consideration are not ignored.”

**Deposit and return and kerbside collection**

91. Dirk Hazell, SESA, suggested that the establishment of deposit and return schemes could detract from local authority efforts to establish kerbside collection and may be confusing for the public who have only recently adapted to this form of collection. Members of the Committee appreciated this point but suggested that in remote and rural areas of Scotland, and in certain forms of accommodation such as tenements, there was no scope for kerbside collection.

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92. Pauline Hinchion, CRNS, suggested that there would be carbon emissions from people driving to central points to return packaging or bottles for reuse, although it was also noted that these sites are usually near supermarkets or other large outlets in an attempt to ensure that people can return items when on journeys to undertake other tasks.

93. The Committee considers that the two processes have merit and that if recycling and reuse rates are to increase the public should ideally have both options at their disposal. It would be undesirable for the establishment of one process to hamper the functioning of the other.

94. Dirk Hazell\(^{30}\) also noted an underlying issue, namely that ways of establishing what the most sustainable method of reducing or recycling waste is central to ensuring that the correct practices are adopted by the public, local authorities and businesses alike—

“The Organisation for Economic Co-Operation and Development...tried to get internationally agreed measures of sustainable conduct...We need robust international—or European at least—agreed measurements of sustainability. That which would make this sort of bill much easier to implement.”

95. Pauline Hinchion\(^{31}\) added that—

“...the issue is how we ensure that we measure in the same way and are not comparing apples with pears. There are therefore problems around data quality, the type of data that are collected and, more important, how we measure data—I think that that was Dirk Hazell’s point. Instead of everybody using their own carbon accounting tool we must get agreement on how we measure data.”

96. The Committee notes the importance of establishing a standard approach to measuring carbon and then producing standard indicators as to what extent different practices are sustainable so that the public can make informed choices about whether to re-use or recycle. Recycling or reuse schemes should be as clear and accessible as possible for the public.

**Packaging**

97. As noted above, the first measure listed in the Waste Directive hierarchy for waste management is prevention. The discussion during the evidence session on 28 January acknowledged that whilst preventing waste by minimising packaging was desirable, without the necessary packaging products such as food can become damaged and become unnecessary waste. For example, Pauline Hinchion suggested that Tesco’s spoilage rate for food that had no packaging was in the

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region of 30% and that this waste then produces methane gas which contributes to greenhouse emissions.

98. The Committee also heard evidence that progress was being made towards reducing the amount of unnecessary packaging and consideration was being given to the most sustainable types of packaging to be used by producers and retailers. The Committee also heard of the Courtauld commitment, a voluntary agreement between WRAP and major UK grocery organisations which in 2008 has led to zero growth in packaging despite increases in sales and population.

Anaerobic digestion

99. Anaerobic digestion is a managed biological process in which biodegradable waste is broken down by naturally occurring microorganisms. This process can be used to treat waste, including food waste. The process produces biogas and this, in turn, can be used to generate energy. Other outputs from anaerobic digestion are fibre which can be used as a soil conditioner and liquor which can be used as a liquid fertiliser.

100. In his statement to Parliament on 24 January 2008 the Cabinet Secretary stated that—

“We are proposing that, by 2025, no more than a quarter of municipal waste...should be treated by energy-from-waste plants. Of course, the cap of one quarter will include anaerobic digestion, if it is used to treat mixed waste.”

101. The Committee would appreciate further information from the Cabinet Secretary as to how food waste will contribute to the targets for recycling and composting and whether energy from food waste will be counted as contributing towards the cap on energy-from-waste.

Conclusions on waste

102. The Committee recommends to the lead committee that, in taking forward the waste reduction and recycling provisions in an effort to achieve zero waste, the Scottish Government should have regard to the following—

- the urgent need to focus on reducing commercial and industrial waste being sent to landfill;

- the need to address the lack of infrastructure available to implement the policy intentions in the Bill;

- the need to consider issues raised by the Environment and Rural Development Committee in Session 2 on charging by sellers of goods for the supply of carrier bags;
the opportunity that current international market conditions could present for Scottish market development;

the need to ensure measures undertaken are in accordance with both the Government’s definition of ‘recycling’ and with the waste hierarchy set out in the Waste Framework Directive;

the benefits of the Government endorsing one method of measuring ‘carbon footprints’ and to establish criteria based on this reflecting which practice is more sustainable than another; and

the need to take into account any potential negative impact on social and economic factors, including in remote and rural areas, of aiming towards ambitious targets to reduce carbon emissions.

Potential stage 2 amendments

103. The Committee requested supplementary written information from the Cabinet Secretary on amendments to the waste provisions that the Government is already aware of. The Cabinet Secretary’s response, annexed to this report, details amendments focusing on the deposit and return scheme. Specifically, the Government will be proposing amendments to allow for the establishment of a new body to co-ordinate or perform a “clearing-house” function, levying deposits and such like. The Committee thanks the Cabinet Secretary for his informative response and notes that there may be considerable cost attached to the establishment of this new organisation.

104. The Committee recommends that the Scottish Government should provide specific costed proposals for such an organisation to Parliament well in advance of the relevant instrument of subordinate legislation being laid to afford the relevant committee the opportunity to fully scrutinise the proposals.

Muirburn

105. Muirburn is a mainly upland land management technique, and is the act of controlled burning of vegetation on open, treeless, semi-natural habitats (including muir or moorland) and involves the burning of gorse, heather and grass to stimulate new growth. Dates on which muirburn can take place are set down in statute (the Hill Farming Act 1946). The provisions in the Bill allow Scottish Ministers to amend, by subordinate legislation, these dates to adapt to the effects of climate change as there is concern that, given changing weather patterns and rising temperatures, the ecology of these areas could now be compromised by burning within the currently permitted limits.

Themes arising from evidence
106. The Scottish Government’s analysis of consultation responses on provisions relating to muirburn dates found that, of the 56 responses 28 agreed with the proposed power (6 of which qualified this answer). Conversely 24 of the responses did not agree and the majority considered there was a lack of evidence to suggest that such a power was needed, and were concerned that the overall length of the burning season could change. The area of consensus as far as there was one appeared to be that any changes to the permitted dates should be based on a rigorous evidence base.

107. The Committee incorporated a discussion on the muirburn provision into its roundtable discussion and into its evidence session with the Minister on 11 February. The SRPBA\textsuperscript{32} commented during the discussion that its members had been anxious about supporting the proposal because it was unclear how the new power would be used stating that “[our members] felt that they were given insufficient information to make an informed decision about any changes to the dates”.

108. The Minister suggested that he had been surprised by the opposition expressed in some of the responses to the muirburn consultation and considered that the lack of detail in the Bill may have led to some overly cautious responses. He assured the Committee that the power would not be used without full consultation with stakeholders and the power would only be used in such a way so as to allow muirburn practices to adapt to the impact of climate change.

109. The Committee appreciates the Minister’s reassurances that the Government will actively consult with all key stakeholders at an early stage in its deliberations on how to use this power.

Conclusions

110. The Committee wishes to highlight the above issues to the lead Committee, for raising with the Minister for Transport, Infrastructure and Climate Change and/or incorporating into its Stage 1 report as its members see fit:

- concerns with the level of detail available in the Bill and accompanying documents for certain proposals; the inclusion of important proposals within subordinate legislation only (which impacts on the potential for full parliamentary scrutiny); and concerns with the timing of some of the consultations for the Bill’s provisions;
- the negative reception from stakeholder groups that the provisions on leasing Forestry Commission Scotland land to release capital has received and the Committee’s recommendations in

\textsuperscript{32} Scottish Parliament Rural Affairs and Environment Committee. \textit{Official Report, 11 February 2009, Col 1444}
response to this - including potential amendments to the Bill should the leasing proposal remain on the face of it; and

- the likely challenges faced by the Government, local authorities and others in implementing the waste reduction and recycling provisions in an effort to eventually achieve the zero waste target including insufficient infrastructure.
Conclusions of the Environment and Rural Development Committee’s supplementary Stage 1 report on the Environmental Levy on Plastic Bags (Scotland) Bill (2006, Session 2)

The Committee stated in its previous report that it wishes to see firm action to tackle resource use and waste management issues. Mike Pringle’s Bill has been valuable in raising awareness of the issues and provoking debate about how environmental benefits and culture change in resource use can be achieved. The Committee very much welcomes that and wants to see that important debate continue and develop.

The likely extent to which plastic bag use may be reduced by a levy (estimates of approximately 90% were given in evidence) does make it a potentially powerful tool. Putting a value on an item can change people’s behaviour and, in at least some instances, there is a place for statutory regulation being used to achieve that. A levy does have the potential to reach virtually every citizen immediately and could cause them to reconsider their resource use decisions. The Committee is, therefore, sympathetic to the aims of the Bill and considers that positive steps are required to achieve these aims.

However, as the Committee stated in its previous report, the evidence it has considered has made it clear that there are a number of complex interacting implications of a levy which make it very difficult to judge whether this particular levy scheme is an appropriate one that will achieve its desired effect.

The Committee welcomes the clarification from HM Treasury (supplied by the Minister in his further evidence) on the application of VAT to the levy. This removes some of the confusion around the administration of a levy.

However, after considering the further evidence received, the Committee remains of the view that there are a number of unintended consequences that appear likely to be connected with using the proposed levy to achieve a large reduction in the number of single-use plastic bags issued at checkouts. The net environmental impact of the proposed levy is an issue of considerable dispute in a range of areas.

The Committee considers that it remains impossible to be definitive about the likely environmental impact of the Bill and the arguments about whether this will be a net positive benefit are very finely balanced. The Committee considers that, on its own, the Bill cannot achieve the obvious and unequivocal benefits that it intends.

While the Committee previously noted that the Executive did not take a formal position on the Bill, at that time it welcomed the Minister’s statement that he
had an open mind on the potential inclusion of a range of measures to reduce bag use in the proposed waste prevention strategy.

However, having considered the further evidence, the Committee maintains its belief that a levy which focuses on one relatively small area of resource use has the best prospect of real success and real net environmental gain if it is integrated within a comprehensive package of measures. That would ensure that public education messages associated with the levy were clear and consistent with those accompanying other waste initiatives. It would also give the best prospect of any unintended consequences or contradictory effects being ironed out.

The Committee also notes that the debate has moved on over the period that the Bill has been under consideration. Some supermarket groups have introduced customer incentives and other schemes to reduce plastic bag use. Integration of the aims of the Bill into a wider waste prevention strategy by the Executive would encourage further development of such initiatives throughout the retail industry. It would also help to ensure that the management of plastic waste is developed comprehensively in accordance with the waste hierarchy (reduce, reuse, recycle).

The Committee notes that the final waste prevention strategy has not yet been published. However, the Committee is disappointed that the Executive has not, to date, responded more robustly to its request to consider integrating the aims of the Bill into its strategy. The Committee considers that a levy has most potential as part of a strategy, and considers that the Executive has the power to promote measures which would achieve the impact of the Bill without the unintended consequences.

The Committee reiterates its support for the Bill’s stated objectives. To achieve these objectives, the Committee urges the Executive to include ambitious measures to address plastic bag use in its waste prevention strategy. The Committee is not persuaded that the levy as currently proposed in this Bill is an effective means to achieve these objectives. The Committee, therefore, recommends that the Parliament does not agree to the general principles of the Bill.
ANNEXE B: ORAL AND ASSOCIATED WRITTEN EVIDENCE, AND EXTRACTS FROM THE MINUTES

28 January 2009 (3rd meeting, Session 3 (2009))

Extract from the Minutes

Written evidence

Community Recycling Network Scotland
Federation of Small Businesses in Scotland
Scottish Environmental Services Association

Oral Evidence

Professor Jim Baird, Glasgow Caledonian University
Pauline Hinchion, Community Recycling Network Scotland
Susan Love, Federation of Small Businesses in Scotland
Dirk Hazell, Scottish Environmental Sciences Association

Supplementary Written Evidence

Community Recycling Network Scotland
Federation of Small Businesses

4 February 2009 (4th meeting, Session 3 (2009))

Extract from the Minutes

Written Evidence

SEPA

Oral Evidence

John Ferguson, SEPA
Iain Gulland, WRAP Scotland
Dr Colin Clark, COSLA
Richard Lochhead MSP, Cabinet Secretary for Rural Affairs and Environment, Scottish Government
Kim Fellows, Scottish Government
Louise Miller, Scottish Government
Kevin Philpott, Scottish Government
Simon Stockwell, Scottish Government

Supplementary Written Evidence

Highland Council
Highland Council
WRAP Scotland
Extract from the Minutes

Written Evidence

Confor
Forestry Commission Trade Union
Loch Lomond and the Trossachs National Park
SE LINK
SRPBA
Scottish Tourism Forum

Oral evidence

Stuart Goodall, Confederation of Forest Industries
Allan Mackenzie, Forestry Commission Trade Unions
Dr Calum MacDonald, Forestry Commission Scotland
Lisa Duggan, Loch Lomond and The Trossachs National Park Authority
Angus Yarwood, Scottish Environment LINK
Janice Cassidy, Scottish Rural Property and Business Association
Gavin Ellis, Scottish Tourism Forum
Michael Russell MSP, Minister for Environment, Scottish Government
Anne Cairns, Scottish Government
Jo O'Hara, Scottish Government
Bob McIntosh, Scottish Government
David Henderson-Howat, Scottish Government

Supplementary Written Evidence

CONFOR
Forestry Commission Trade Union
SE LINK
Present:

Roseanna Cunningham (Convener)  Rhoda Grant (Committee Substitute)
Liam McArthur             Alasdair Morgan
Elaine Murray            Peter Peacock
John Scott (Deputy Convener)      Bill Wilson

Apologies were received from Karen Gillon.

The meeting opened at 10.02 am.

**Climate Change (Scotland) Bill:** The Committee took evidence on the Bill at Stage 1 from—

Professor Jim Baird, Glasgow Caledonian University;

Pauline Hinchion, Chief Executive, Community Recycling Network Scotland;

Susan Love, Policy Manager, Federation of Small Businesses in Scotland;

Dirk Hazell, Chief Executive, Scottish Environmental Services Association.

**Climate Change (Scotland) Bill (in private):** The Committee reviewed the evidence heard earlier in the meeting.
SUBMISSION FROM CRNS


1. Introduction

The Community Recycling Network for Scotland (CRNS) was established in 2004 to provide support and information for community led organisations involved in recycling, reuse, composting, reduction and waste education activities.

The CRNS is a membership body for community recycling organisations throughout Scotland. We provide information, advice and support to both existing and emerging community recyclers.

Mission Statement

The CRNS exists to build a stronger community recycling sector in Scotland which can create real social, environmental and economic benefit within our local communities.

Values

These are the underlying principles that guide the work of the CRNS) The CRNS is:

• Committed to the principles of Zero Waste and sustainable development.
• Committed to and directly accountable to the Membership.
• Committed to local communities delivering local recycling solutions.
• Committed to carrying out all of its activities with trust, integrity and openness.
• Committed to social and environmental justice.

Objectives

Our current objectives are:

• To build more robust organisations
• To assist the sector to maximise the recycling, reuse, composting and waste prevention opportunities available to it
• To provide networking opportunities and information exchange to allow the sharing of best practice
• To represent and raise the profile of the sector
• To provide an accessible portal and range of advice to sustainable communities on recycling opportunities
• To improve Membership services and benefits

Impact of Sector

The size and impact of the community recycling sector in Scotland was mapped by the CRNS in 2006. The mapping study found that there were;

• diverted almost 73,000 tonnes of materials from landfill
• had a turnover in excess of £26 million
• employs 1,100 full time equivalent staff
• offers over 950 training places and over 3,200 volunteering opportunities
• helps over 68,000 people

2. Overview
The CRNS welcomes the opportunity to respond to the consultation document. Our response focuses not only on answering the questions posed by the Scottish Government in the consultation, but also an overview of the impact that any proposed legislation may have on the community recycling sector as well as some of the opportunities that the proposed legislation presents.

We have assumed that the proposals that have been included in the consultation have been set out because the progress in these areas has not happened to date through market forces, voluntary codes and other guidance and therefore the role of legislation in driving these issues forward needs to be further investigated.

It is also interesting to note the impact that the publication of the consultation has already had with some of the major supermarkets announcing more robust waste prevention plans as well as trials of reverse vending systems.

As you are aware, the CRNS is fully committed to the goal of Zero Waste. The Zero Waste philosophy focuses on the redesigning of our one-way industrial system into a circular system, similar to the successful strategies found in nature where waste becomes an asset rather than a liability. Products that cannot will simply be designed out of the system (prevented). Waste would then cease to exist in its current form and the waste management industry would be replaced by a resource re-utilisation sector led by empowered community organisations that would realise the value of the assets flowing through their communities for local economic and social gain. This is surely a fundamental part of sustainability in the truest sense.

Zero Waste should therefore not only be seen as a function of waste management, but as a new economic system for Scotland with all policies and strategies coming from the Scottish Government benchmarked against whether they move us towards and away from a Zero Waste society. The CRNS would therefore like the legislation to reflect the fact that it will be part of the solution on the journey towards a Zero Waste society within the Zero Waste philosophy as outlined above.

In support of these principals the CRNS has responded to the questions in the consultation as requested in an attempt to shape waste policy in the direction of sustainability which embraces social and economic goals as much as environmental ones and seeks to address waste as a resource which when managed locally can lead to a positive impact on communities and the environment.

3. Responses to the Consultation Questions
3.1 Proposal 1: Duties on public bodies and businesses to provide recycling facilities

Proposal
To further encourage recycling by giving a power to the Scottish Government to make regulations which would impose duties on public sector bodies and businesses to provide recycling facilities for customers, staff and, where appropriate, members of the public. The regulations would specify which bodies and businesses were to be subject to this duty and the nature of the recycling facilities that would be required.

Response to questions
1. Do you consider that legislation should be made in this area?
2. If so, what form should that legislation take?

Comments
Of the options outlined the CRNS would propose Option 1

Given that over 80% of waste arisings are from commercial and industrial sources and that targets are going to be increasingly hard to meet, it is no longer the time for the commercial sector to be given the option of a voluntary Code of Practice. The CRNS believes that recycling, reuse and composting should be obligatory particularly where the services and infrastructure are available.

The criteria for determining which bodies and businesses would be subject to this legislation needs to be very clear. Factors to consider should include number of staff, customers, members of the public that access the bodies or business, the amount of waste they currently generate etc.

Where appropriate and depending on the size and nature of these bodies and businesses they should be required to have onsite composting.

In addition steps should be taken to move from a volume/frequency of collection charging system to a weight based charging system to allow direct cost savings to be made through waste prevention. Furthermore the cost of collecting residual waste for disposal should be much higher than the cost to collect recyclates.

These bodies and businesses also need to have access to guidance, support and resources to help them minimise their waste (see Proposal 4 Waste Prevention Plans) This may be delivered through existing bodies including the Scottish Waste Awareness Group, Envirowise, the Business Environment Partnership and Scottish Enterprise.

The Scottish Government should also give consideration as to whether this legislation could be broader to include wider measures to reduce the carbon footprint and climate change impact including energy use, water and utility use and transport.

This also links to Proposal 6 about mandatory waste data returns

3.2 Proposal 2: Packaging
Proposal
To encourage waste prevention by giving powers to the Scottish Government to make regulations on packaging which would set statutory targets on retailers for packaging reductions. Response to questions
1. Do you consider that legislation should be made in this area?
2. If so, what form should that legislation take?
Comments
Of the options outlined the CRNS would opt for Option 1
There are already challenging targets within existing packaging legislation and the work being undertaken by WRAP and the major retailers and supermarkets through the Courthald Commitment has seen some significant progress made in this areas.
In addition the work of packaging compliance schemes such as Valpak are also making good progress in this area, including raising awareness amongst consumers and the public about the role of packaging and the progress that has been made to date.
There is a need to encourage further lightweight and best in class approaches across a wider range of packaging as well as increasing the amounts of recycled materials in packaging and greater levels of reusable packaging in particular in the transit and secondary packaging areas.
Could also investigate the possibility of variable VAT rates for materials with greater levels of recycled content and where reusability I recyclability is linked to VAT rates.
3.3 Proposal 3: Specifying recyclate
Proposal
To encourage recycling by taking powers to enable the Scottish Government to place a duty on public bodies and businesses to specify a minimum percentage of material made from recyclate in procurement contracts.
Response to questions
1. Do you consider that legislation should be made in this area?
2. If so, what form should that legislation take?
Comments
Of the outlined options the CRNS would propose Option 3
Page 6 of 14 Community Recycling Network for Scotland
Response to Proposed Legislation on Zero Waste — October 2008
3.4 Proposal 4: Waste Prevention Plans Proposal
To encourage waste prevention and recycling by taking powers to enable the Scottish Government to place a duty on public bodies and businesses to have waste prevention plans. Response to questions
1. Do you consider that legislation should be made in this area?
2. If so, what form should that legislation take?
3. What public bodies and businesses should be covered?

Comments

Of the options proposed the CRNS would opt for Option 1

Substantial quantities of organic waste could be diverted from the waste stream if appropriate incentives are put in place to encourage public and commercial organisations to compost garden and food waste on site or have their compostable waste collected, if a collection service exists in their area. This is particularly important for hospitals, offices with canteens, schools or hotels generating large quantities of food waste, and equally important, in terms of reducing carbon emissions, for the hospitality industry in remote, rural locations of Scotland.

Obviously this could not be made obligatory at this stage as organic waste collections do not exist in many areas and not all commercial and public sector premises have the suitable space for on-site composting. On-site composting could range from one or two home composters or green cones to small-scale in vessel composters depending on the size and type of organisation. In vessel composting on site is a labour intensive process which needs significant staff time especially in the start-up phase. As the regulations stand the site would also have to have room for the use of the finished compost unless they have the compost (reduced in volume) uplifted as a waste product.

As outlined in the CRNS response to the Better Waste Regulation Consultation in June 2007, there is an urgent need for the current Waste Management Licensing Regulations to be amended to allow non-household premises to compost their own meat-included food waste on site under an exemption or low level permit as currently a Full Waste Management Licence and a Certificate of Technical Competence is required, costing £3348 in Year 1 and £2073 per annum thereafter, plus on average £2500 for a COTC. At present meat-excluded waste can be composted under an exemption by these premises but the segregation of the meat component from the food waste stream discourages participation and reduces the amount of waste that can be diverted.

If the CRNS goes ahead with the Compost Doctors Programme trained community sector employees will be able to assist a number of public and commercial sector Organisations each year in selling up their on site composting operations.

Promotion of the benefits of on-site composting including potential cost savings and where to find information need to be promoted to the public and private sectors. Incentives to compost on site could include the waiving of VAT on composters, extending the current Big Hanna type government type deals such as reduced price in-vessel composters to companies purchasing them via LA (this has the advantage of LA’s recording what companies are using the deals and targeting training or expertise to those companies to make sure they are doing the work. This would also link to Proposal 6 about
mandatory waste data returns) Alternatively offering direct discounts subsidised by the government (such as have been offered through WRAP to householders).

In terms of the bodies and businesses the criteria for identifying them should be very clear but should include the tonnage of materials generated by these bodies and businesses and the extend to which they

All Scottish Local Authorities and non-governmental departmental bodies should be required to have a Waste Prevention Plan. However, rather than targeting individual companies perhaps make encourage industry bodies to have waste prevent plans in place for their industry. Not only would this take some of the pressure from small companies to undertake them but it would allow for smaller resources to be directed towards these bodies to roll out initiatives. Initially those bodies which could have the biggest impact such as the Tourism Industry should be targeted firstly perhaps rolling out to other industry bodies in the longer term. As per comments on Proposal 1 existing organisations should be further resourced and partnered with those bodies to develop Waste Prevention Plans in addition these could be linked to wider sustainability/climate change/carbon footprint action plans. Finally, it would allow for an industry wide waste data returns system which might see better data returned.

3.5 Proposal 5: Deposit and Return
Proposal
To encourage recycling and reuse by taking powers to enable the Scottish Government to introduce deposit and return systems.
Response to questions
1. Do you consider that legislation should be made in this area?
2. If so, what form should that legislation take?
3. Your views on the practicalities of such schemes in Scotland?
Comments
Of the three options outlined I prefer Option 1

3.6 Proposal 6: Mandatory Waste Data Returns from Business
Proposal
To ensure more effective planning and policy making on commercial and industrial waste by taking powers to make regulations requiring businesses to send waste data returns to SEPA. Responses to questions
1. Do you consider that legislation should be made in this area?
2. If so, what form should that legislation take?
3. Do you have any views on the kind of businesses to be covered?
Comments

Of the three options outlined the CRNS opts for Option I although criteria for choosing businesses should be based on more than just size and should relate to amount of waste generated. Consideration should also be given to undertaking this action in the short to medium term on an industry body basis as outlined in proposal 4 comments above which might improve the quality of data returns.

Any mandatory waste data returns should be rolled out in such a way that it is linked to environmental risk and volume of waste. As such it should be based on amount of waste specific businesses generate in particular hazardous waste and bio-degradable/organic waste.

The collection of data is crucial but any systems introduced need to ensure they are not too onerous on businesses, especially if an individual business approach is adopted as against a industry body approach. If so a simplified version of the Waste Data Flow system should be used bearing in mind that a lot of these companies are not waste management companies so support must be available from SEPA/Government to assist initially in completing a data flow, perhaps having an online support resource.

Perhaps we should also focus on the quality and quantity of waste data that is currently collected and ensuring that this is good data by requiring waste management companies to provide more details to businesses and to government/SEPA about the quantities and types of materials that they collect.

3.7 Proposal 7: Other measures to encourage waste prevention, including action on single-use carrier bags

Proposal

The Scottish Government would also welcome other ideas on legislation which could help to prevent waste.

Responses to questions

1. Do you consider that legislation should be made in this area?
2. If so, which areas should these powers cover?
3. Are there are any other areas, not covered by this consultation, where legislation could be made to increase recycling and promote waste prevention?

Comments

The CRNS would like to suggest a tax on high-impact products such as bottled water in plastic bottles and more public awareness raising on the impact of such products and their waste materials (especially in areas of tourism, as raised at the Cairngorms Forum).

Single use carrier bags — the current definition is not clear as to what these bags are as many products/consumer goods come in single use carrier bags (potatoes, toilet roll etc.) and therefore any definition has to be extremely clear.
Landfill Bans—the Government may want to consider banning certain products/goods from landfill particularly focusing on those products/materials that either has a market value or has a recycling or reprocessing route. Again any definitions used need to be very clear in order that there is minimal room for interpretation. Furniture should be banned from landfill as should clothes, textiles and all wood/wood derived products.

Variable VAT on environmentally/recycling friendly products and packaging

CRNS
October 2008
SUBMISSION FROM FSB

Introduction

The Federation of Small Businesses is Scotland’s largest direct-member business organisation, representing around 20,000 members. The FSB campaigns for an economic and social environment which allows small businesses to prosper.

FSB Scotland has consistently highlighted the need for the Scottish Government to examine how waste disposal options for small businesses can be expanded, to allow Scotland and business to benefit from the opportunities offered by increased business recycling.

We recognise the role that business must play in achieving a more sustainable Scotland and we believe that small businesses have demonstrated their commitment to this in recent years; however small businesses require support to change, particularly in the current financial climate. While we support the government’s aim to take action in relation to improving business (including public sector) recycling, we strongly believe that offering carrots, instead of, or in addition to, sticks would be a more beneficial way to progress.

Small Businesses and the Environment

We have always been happy to share data on environmental performance of small businesses with the Scottish Government. We previously carried out a membership survey on waste disposal in late 2004. At that time we learned that 43% of our members recycled some waste. The majority did not have hazardous waste streams, mainly disposing of paper, cardboard, and food waste (similar to household waste). Most businesses had their waste collected by their local authority.

Recent survey work with FSB members suggests that Scottish businesses have made progress and have a commitment to environmental improvement. Initial data (not yet published) shows that 40% of our members have changed the operation of their business as a result of climate change.

In examining the most important catalyst for future improvements, the main factor cited was a general concern for the environment — fines and penalties were less important as motivation for change.

Data gathered in early 2008 for the biennial FSB membership survey. Data referred to is based on 708 Scottish responses.

Waste

This recent data also shows that 84% of small businesses are now recycling some of their waste — a substantial improvement on the 2004 survey data. Responses also underline the ongoing importance of local authorities in small business waste disposal in Scotland, particularly when compared with other areas of the UK. The majority see local authorities as the main source of advice on environmental legislation and Scottish respondents are most likely in the UK to recognise that their local authority offered business kerbside recycling at a charge. 63% and 68% report that they use local authority facilities to recycle cardboard and paper respectively.
We remain concerned that some of the persistent problems relating to recycling are still a factor. Many businesses still feel that no facilities are available for recycling (21% felt no recycling was available for catering waste for example) and cost was cited as the main barrier in waste disposal. Overall only 43% were satisfied with the level of recycling offered by their local authority, perhaps suggesting a frustration at current limitations.

**Moving Forward**

We believe that evidence from our members shows that progress has been made in improving recycling amongst small businesses, as well as strong indications of support for environmental improvement. The fact that we have made such dramatic progress suggests that a legislative approach is not the right way to improve and risks alienating the goodwill that clearly exists in the small business community.

Yet again we see evidence of the key role played by local authorities in waste disposal for small businesses in Scotland. We understand the concerns of local authorities regarding pressure of landfill targets but we reiterate our view that developing recycling services and facilities for local businesses would help increase valuable recyclate collected by local authorities and reduce the small business contribution to municipal landfill. We are pleased that many local authorities have made progress in recent years but this issue cannot be ignored and local authorities must recognise this if we are to make progress as a nation.

In considering the evidence we are concerned that the Scottish Government should not proceed with plans to force all businesses to recycle, or offer facilities to do so to their customers, until cost-effective, facilities are in place to cope with increased demand. We do not believe that appropriate infrastructure or services exist at present.

If the Scottish Government wishes to set specific standards for parts of the public sector — and the evidence for facilities at certain public amenities is convincing - then small businesses should be specifically exempted at this stage. In the main this is because a large number of small businesses are not customer-facing (i.e. not shops or cafes open to public) and have hardly any employees (93% of all businesses have less than 10 employees). Therefore, legislation aimed at providing facilities for employees and customers would unfairly impact on the majority of small businesses.

Finally, we are disappointed that the consultation paper lacks detailed proposals, particularly since these proposals are likely to feature in primary legislation. The consultation paper is well structured and ambitions for legislation are clear but we reiterate our opposition to vague, enabling’ legislation. Some of the measures proposed have the potential to affect anywhere between a number of prescribed public sector premises, to tens of thousands of businesses. Clearly there is a vast difference in the cost and practicality of such extremes. To proceed to primary legislation without options which have been subjected to an effective business impact assessment would be both unwise and contrary to the Scottish Government’s support for the principles of better regulation. As a first step, when citing examples from other EU member states, the Scottish Government should, as a matter of course,
also obtain relevant impact assessment information from the member state (down to costs per business, where available) to inform discussion of the practicalities and costs of such options.

Questions

PROPOSAL 1: DUTIES ON PUBLIC BODIES AND BUSINESSES TO PROVIDE RECYCLING FACILITIES

As outlined above, we do not believe the case has been made to place a duty on small businesses to offer facilities to customers and staff. Such a duty imposed on businesses would likely impact on the majority when in fact it aims to provide facilities in some specific locations and premises as an obvious first step to improving availability of recycling facilities. This is not a sound basis on which to impose a cost on businesses and we therefore welcome the reference to only applying this duty to units over a certain size.

If such a duty is placed on public bodies (particularly local authorities), we hope this might build capacity by encouraging greater thought about the availability of uplifts and facilities for recycling which could also be used, at a later stage, for small businesses.

PROPOSAL 2: PACKAGING

There is little doubt that there is a growing public mood against excessive packaging. The problem lies in identifying those with influence and responsibility to reduce packaging — most small businesses have no clout whatsoever in terms of supply chain pressure.

The suggestions for legislation tend to suggest that retailers will be expected to provide a lot of paperwork on excess packaging when they are not the main source of the problem. We cannot see what will be gained by placing a further reporting burden on small retailers.

PROPOSAL 3: SPECIFYING RECYCLATE

We see the need to continue to support the use of recycled material in, say, construction contracts and to extend this where appropriate to other spend by the public sector. We must, however, be careful to ensure this duty does not contradict wider aims of sustainable procurement, particularly the benefits of buying from local sources. We cannot see any relevance to purchasing by small businesses and recommend they be exempted from such a duty.

PROPOSAL 4: WASTE PREVENTION PLANS

We support the Scottish Government’s aim to place greater emphasis on commercial and industrial waste. We recognise that having a forward strategy for dealing with waste will be a key factor for many organisations, particularly large parts of the public sector involving many different complex services and premises. For the majority of small businesses who probably operate from one premises, have few employees, and straightforward waste streams, we cannot see the benefit of such plans outweighing the bureaucratic burden. We do support, however, an increase in advice and aware-raising for small businesses about the benefits to the business of reducing, re-using and recycling waste but we must be careful not to raise expectations — many
businesses would like to recycle more waste but simply do not see practical, affordable options.

PROPOSALS: DEPOSIT AND RETURN

We agree that there is a history of operating deposit and return schemes in Scotland; therefore it may be easier to encourage public participation in such a scheme. There are clearly a number of issues which would need to be addressed and which cause particular concern for small businesses. We agree that a working party to help develop such proposals would be an effective way to proceed. We note the likelihood of exemptions for small businesses not being available however we think it would be worth exploring phased introduction, should the government decide to proceed with deposit and return. This could result in a pilot project (perhaps voluntary?) as a first step, followed by rolling out to larger stores in the first instance.

We will gather more detailed views from smaller retailers regarding practicalities of such a scheme however in the meantime the concerns for small businesses would include:

• Practicality of storing cans/bottles — consider fire and health and safety aspects
• An increase in paperwork and costs associated with running the scheme, particularly clarity of deposit money for accounting purposes
• Enforcement — would local authorities be best-placed to interact with local businesses?
• Fees — businesses should be encouraged to participate, therefore imposing a fee/licensing structure would not be helpful
• Reverse vending — we support the use of technology to facilitate the scheme but will this be possible or affordable for small businesses?
• Support - in rolling out such a scheme it is likely small businesses would require some kind of source of information and advice
• Impact on existing kerbside recycling by local authorities

Lastly, since this proposal is based on two existing schemes, it would be helpful (in advance of any working group) to gather relevant information from those countries regarding the practicalities for businesses of: separation, storage and collection of the goods; any impact on existing waste collection and additional costs on business; and, bureaucratic and accountancy implications for business.

PROPOSAL 6: MANDATORY WASTE DATA RETURNS FROM BUSINESS

While we accept that it is clearly necessary to have information on waste streams in order to plan and build appropriate infrastructure, we would nonetheless like to see more explanation of which specific information is required and for which policy purposes. This justification would make it clearer where information requirements should be targeted and there would then be a clearer proposal for legislation or working with particular sectors to develop a plan for gathering more comprehensive data (with the threat of legislation). We also believe that there must be scope to improve the sharing of data
gathered through different licensing procedures and/or government agencies. We welcome SEPA's indication that they will address this - surely, this should be completed before any legislation is discussed?

At present, we are not convinced that the small amounts of non-hazardous waste from most small businesses require blanket legislation potentially forcing them to complete paperwork which would be of little value.

If any data requirement legislation is introduced, it must be combined with a review of other environmental data gathered from businesses so that some kind of streamlining or reduction can be achieved.

PROPOSAL 7: OTHER MEASURES TO ENCOURAGE WASTE PREVENTION, INCLUDING ACTION ON SINGLE-USE CARRIER BAGS

The FSB's response to legislative measures to reduce the use of plastic carrier bags is well documented. We believe that previous proposals were likely to impact most severely on small, non-food retailers — who we suggest are least likely to be perceived as the main perpetrators' of excess use of carrier bags. We believe that focusing on carrier bags has been a distraction from more substantial issues regarding business recycling — some of which have been discussed in this document.

RIA

We welcome the work initially carried out for the partial RIA but would encourage the Scottish Government to incorporate the use of the Business Impact Assessment, as recently recommended by the Regulatory Review Group in Scotland. We do feel that some of the conclusions reached regarding costs to business are perhaps rather optimistic.

Further detailed information (particularly looking at costs) from other countries would help develop the RIA further and would then help the Scottish Government determine which proposals are viable on the basis of excessive cost and practicality implications for businesses (and the public sector).

FSB
October 2008
SUBMISSION FROM SESA

- SESA is the trade association representing Scotland’s waste and secondary resource industry.
- Driven by EU environmental law, we are a leading partner in Scotland’s transformation from a disposal to a recycling society: since Devolution, we have helped Scotland’s household recycling rate to increase more than five fold to above 32%.
- Two out of every three voters in Scotland believes the waste collection, recovery and management service our Members provide in partnership with local authorities is the most valued local service.
- Our Members provide one third of the Country’s renewable electricity.

Preface

Law relevant to recovery, recycling and management of waste is overwhelmingly governed by EU law. As a general principle, it is therefore particularly important that Scotland’s laws are demonstrably consistent with EU law and use definitions wholly consistent with, for example, the Waste Framework Directive (2008/98/EC). To give one example, we believe references in the Bill to “recycling” - when their meaning is much closer to “recovery” as defined by the Directive - are an unhelpful recipe for confusion;

We have no objection to Scotland seeking to be more ambitious than EU law when there is a clear justification for - and route map to - such ambition, but Scotland’s law should still be framed in a way that is manifestly consistent with relevant EU law;

Further, we note that the Bill proposes very wide powers for Ministers through regulations. We would prefer to see greater clarity and detail in the primary legislation to inform the democratic process. Unlike an EU Directive which permits flexibility within a Member State as to how prescribed outcomes are achieved, such imprecision in the Bill is clearly not aimed to deliver subsidiarity across Scotland but instead seeks wide executive powers where the likely character of such execution remains opaque.

Clause 52: waste plans

We would greatly welcome good, clear plans for the management of waste, with clear targets for recycling and recovery of waste and how these targets are to be achieved. It would be more helpful if Clause 52(1) reflected the terminology used in the Waste Framework Directive setting out the five tier hierarchy and the distinction between recovery and disposal;

We also recognise that Scotland should reflect reference in the Waste Framework Directive to minimisation of waste. However, this must not distract from the need to provide infrastructure to recover value from existing volumes of wastes diverted from landfill. A legal requirement for site waste management plans for construction and demolition projects is one example of a useful approach to adopt;
We advise against the definition of “recycling” proposed in Clause 52(4): it is not consistent with the EU law with which Scotland must comply.

- **Clause 53: waste data**
  Clause 53(1) is an example of a Clause providing such wide-ranging powers for Ministers as to make the primary law almost meaningless. For example, the primary law ought to indicate how and on whom the burden of the law is likely to fall;

  Our industry has long recognised the need for better and more relevant and timely data on waste. We believe this requires significantly better capture of data from waste producers and from sites exempted from waste management licences;

  Data from our industry should generally be required by regulation and the requirement should avoid being framed in terms that require duplication of effort. In addition, this is an area where there should be consistency across the UK to avoid, for example, the need to replicate computer systems.

- **Clause 54: recovery facilities**
  This Clause reflects a presumption in the Waste Framework Directive in favour of recovery over disposal of waste and, again, should be both couched in such terms and provide sufficient detail in the primary legislation to give an indication as to what in practice the law is likely to mean;

  In broad terms, we welcome the general provision of the polluter pays principle at Clause 54(2)(e) provided SEPA and other relevant authorities are adequately resourced to enforce zero tolerance of fly-tipping across Scotland;

  Notwithstanding current turbulence in global commodity markets, we believe the Landfill Tax escalator and other drivers will over a relatively short period suffice to promote higher levels of recovery of business waste and that an unduly prescriptive regime for this waste stream may not provide the best possible results.

- **Clause 55: facilities at events**
  Subject to comment already made, this provision seems sensible.

- **Clause 56: green public procurement**
  We warmly welcome the prospect of greener public procurement as a stimulant for markets in recycled materials. Frankly, however, public authorities across the UK should now be able to provide far more detail than the generic framework offered by Clause 56.

- **Clause 57: packaging targets**
It is important not to disrupt the functioning of existing producer responsibility obligations, transposing the EU Packaging Directive, placed on the packaging sector;

The Producer Responsibility Obligations (Packaging Waste) Regulations, applicable in Scotland, England and Wales, already provide a direct incentive for those using packaging to reduce its use. Further regulation on this matter may be seen to be redundant;

Also, the Packaging (Essential Requirements) Regulations already require that packaging weight and volume must be reduced to the minimum necessary for safety, hygiene and consumer acceptance of the packaged product. More robust policing of existing law might be preferable to new law.

- **Clause 58: deposit and return**
  Statutory deposit and return schemes appear to work well in a number of EU Member States;

  However, given the scale of investment in infrastructure required to enable Scotland to comply with relevant EU law, it is important that there is a measure of consistency in Scottish official policy extending beyond the ebb and flow of specific administrations. We simply note that this proposal represents a change of policy since the Strategic Waste Fund provided resources for collection infrastructure: there is potential for deposit and return schemes to conflict with investment assumptions behind such investment in infrastructure and this could mean, for example, that the Scottish taxpayer might not secure the best value for money;

  We would invite the Scottish Parliament to probe the Scottish Government on the evidential base behind its current proposal and to give a very precise indication as to why it is believed to offer better prospects than the rapid increase in recycling and public participation rates in recycling being secured through the model of investment in collection infrastructure.

- **Clause 59: carrier bags**
  We do not consider this to be a priority;

  Far more important is the need to extend general awareness of broader waste management issues such as the need to segregate materials for recycling and the pressing need for new facilities to recover value from waste.

- **General points**
Much of the 22 million tonnes of waste produced each year in Scotland is potentially either a recyclable material or a renewable, decentralised source of energy providing a net carbon benefit and making a significant contribution towards Scotland’s carbon reduction targets. Appropriate waste laws in Scotland can therefore deliver both compliance with EU waste laws and also an opportunity to reduce net CO2 emissions at no additional marginal cost;

It would clearly be easier for public authorities to determine optimised policies for waste in a context where there were internationally accepted, relevant and robust indicators of sustainability. SESA’s Members are filling a vacuum by compiling methodology which will enable specific waste facilities to benchmark their carbon footprint against those of other such facilities. We hope to conclude this work in 2009.

Scottish Environmental Services Association
22 January 2009
Climate Change (Scotland) Bill: Stage 1

The Convener: Item 5 is stage 1 consideration of the Climate Change (Scotland) Bill. Our focus today is on sections 52 to 61, which deal with waste reduction and recycling. Although we are a secondary committee on the bill, we are the only committee to take evidence on this chapter.

I welcome the panel: Professor Jim Baird of Glasgow Caledonian University; Pauline Hinchion, chief executive of the Community Recycling Network Scotland; Susan Love, policy manager of the Federation of Small Businesses in Scotland; and Dirk Hazell, chief executive of the Scottish Environmental Services Association.

Given that panel members do not represent one set of interests, members should make it clear to whom their question is addressed. Equally, if any panel member wants to contribute to a question that is addressed to another panel member, they should indicate and I will bring them in.

SESA has provided a submission to the committee and we have responses to the Scottish Government’s consultation on waste management from the Community Recycling Network Scotland and the FSB, so we will move straight to questions from members. I come first to John Scott.

John Scott: Thank you, minister.

The Convener: Minister?

John Scott: Convener.

Bill Wilson (West of Scotland) (SNP): You are rising rapidly, convener.

John Scott: Everyone has zero waste as an objective, but is it doable? Can we achieve it in the real world?

The Convener: I guess that all the witnesses will have something to say about that.

Professor Jim Baird (Glasgow Caledonian University): Zero waste has its origins largely in New Zealand and Australia, where many of the initiatives started. Its purpose is to decouple waste growth from economic growth and to move us away from dependency on landfill and incineration. The debate often focuses on whether we should send waste to landfill, but zero waste is properly defined as trying to reduce consumption and the production of waste, followed by recycling, so that, in effect, society does not produce waste in the first instance. Zero waste is quite an emotive term and people tend to be polarised on the question of whether it is doable, but everyone acknowledges that we should aspire to achieve it.

I mentioned New Zealand and Australia because they often present themselves as leading the way on zero waste, but I was there in September and was able to unpick some of their figures. Some of the major states in Australia are performing just slightly better than us on recycling, with figures of 38 or 40 per cent, as against the Scottish average of about 32 per cent. Although other countries portray themselves as leading on zero waste, Scotland is doing rather well. Zero waste is an aspiration—the real challenge is consumption in society—and it is unlikely that we will ever reach the point of zero landfill.

Pauline Hinchion (Community Recycling Network Scotland): I see zero waste as achievable. The CRNS has tied its colours to the mast of zero waste but, if that is to be achievable, we must move away from the notion that it is about managing waste and recognise that it has implications for the whole economic system—it is about how we design, produce and consume our products. If we look at zero waste in a comprehensive sense, it is achievable, but in Scotland the concept is seen as being about preventing landfill, which reduces its ability to make a significant contribution and to be achievable.

Susan Love (Federation of Small Businesses in Scotland): It is important to make the point that the owners of most small businesses are just people who share the environmental concerns of the public at large. There is a general desire among businesspeople to reduce their businesses’ carbon and environmental footprints, but zero waste is a concept that does not seem particularly realistic to many small businesses. We have suggested that a more helpful approach with small businesses is to promote the resource efficiency angle of waste reduction.

Dirk Hazell (Scottish Environmental Services Association): Scotland is already falling short of meeting its obligations to divert a certain amount of biodegradable municipal waste from landfill by 2010, and the European Union waste framework directive that was put in place at the end of last year will apply further specific recycling targets to Scotland. In that context, it is probably more helpful to focus directly on the European target, certainly in legislation, than on a phrase such as zero waste, which has a slightly different meaning as used by the Scottish Government from the meaning that environmentalists originally gave it.

I agree strongly with what Pauline Hinchion said about product policy: if we want to get long-run amounts of waste back into the productive economy, products must be better designed in the first place. Realistically, however, some waste will...
always have to go to landfill—for example, if committee members were unlucky enough to have to go to hospital, I do not think that they would want to see recycled syringes being used.

10:45

**John Scott:** Is the current waste infrastructure sufficient to meet current and future waste policy?

**Dirk Hazell:** There is nowhere near enough waste infrastructure anywhere in the United Kingdom to comply with existing European obligations. In Scotland, we need to accelerate our transition from a disposal to a recycling society, but to do so requires more infrastructure. It also requires much stronger green public procurement to give an impetus to recycling markets—there is a bit of provision for that in the bill, but it is anaemic.

**The Convener:** Does anybody else want to comment on that aspect? You do not all have to.

**John Scott:** The question is whether current waste infrastructure is sufficient to deliver for the future.

**Pauline Hinchion:** I agree with Dirk Hazell that the current infrastructure is insufficient and, ironically, that is probably particularly the case outside the municipal waste stream. There has been a focus on that infrastructure at the expense of construction, demolition and private-sector waste, but wider public sector bodies have invested insufficiently in managing and reducing their waste. I welcome the Waste and Resources Action Programme anaerobic digestion grants for food waste in particular because there is no doubt that the methane produced when organics are put into landfill has a significant effect on greenhouse gas emissions. We need to get to grips with that aspect, which has been a poor relation up to now.

**Professor Baird:** Let me respond to SESA’s comment about the zero waste concept being unhelpful. Any waste is a measure of inefficiency in society, whether it comes from a small business, a home or a big business, and when we attempt to deal with that, it means that we are all engaged in the process. When we try to communicate policy initiatives that have been introduced by the current and previous Administrations, it is useful to engage the public through the concept or brand of zero waste, which I think is a helpful device. The Cabinet Secretary for Rural Affairs and the Environment has set targets that go beyond the European waste framework directive, which means that, in many ways, we lead the UK and Europe in setting demanding drivers on waste.

**Susan Love:** The FSB has been involved in the issue of recycling waste for several years, investigating possible further options for small and medium-sized businesses, but we keep coming back to the same problem that there are no facilities for SMEs to use. The committee will see that point running through our written response. It will not be remotely possible to implement many of the bill’s measures unless we make progress with facilities, and the local authorities’ comments about why their waste services for businesses are limited bring us back to the lack of resources for infrastructure. Unless that central problem can be solved, we fail to see how parts of the bill can be implemented.

**Rhoda Grant (Highlands and Islands) (Lab):** We have heard that the zero-waste initiatives target the end product rather than the start of the process. We have also heard, from producers, that if we do not use packaging we will end up with more waste because more products will be damaged. Is there a balance that needs to be struck?

**Professor Baird:** Packaging exists for a reason: it protects products and ensures that, for example, our fruit and vegetables arrive in the shop safely. If we were simply to bundle apples into a big box, more would get bruised and subsequently thrown away. We fully accept, therefore, that there is a role for packaging.

Through the Courtauld commitment with retailers, we are trying to drive down the amount of packaging by 25 per cent over the next couple of years. That should result in, for example, ready-made meals coming with a little watchstrap of cardboard around them rather than a full cardboard box. Attention is being paid to design, which is resulting in reductions in the packaging that is used. You are right to suggest that we need to balance a reduction in the use of packaging with the need to maintain product integrity.

**Pauline Hinchion:** Tesco would argue, rightly, that there is a spoilage rate of about 30 per cent in food that has no packaging and, given what we were just saying about methane being dangerous for greenhouse gas emissions, we have to take cognisance of that.

Like Jim Baird, I suggest that we need to think about the type of packaging that is used. Do we need many layers of packaging made up of plastic, cardboard and foil around one item? Could we simplify the packaging so that it is more readily recycled? People have not got to grips with the notion of refills. How do we encourage people to reuse their packaging so that, instead of buying new containers of Fairy Liquid, they refill their old container? It is too simplistic to say that we will be able to do away with packaging or that having no packaging is best for the environment.

**Elaine Murray:** Last October’s European Union waste directive indicated that there should be a
hierarchy of ways of dealing with waste, with prevention being the most desirable method, followed in descending order of desirability by reuse, recycling, energy production and landfill. Do you agree with ministers that the bill takes sufficient cognisance of the EU framework, which will come into legislation in the next two years?

Local authorities have decided how to deal with municipal waste without having had regard to the framework. Some areas are considering autoclaving waste, while others are introducing power-from-waste plants. The local authority that covers my constituency recycles a certain amount of waste but uses quite a lot of the paper and plastics to produce power. I am concerned that our local authorities might be going in a direction that the EU has now abandoned. Do you think that the EU framework has an impact on local authority policies?

Dirk Hazell: The bill clearly does not take sufficient cognisance of the EU framework.

There are two fundamental issues about the bill. One is that it proposes extremely wide powers for ministers, and ministers have not explained to Parliament exactly what those powers will mean in practice. For example, in sections 52, 53, 54, 56 and 57 the Parliament is asked to confer on ministers powers to turn unspecified classes of people into criminals on whom unlimited fines can be imposed. That is a question for the Parliament, and it will be interesting to see what scrutiny you apply to the minister on that point.

Secondly, I have a more general point about terminology—there is some disagreement between Professor Baird and me on this. It is one thing to use terminology for the purposes of public presentation; it is quite another to use it in a bill. It is extremely unfortunate that the bill does not reflect the terms of the waste framework directive. References in the bill to recycling do not address Scotland’s duties under article 11 of the waste framework directive, which is specific on recycling. The definition of “recycling” in the directive is different from the definition in the bill. The fact that the Scottish Government does not have the courage to advocate energy from waste is not a reason to include unhelpful terminology in the law. If the Scottish law means “recycling” it should say “recycling”; if it means “general recovery” it should say “general recovery.”

Your question had a number of components, but I should let other witnesses comment.

Professor Baird: There is an interesting point in that, although Governments and Administrations have tended to focus on challenging local authorities to deliver on recycling, this bill tries to address the other major part of the waste stream, which is commercial and industrial waste. It also picks up on fairly innovative ways in which we can move towards the aspirational, longer-term, 70 per cent recycling target. As members know, the bill is an enabling bill, so at some point the Administration will have to come back to the Parliament to define other measures.

When clear signals are sent to producers and the waste sector about what is expected or required of them, they will deliver. We have sent clear messages about landfill tax, and strong messages have been sent to councils and the retail sector about reducing packaging. When such messages are sent, people sit up and respond. The bill is trying to send innovative signals to producers and the waste sector about how Scotland wants to deliver on ambitious targets. I broadly support the approach, which is quite innovative for Scotland.

The Convener: Do you take issue with Dirk Hazell’s comment about the Scottish Government’s lack of courage?

Professor Baird: SESA is making a point about capping energy from waste. A dash for incineration would be the simplest solution for all of us, but when we start to consider how to drive forward recycling and waste prevention, we might be right to temper our enthusiasm for energy from waste.

Elaine Murray: Is that not in accordance with the view in the waste directive, which puts recovery of energy in fourth place out of five approaches to waste?

Professor Baird: Indeed. We are talking about a hierarchy, and we should focus on prevention, reuse and recycling. The current Administration has taken a policy decision on capping energy from waste.

Dirk Hazell: I do not want to monopolise the discussion, but I want to ensure that what I have said is clear. The bill should use the term “recycling” in the same way that the waste framework directive uses the term. The WFD gives a precise definition of “recycling”: putting material back into the economy for productive reuse. The word should not be a cover for other things that are not recycling, as using a very wide definition of so-called “recycling” softens the target for the Scottish Government. Scotland is twinned with Bavaria, which has a recycling rate of around 75 per cent. In that context, we are not being ambitious.

11:00

Alasdair Morgan: Am I right in thinking that the waste framework directive does not have to be transposed until 2010? Are you saying that if we pass the bill in its current form, we would be in
breach of that directive, which was finalised only in October?

Dirk Hazell: My point is simple. European law is a statement of what states such as Bavaria—with which Scotland is twinned—achieved some time ago. European law sets a waste target that is difficult for us to reach because waste has been ignored for generations. We have had cheap landfill for a long time and we must make huge investment in infrastructure.

As I say, my point is simple. Because European law is the driver, Scottish law ought to reflect our obligations under European law. Compliance with European law ought to be made as simple as possible in Scotland, particularly as, I suspect, the context is one in which the Scottish Parliament and the Scottish Government will not devote vastly more generous resources to dealing with waste than are thought to be absolutely necessary to achieve compliance.

Susan Love: I want to pick up on a couple of points that Dirk Hazell made in his first comments, in case we do not return to them. They are quite important from our perspective.

First, it is important to mention again the powers in the bill. I represent the FSB on the regulatory review group. The bill takes massive enabling powers, which, from our perspective, is extremely unhelpful if we are trying to work out what the potential impact of the legislation might be. Consider, for example, waste prevention plans. On the one hand, the Government might be looking at bringing in waste prevention plans for construction sites, which is quite logical; we can see the point of that. However, the bill also gives the Government the power to require waste prevention plans for all business premises in Scotland. There is a vast difference between those two objectives, but all of that can be achieved under one section. We do not think that that is a helpful way to draft legislation if we are keen on having better regulation.

My second point is about local authorities' plans. Local authorities are critical from the SME perspective. Municipal waste includes a lot of business waste. Local authorities have invested money in recycling facilities for the public, but they will, in some circumstances, still pick up from business mixed waste that is not segregated. That seems to us to be utter madness. It is important to bear it in mind that municipal waste includes SME waste.

Liam McArthur: I would like to return to the point that has been made about infrastructure, which is relevant to Susan Love's point about uncertainty arising from the enabling nature of the bill. Obviously, we have come quite a way from being extremely far behind in our recycling rates—

I think a current rate of around 30 to 32 per cent has been suggested. I am interested in whether that kind of percentage is locked in. I refer to SESA's evidence on section 58, which is on deposit and return schemes. There is a suggestion that, under the bill, the Government might take decisions on deposit and return schemes that will divert infrastructure investment and that any gain may come at the expense of losses in other areas. Could decisions result in zero-sum games? I am interested in Mr Hazell's comments and those of the rest of the panel on that.

Dirk Hazell: That is a very pertinent question. From an appallingly low base—lower even than that of England, which was quite difficult to achieve—there has been a 500 to 600 per cent increase in recycling in Scotland since devolution. That is a very short time, and the increase has been achieved much more quickly than anything that has been done elsewhere in Europe. It has been achieved on the basis of some investment and some assumptions. By and large, the strategy has been to try and persuade most householders to think of themselves as recyclers and, through their collection system, to increase recycling progressively.

It is an undeniable fact that deposit and return works very well in a number of European countries. Our point is that we cannot keep chopping and changing. Whatever Scotland goes for must remain stable between Administrations. If we superimpose deposit and return on infrastructure that has already been put in place for home-based collection systems, that will not bring about the best value for money for the infrastructure that is already in place. It can be confusing for the public if they keep getting different signals. The public want to know how to recycle. Most people want to be recyclers now, which is a much better situation than before devolution. There needs to be consistency between Administrations.

I have looked through the deposit and return briefing that the committee has received, and there is not one word of justification in it for changing to such a system. It is incumbent on the ministers who come before you to say why, exactly, they think that it would provide a better model than the model that has been employed in Scotland so far, which has raised recycling levels at a record rate. Why do they think that deposit and return is better? Where is the life-cycle analysis? Where is the cost benefit analysis? You have not been given one fraction of a sentence on any of that.

Pauline Hinchion: There are concerns about that proposal. I can see deposit and return schemes impacting on kerbside collection, with people making additional journeys to return
containers because of the financial incentive. That could undermine the kerbside recycling schemes that have been set up.

There is a driver behind the idea, however. There are concerns on the part of reprocessors—the Confederation of Paper Industries and O-I, the glass people, for example—that the quality of the stuff that comes from kerbside collections is just not good enough. You will have read about the matter in the papers over the past couple of weeks, including in The Observer last weekend. Unless kerbside collection is done well, by which we mean that it is source separated at the kerbside, reprocessors get mixed-colour glass, which can only go for cullet in road making. If it is not properly sorted, it cannot go back into the reprocessing and manufacturing process. It would not surprise me if a large number of deposit and return schemes are being punted because a better quality of return might result. As long as materials are commingled, quality suffers. As a result, reprocessing opportunity suffers.

Susan Love: We were relatively relaxed about the deposit and return idea when it was first being discussed by the Government. The more we consider the evidence, however, the more we are becoming concerned that it might not be an appropriate approach, particularly because we are trying to push the message that the schemes that have worked for households have involved making recycling as easy and accessible as possible for people. Some elements of deposit and return seem to reverse that. It does not seem to make a great deal of sense.

The Convener: I wonder how easy and accessible householders think the various schemes are, and are becoming. I have seen some very complicated calendars for various pick-ups, and it is easy to understand why people have become confused and fed up with the whole process. I wonder what would happen if we went even further with separation at the household level—I wonder what kind of resistance we might start to hit. That in itself might become a barrier.

Pauline Hinchion: When local authorities roll out new kerbside services, there is rarely an intensive awareness-raising campaign. People might get something through their doors to say that the council is now picking up paper fortnightly on Tuesdays, for instance, but that misses the point that behavioural change is difficult to achieve. People need consistency, and there needs to be a relentless effort to get them to appreciate what is being done.

A good example was recently provided by the Welsh Assembly Government. One local authority in Wales actively engaged with people, knocking on their doors and telling them about the scheme. People will get the message that way, but councils cannot just come up with a commingled or three-bin system and expect people to understand why it has been introduced. Not enough attention is paid to awareness raising and giving out information. Having a website is not enough; it requires resources and knocking on people’s doors. However, when people get it, they really get it.

John Scott: The system in South Ayrshire works very well; the council is second-top of the league for recycling and the complicated planners that the convener mentioned seem to work. Here in Edinburgh, however, I do not quite know how to go about recycling. I am an avid recycler, but I do not know how to do it here.

Dirk Hazell: Susan Love and Pauline Hinchion have made entirely valid points, but it is necessary to be pragmatic, rather than dogmatic. Different collection systems will work well in different places. What works in an urban area where there are tenements will be a very different collection system from what might work well in suburbs, where people have front gardens and live on quiet roads.

Pauline Hinchion made one important point that I must rebut. She said that commingled collections result in poor-quality materials for recycling. Given the amount of investment that is going into material recycling facilities—MRFs—that is not in fact the case.

I will not be rude about The Observer, which is usually on the side of the angels on green issues, but you should not believe what you read in the Rothermere press. The photographs that were shown of bales of paper that were allegedly stranded at a London facility two Sundays ago did not tell a true story. That paper was in fact going on for further reprocessing. It is important to make the point that SESA’s members are still placing materials for recycling, based on commingled collection, for further use on international and domestic markets, even in the heart of one the worst and most rapid falls in commodity prices. That material is being used. One should not be too dogmatic about commingled and separated collection.

Professor Baird: I return to the point about undermining the existing infrastructure. One of the challenges for Edinburgh, for example, is that only 100,000 households can get a box collection service. Another 100,000 at least—perhaps 130,000—cannot. Much of that is to do with property types. We want measures to be introduced to make it easy for all of us to engage in recycling. I would not wish to deny people living in flats and multirose premises the opportunity to recycle. If they can go along to their local Tesco or Asda and use a deposit and return system, that is great, and that should be welcomed. Recycling on the go, at events and so on, should be in place, too.
My only slight concern about deposit and return is about how it sits with attempts to drive through change using existing packaging regulations. How could Scotland go it alone in that regard?

The Convener: We need to move on. We have done quite a lot on that subject, and we need to get through some more.

Peter Peacock: I wish to hear some comments from Pauline Hinchion and Professor Baird on the point that Dirk Hazell and Susan Love have covered, about the sections of the bill that deal with waste—sections 52 to 59—and the extensive enabling powers that are being sought. Is that the right way to proceed, as a matter of principle? Do you have concerns about that? Do you see any disadvantages in that approach? Dirk Hazell and Susan Love have already made known their points of principle in that regard.

Then perhaps everybody could answer this second question. If you have concerns about the provisions, what is the alternative? What are you suggesting? Do we await the next primary legislative slot? Perhaps Professor Baird and Pauline Hinchion could start on the first point.

11:15

Professor Baird: I cannot comment on the parliamentary process and, therefore, the benefits of taking significant powers and introducing secondary legislation later. We have focused on municipal waste in the past, but we also need to target business, commercial, industrial and other waste streams. We acknowledge that our data and ability to target those waste streams are a little bit restricted because of limited policy levers. I broadly support the fairly ambitious and innovative steps that are proposed, particularly if they target waste prevention. One reason for encouraging businesses to measure their waste is that if they cannot measure it, they cannot manage it; measuring it is the first step in trying to reduce and recycle business waste more effectively.

Pauline Hinchion: In one sense, the bill is really ambitious. It gives people powers finally to take control of the situation. Ultimately, if we are to achieve an 80 per cent reduction, somebody has to manage the process. In that sense, it is good. However, there is a danger that everything will become instrumental and the concerns of small businesses or householders will be ignored. When people are given so much power, it can become all about delivering on the powers, the control and actions.

I will give an example. We have members in Shetland who collect, recycle and reprocess glass into really nice glass awards. Theirs is a small business, but Shetland is a small place and they do great work. Under the bill, it would probably be better for the climate if they just put the glass on to a ship and sent it down to Alloa to be processed.

We have to be careful that the powers do not become too instrumental and that some of the other factors that may have to be taken into consideration are not ignored. That is what I would be concerned about, if that makes sense.

Alasdair Morgan: I did not understand that point. You said that, under the bill, it would probably be better if the people in Shetland shipped the glass to Alloa. Are you saying that their net use of energy would be less if they shipped it to Alloa?

Pauline Hinchion: Yes.

Alasdair Morgan: That is nothing to do with what the Government says; it is just a fact.

Pauline Hinchion: No—I am sorry, I meant that it would probably be easier to achieve an 80 per cent reduction if they just shipped the glass to Alloa than if they continued to collect and reprocess it, but there is a job creation and social side to that activity as well.

Professor Baird: Some work that we have done at Glasgow Caledonian University shows that, if we move towards the levels of recycling targets that we are talking about and crack waste prevention, the waste sector could contribute around 6 per cent of the 80 per cent reduction that you want for 2050. That is a significant contribution towards achieving the carbon reductions.

Susan Love: I am sceptical, because I have yet to see many powers that have been taken not subsequently being used when Governments want to make annual reports and show that they have taken action. The Federation of Small Businesses in Scotland is nervous about powers being taken with the assurance that they might not be used.

I also have concerns about the level of scrutiny for secondary legislation. Legislation that affects business is often made through secondary legislation and, in our view, the development process for it simply does not attract the level of scrutiny and attention that primary legislation does. It is also harder to change secondary legislation.

My third point is about timing. All through the policy memorandum, there are phrases saying that the Government has to take powers now or might as well take them now, but I do not understand the justification for that. Why is there a sudden rush to confer all the powers now, as if there would be no further opportunity in future? It is not as if the problem will go away.

The Government should simply decide what it wants to do. I am not saying that there is no
ambition, but the bill speaks to me of hedging your bets. The Government suggests throughout that it will probably not need to include small businesses in these provisions or that there may be a de minimis route for that; if so, why is the bill not drafted to say that provisions will apply only to public bodies or large businesses? The same point applies to recycling options. After all the public bodies or large businesses? The same drafting to say that provisions will apply only to minimis route for that; if so, why is the bill not in these provisions or that there may be a de.

should have a clearer idea of what it wants to do and should draft the bill accordingly.

Dirk Hazell: I agree with much of what Susan Love said. We warmly welcome what we assume to be the principal intent of the bill. Our industry is about helping to make the planet more sustainable. We exist only because of regulation—our job is to provide what is safe for the environment and human health. However, as Susan Love said, the bill is very imprecise; it has not been thought through in the way in which one would have wished. If we as an industry are to be on the receiving end of some of the powers that are being sought, we would like to know that at the primary legislation stage, so that we can demonstrate outside. It is much more difficult to do that at secondary legislation stage.

Section 56 is on the procurement of recyclate. Any Government in the European Union ought by now to be coming up with pretty tangible figures for green public procurement. There are some in Scotland, but they are not very ambitious. In construction and demolition, such figures make a lot of sense. Our members in the Netherlands are getting 99 per cent reuse and recycling from construction and demolition; with the right regulatory framework, that is easy to do.

I turn to section 53. Our industry has said for years that we really want better information on waste. The Government needs more data to inform its policy on both household and business waste; we welcome the recognition of that need. However, under section 53 the Government will have the power to create a criminal offence with unlimited financial liability. On whom will that offence fall? If it falls on our members, we will have a problem, because we do not necessarily know what is in the waste that our customers provide; we rely on the waste producers, especially those on the business waste side, to tell us that. Susan Love and I may not agree on the specific point of who should assume liability for waste data, but we agree that there is a political issue to be resolved, and that it should be addressed in primary legislation.

The Convener: Some organisations have indicated to us that they object to the use of enabling powers—they want powers to be enacted through the bill. You appear to take the opposite view—you would be even unhappier about that than about the inclusion of enabling powers in the bill.

Dirk Hazell: As an industry, we would be happy with clear regulatory powers for collection of data that applied on a level playing field—which is more than we have at the moment—and were enforced. That is our basic position. Our secondary position—this is where Susan Love and I part ways—is that the primary duty should be on the waste producer, rather than the waste manager.

The Convener: At this stage, we are talking at a slightly higher level. The bill includes enabling powers that may or may not subsequently result in subordinate legislation. I take on board Susan Love’s scepticism and her suggestion that if the Government can do something, it will. However, I suspect that if she were to look at some of the legislation that we have passed over the past 10 years she would find that that is not the case. Some organisations have lobbied against the use of enabling powers that would allow us to do one or another or everything that the bill mentions at a future date; they say that we should do those things right now. Do you not want that, either? Dirk Hazell appears be saying that the bill is flawed to the extent that none of the enabling powers should be enacted in the way in which they are being presented at the moment.

Dirk Hazell: I am saying that, if we want to create new criminal offences with unlimited financial liability, the primary legislation should say who the guilty people will be.

The Convener: So you do not want the powers to be enacted as they are in the bill.

Dirk Hazell: The bill should say who the guilty people will be.

The Convener: Right—you do not want the powers to be enacted as they are at present.

Dirk Hazell: We want more precision.

Susan Love: We do not want them to be enacted because the bill does not say exactly what the Government wants to do. The proposed powers are so wide that it would be hard to say what we would be putting into legislation if we enacted the bill as it stands. That is the problem.

The Convener: So you would rather not have to wait for the subordinate legislation—you want the details to be in the bill.

Susan Love: If we are to have an argument about whether the provisions on waste plans will apply simply to construction sites or to every business premises in Scotland, I would rather that the Government was clear about its view and that we had a debate among our members, rather than have me fight it out with an official behind closed doors.
Pauline Hinchion: I have concerns about enacting the powers as they are drafted, because, as Dirk Hazell pointed out, the term “recycling” is used in the bill for recovery and reuse. Reuse should be higher up the waste hierarchy. It seems that many processes have been concertinaed into the term “recycling”. That will not allow for the infrastructure that is required for reuse or for the way in which re-usable material is procured compared, for example, to the procurement of recyclate.

Professor Baird: I am broadly supportive of the measures. If we are challenging ourselves to deliver more and better reuse, waste prevention and recycling, the powers in the bill are the kind of powers that we should take. The bill is written in a language that is so broad that it is difficult to understand where the responsibilities will fall. However, I broadly accept that that is the way in which Government legislation works. The broad powers are taken and then there is a debate and argument about how they are delivered. I hope that several of the measures will be taken at the earliest opportunity.

The Convener: We need to move on. Elaine Murray has some questions, although she may feel that some of the issues have been covered.

Elaine Murray: Yes. Dirk Hazell touched on the media coverage of piles of recyclable material sitting in warehouses. On the news last night there was another item showing vast stores of recyclable paper and plastic. Strangely, a UK Government adviser implied that the carbon footprint of recycling means that it is not worth doing and could actually have a deleterious effect. Will you say a bit more about the current economic situation? Will you also talk about the science and the arguments on whether some things that we do when we attempt to recycle do not do as much good as we hope they do?

The Convener: I will add a point that follows on from Elaine Murray’s question. A personal bugbear of mine is that an awful lot of recycling is predicated on people loading stuff into their cars and then driving it to a central point. When I have queried that in the past, I have found that nobody ever factors that into the equation. That takes us back to points that Pauline Hinchion made earlier.

Dirk Hazell: If I may say so, you have hit on one of the most important points underlying the debate. Every time we talk about the environment, we are in the area of theology as much as substantive science. It is difficult for you as public leaders to do the job that you are asked to do without knowing what the most sustainable route is. The Organisation for Economic Co-operation and Development—an international organisation that is based in Paris and which the UK is a member of—has for years tried to get internationally agreed measures of sustainable conduct. The typical pattern is that a particular Government says to the OECD, “We want these figures, because they make us look really sustainable.”

As a reaction to that, various sectors are developing their own measures of sustainability, although that is not as satisfactory as international public agreement. Our sector is doing precisely that. We are not entirely satisfied with the indicators that the regulators have come up with throughout the UK, so we are developing our own robust measurement to show the carbon footprint of individual facilities, which we hope will be done by the end of 2009. That will enable people to compare the carbon footprint of one facility with that of another, which will enable benchmarking and raise overall standards. However, I do not pretend that that is as good as having robust analysis. WRAP has produced no end of stuff, some of which is quite good, but it is not scientific analysis that shows exactly, for example, how recycling something is by far the best thing to do; it is just a collection of other people’s work, by and large. We need robust international—or European, at least—agreed measurements of sustainability. That would make this sort of bill much easier to implement.

11:30

Susan Love: I will let the experts next to me comment on the science. On the economics, though, the situation has deteriorated significantly since we started talking about the bill. We have made the point to the Scottish Government that, given the potentially vast costs to businesses of certain provisions in the bill, we do not think that this is the time to send out the bill’s message to business.

Pauline Hinchion: To me, there are two sides to the question. One side, with reference to section 53, is about data quality and how we standardise the various accounting mechanisms that are in place. Every time I go on to the internet there seems to be a new carbon accounting tool. The issue is how we ensure that we measure in the same way and are not comparing apples with pears. There are therefore problems around data quality, the type of data that are collected and, more important, how we measure data—I think that that was Dirk Hazell’s point. Instead of everybody using their own carbon accounting tool, we must get agreement on how we measure data.

The other side of the question is the quality of recyclate. The campaign for real recycling, whose members are recyclers and reprocessors, and the Confederation of Paper Industries have said in the past few weeks that there are good prices for good-quality material. However, the media
bombard us with the incorrect perception that, in the recycling world, nobody is selling recyclate to anybody. We are not selling poor-quality stuff, which I would argue with Dirk Hazell comes largely from the commingled approach, and there are good prices to be had, as two reputable bodies have said. Ironically, the article on recycling in The Observer was about somebody following their basket of recycling to its logical conclusion. The interesting point is that because the London Borough of Hackney Council does source-separated recycling, the collected bottles, plastic, cardboard and paper are recycled in the UK. It is clear that our reprocessing industry needs quality material. The situation looks worse than it is, but we must have quality material.

Professor Baird: I have two points: one on environmental impacts and the other on paper. Through the remade Scotland programme, which the Government funds, we did some work with the Convention of Scottish Local Authorities on the drop in prices since August. There has been a significant drop, but material continues to flow. In particular, in local markets for recycle such as glass, which is largely dealt with in Scotland and in the UK, prices have held up. Prices have also held up for materials flowing into the compost market. Paper prices have partly held up because we have domestic demand for it, but we ship some paper to China and other places overseas. Because there have been collapses in some areas, we have a fragile economy that is trying to establish itself. It is a little bit vulnerable, but material is still flowing. It is therefore a pity that the media choose to present it in a negative way.

We can take two approaches to considering environmental impact or sustainability. To make my argument, I will take carbon as a surrogate for sustainability. We can take a life-cycle analysis or an inventory analysis. Unfortunately, countries take an inventory analysis. If we ship bauxite over here from Australia to make aluminium, Australia picks up the tab on the bauxite production side, and we pick up the tab when we melt the bauxite or process it into cans. Issues arise because of countries owning inventories.

Life-cycle analysis considers the broader, global perspective. It has been said that with the bill, Scotland will take a more holistic, global point of view. We see that happening on the issues of air transport and shipping emissions. Although I am not sure how it will work, we have to think globally on those issues.

Dirk Hazell is right to say that there is no nationally or internationally agreed approach. My views are based on every study that I have worked on, reviewed or learned about.

There are four elements to recycling. The first is the collection process, which includes taking materials in vehicles to collection centres. The second is reprocessing and sorting the materials for particular markets. The third is the displacement of aluminium from our recycled aluminium. The fourth is landfill. From the studies, it is clear that the impact of the first two elements—which include people taking their cars to the local civic amenity site—is small in relation to the environmental impact of methane from landfill sites. Unquestionably, there are gains to be made from substituting raw materials with recycled materials. Even if lots of trucks are running around to collect materials, the impact is insignificant when compared with the gains that can be made elsewhere. The difference is huge.

The direction in which we are going, and the measures that are being proposed, are contributing to reducing Scotland’s greenhouse gas emissions.

Elaine Murray: I want to ask about the reliance on voluntary agreements. We are probably achieving the targets that were set for last year, but future targets are pretty ambitious. At the moment, things are being left to local authorities. However, in the same way as issues arise internationally, issues may arise to do with the way in which local authorities count their contributions towards reducing their greenhouse gas emissions. People in local authorities sometimes consider issues in silos and say, “Once we give it to somebody else, it doesn’t really matter.”

Will it be possible to achieve the 80 per cent target without using more of a stick? Landfill fines have been suspended, so there is not much of a stick there at all. Will we need more of a stick in later years so that we can meet the targets?

The Convener: I will ask Susan Love to answer that one.

Susan Love: From a grass-roots business perspective, I cannot see any point in a stick being used if there is nothing that businesses can do. You cannot force businesses to recycle if no recycling facilities are available.

Elaine Murray: I was thinking more about the responsibilities of local authorities in achieving the targets.

Susan Love: I am sure that COSLA will give you a good response to that next week.

Professor Baird: In 2003 and 2004, I worked with most Scottish local authorities to help them to decide how to spend the strategic waste fund that was available at the time. I remember sitting down with many councils and trying to figure out what recycling could be achieved for the available money. At that time, we were planning for 25 or 30 per cent. We are now going through another
exercise with councils, and this time we are thinking about achieving 52 or 54 per cent.

A cultural shift has taken place in the way in which people think about recycling. I stood in Tesco in Wishaw the other day with my daughter, and we saw just how many people there now bring their own bag; and I go to my local civic amenity site, and I see people engaging in the whole idea of recycling. There has been a cultural shift.

If you had asked me four or five years ago where we would be today in terms of recycling, I would have said, “Nowhere.” If you asked me now, I would say that 60 per cent could be delivered. If you asked me again in five years’ time, I would say that perhaps 10 years from now, 70 per cent could be achieved. There is a shift in how we as a people are responding to the issue.

Dirk Hazell: I agree with both the previous speakers. We believe that the landfill tax is proving to be quite a good driver, and we think that by 2011, when the tax reaches £48 a ton, it will begin to be quite an effective driver of business behaviour in particular. The tax works on the polluter-pays principle, and it sends a long-term, clear signal. All our leading members believe that it will drive higher levels of recycling within the business community.

There is a caveat, in that the higher the landfill tax rises, the greater incentive there is for criminals to bypass the regulatory system altogether. There have been quite serious problems with that in Scotland, and we need to ensure that the white van tendency is regulated out of business. We welcome the establishment of specialist procurators fiscal, and we have asked for the Scottish Environment Protection Agency to be given additional resources to capture criminals in the first place.

We support putting up the landfill tax, probably to well above £48. We think that a long-term, clear signal will suffice—particularly with regard to business waste—to change behaviour. However, some of that landfill tax revenue must be used to protect the landfill tax revenue by providing resources for extra procurators fiscal on the environment side so that cases are brought to court, and extra resources for SEPA on the prosecuting side so that it can capture criminals in the first place. Those two things cannot be separated.

Pauline Hinchion: I agree with Elaine Murray—once we get beyond the easy hits on recycling, and we talk about a figure of 80 per cent, significant cultural and societal change is necessary. We all think that it will be enough simply to increase recycling, but it will not: it will require much more than that. One of the great things about the bill is that it includes aviation, which is an area in which we will require big cultural and societal changes.

My concern is that we use the stick all the time. I would like a bit more carrot to be used, particularly on a smaller scale. We need to encourage people and reward them for being citizens and taking proper responsibility for their environment.

John Scott: Some of the submissions have suggested that there may be policy divergence between Scotland and England. What might be the impact of the possible divergence in waste policy in Scotland from the policy in the rest of the United Kingdom?

Susan Love: I suspect that you would get a different answer from us than from the Confederation of British Industry Scotland. Most of our members operate within Scotland, so they would not be subject to two different regimes. The issue arises of putting businesses at a competitive disadvantage if they are required to comply with more onerous regulations—and their associated costs—than are businesses south of the border.

The other issue is that in developing a regime with carrots and sticks, I suspect that the Government south of the border will introduce fiscal incentives to accompany some of the options to reduce waste. We do not have such a package in Scotland, so our approach might have to be slightly different from that south of the border.

John Scott: Coca-Cola, for example, has concerns about there being different policy in that area in different parts of the United Kingdom.

11:45

Dirk Hazell: I agree with Pauline Hinchion’s final comment—we need a cultural change. In particular, we need stronger laws on producer responsibility: there is a generic provision in the new waste framework directive for extended producer responsibility. When you talk about waste policy, you are talking about European Union law and global markets for materials.

Going back a few years, one distinguishing feature of the UK was that waste was cheap, therefore there was no incentive to be criminal. Also, the whole country was run as an island. In effect, devolution has put us into exactly the same position as any other mainland European member state—we face the same issues.

The cost of waste treatment in Scotland should be broadly the same as the cost in England. There should be roughly the same standard of enforcement of regulation—in other words, zero tolerance for environmental crime—in Scotland as in England. If we are to get the best possible value, we will need to put in place broadly
compatible regulations. For example, in terms of requirements on data collection, it makes no sense to require one part of the European Union to collect data in one way and for another part to have to do things differently. It makes even less sense for that to happen where there is a common land boundary, as is the case with the Irish Republic and Northern Ireland, and Scotland and England.

The last thing that we want is for waste to be moved around the country as a result of regulatory arbitrage between England and Scotland. The EU directive contains a broad statement on the proximity principle. As a general rule—certainly, for the initial treatment stage—we should stick to that principle. We need to make life as difficult as possible for the criminals.

Professor Baird: Under English law, provision is made for site waste management plans that cover construction sites. England has chosen to go it alone on that one.

I agree that there are concerns. We have to be mindful of the impact of competition on the bill. I am thinking of deposit and return schemes and how the new measures will sit with existing packaging regulations.

In principle, dealing locally with waste and providing services at the local level should not affect competition south and north of the border or how business functions across borders.

John Scott: It is all very well for us to talk about comparing the situations in England and Wales and in Northern Ireland and southern Ireland, but what about comparing the UK or England and France? Will there be uniformity, or could we be putting retailers at a disadvantage? For example, will international retailers buy into what we are doing in Scotland as opposed to what is being done in France, Italy or wherever?

Professor Baird: We have struggled to get consistent product labelling from retailers at the international level. Challenges lie ahead in that respect. Europe is coming at the issue slightly differently from the way in which Scotland is doing things. Europe has an established mix of energy from waste, recycling and landfill. Given that Scotland has less of an appetite for energy from waste, we have to compensate by focusing on the recycling and recovery side. That said, in fairness to Europe, it is pushing hard on recycling.

There is uniformity in the ways in which waste is dealt with—global markets are involved. That said, a large element of waste will always be dealt with using local solutions. For example, a huge amount of organic material will only ever be dealt with by means of composting, anaerobic digestion and food treatment systems.

Dirk Hazell: There will not be uniformity through the European Union. When the waste framework directive was being negotiated, countries made clear their national interests. For example, Germany has gone for a high-end, value-added process, but there is no realistic prospect that any Government of any party in any part of the United Kingdom will go down that route.

In broad terms, the various parts of the UK are trying to align economic and environmental sustainability—they are trying to get the best environmental results as cost effectively as possible. That is a slightly different approach from that which Germany and some other EU countries have adopted.

Public policy has been right in this country. I disagree slightly with what Professor Baird said on the matter. Given that we started from such a low base, with so much landfill, public policy was right to put the initial emphasis on high levels of recycling, so we did not go straight into energy recovery. The next phase will need to include more energy recovery, so in that respect there will be more uniformity.

The real point is—as it is for any mainland European member state—that when there is devolution of the policy area that we are considering, we must be mindful not to create arbitrage between England and Scotland, because criminals and others will exploit significant regulatory and price variations. As a general rule, it is sensible for the regulators to speak to each other, even though the matter is a sovereign area for Scotland. I think that the regulators are starting to speak to each other more.

The Convener: I thank you all for coming. There will be another evidence session on the bill on 4 February, when the cabinet secretary will join us. Some of the issues that we have discussed will come up then. If any of the four witnesses wants to forward further evidence to us as a consequence of our discussions, please do so, bearing in mind that we need such information quickly, because the next evidence session will take place next Wednesday morning. We would appreciate further written evidence being provided as timeously as possible.
Comparison between Shetland’s glass being processed in Cunningsburgh, Shetland and transported to Alloa, Clackmannanshire for processing.

Introduction:

Below is the detail requested by the Committee in relation to my appearance at the Committee meeting on Wednesday 28th January 2009. In addition information about Enviroglass is also attached.

The information below has been provided by Enviroglass and has notes at the bottom outlining some of the assumptions made.

The Enviroglass example is used to highlight how a very narrow instrumental approach to counting carbon emissions can have an adverse effect on local economic and social issues, especially in smaller communities.

Scenario –

This estimation is based on 500 tonnes glass per annum arriving at SIC yard in Lerwick. The glass is received from kerbside collection, SME collection and bring sites in Shetland. At this point there would be two options; 1 transport by road to Enviroglass plant in Cunningsburgh, 20km away or transport by sea to Aberdeen and then by road to Alloa.

1. Glass processed in Shetland:

Travel road: 20km = 500t x 20km x 48gCO2/t = 0.48 tCO2
Operation of Enviroglass – electricity consumption = 5 tCO2
Total = 5.48 tCO2 per annum for production of glass cullet from glass collected in Lerwick by Enviroglass, Cunningsburgh

2. Glass processed in Alloa:

Travel: Ferry: 350km = 500t x 350k x 11gCO2/t = 1.925 tCO2
Travel Road: 120km = 500t x 120km x 48gCO2/t = 2.88 tCO2

However the carbon impact of the additional transport would be zero, as there is significant spare capacity in shipping of freight from Shetland to Aberdeen. Moreover, the haulage companies delivering to Shetland (such as Northwards) operate from bases in the central belt, so there is also spare capacity to Alloa glass recycling plant. Therefore the additional journey would be the diversion from the A9 to Alloa, which is 14 kms

Travel road: 500t x 12km x 48gCO2/t = 0.288 tCO2
Operation of O-I glass crushing plant = (estimated) 1 tCO2
Total = 1.288 tCO2 per annum for production of 500t glass cullet by O-I, Alloa
3. Carbon impact of not producing glass cullet in Shetland:

If glass cullet were not to be produced in Shetland there would be a need to import 200t of cullet, as 40% of the glass cullet produced at Enviroglass is sold for shotblast at the Sullom Voe oil terminal. Glass would also need to be imported for other uses (landscape gardening and aggregate replacement in pathers), though since Enviroglass exports about as many tonnes of these products as it sells on Shetland the impact could be regarded as neutral. Even if the cullet was sourced from O-I in Alloa, these 200 tonnes of shot blast represent 2.142 tCO2 per annum.

4. Cost of shipping the glass from Shetland

The cost of shipping 500t of uncrushed glass to Aberdeen has been quoted at £50,000 (by a Lerwick Shipping Agent). The cost of shipping 200t glass cullet from Aberdeen to Lerwick would be lower per tonne (because cullet is more dense than bottles), approximately £5,000 per annum.

5. Summary

If narrow view of carbon footprint was taken, it could appear that the transport of glass to Alloa, largely using empty ‘back-fill’ freight, would produce about 60% of the carbon footprint of crushing the glass in Shetland.

However when the consequent requirement to ship glass cullet to Shetland (for use at Sullom Voe as shot blast, which is a major outlet for Enviroglass cullet) is taken into account, the carbon footprint of crushing the glass locally is an order of magnitude smaller.

The economic value of three full time equivalent jobs to the Shetland economy is significant, probably in the region of £100,000.

Finally, whilst the carbon impact of transporting the glass to the mainland and returning with 200t of shot blast is effectively zero, there is a significant financial cost, estimated at £55,000 per annum from Aberdeen alone, excluding the cost of road transport to and from Alloa.

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Notes:

1. Freight by road uses DEFRA data: 48 gCO2/tkm


3. Freight by shipping uses DEFRA data: 11 gCO2/tkm
4. Carbon Footprint of crushing glass in Alloa:
Alloa handles c. 200,000t of glass per annum. The carbon footprint of
crushing the glass in the Alloa plant is therefore significantly smaller, per
tonne of glass crushed, than the Shetland plant. Accurate figures are
awaited, but it is estimated at 2 gCO2/t, therefore for an equivalent 500t, = 1 t
CO2.

Community Recycling Network
30th January 2009
The Federation of Small Businesses in Scotland also gave evidence to the Committee on 28 January. Following that meeting their representative, Susan Love, submitted a copy of a report of survey responses on local authority trade waste practices published by SEPA in 2007 entitled Business Waste Framework. This report was presented to the Committee with SEPA’s permission.
Present:

Roseanna Cunningham (Convener) Rhoda Grant (Committee Substitute)
Liam McArthur Alasdair Morgan
Elaine Murray Peter Peacock
John Scott (Deputy Convener) Bill Wilson

Apologies were received from Karen Gillon.

The meeting opened at 10.00 am.

Climate Change (Scotland) Bill: The Committee took evidence on the Bill at Stage 1 from—

John Ferguson, Unit Manager, Sustainable Energy and Resources, SEPA;

Iain Gulland, Director, WRAP Scotland;

Dr Colin Clark, Head of Waste Management, COSLA;

Richard Lochhead MSP, Cabinet Secretary for Rural Affairs and Environment, Kim Fellows, Deputy Director for Waste and Pollution Reduction, Louise Miller, Solicitor, Food and Environment Division, Kevin Philpott, Waste Regulator Senior Policy Officer, and Simon Stockwell, Waste Strategy Team Leader, Scottish Government.

Climate Change (Scotland) Bill (in private): The Committee reviewed the evidence heard earlier in the meeting.
SUBMISSION FROM SEPA

Proposal 1: Duties on Public Bodies and Businesses to Provide Recycling Facilities.

Question 1: Do you consider that legislation should be made in this area?

SEPA does not consider that a Voluntary Code of Practice on Recycling outwith the home would on its own deliver a zero waste society. We therefore believe that legislation would be beneficial in this area. Significant quantities of recyclable materials exist in waste streams outside the home within both public spaces and work facilities that could usefully be recovered.

Question 2 If so, what form should that legislation take?

Legislation could be based on a revised form of a number of existing regulatory systems such as:

- Producer responsibility
- Duty of Care
- Building regulations
- Event licensing process
- The Planning System

Town and Country Planning legislation could be a useful vehicle to deliver appropriate requirements. The Town and Country Planning General Development Procedure Order could potentially be amended to require all qualifying new development to provide details of recycling and composting provision when submitting a planning application. The planning application would not therefore be registered as “valid” without this information, in a similar manner to requesting details of drainage and road access. Amending planning legislation would ensure developers took this requirement on board at the earliest design stage where the facilities and any land area required can be properly considered. Failure to consider this at the planning application stage may result in applications subsequently being submitted for Building Warrant where the layout would have to be changed to provide recycling facilities, materially affecting the entire development. This would then, in some cases, result in the developer having to submit a revised planning application so delaying the development process. Separate legislation would be required to enforce this requirement retrospectively.

Legislation should address a range of specific issues including:
- the type of waste, for example, cans, glass, paper, batteries, household hazardous wastes and plastics to be recycled
- facilities should be appropriate to the location and types of waste likely to arise
- powers should enable material collections systems and capacities to be specified based on the type of location in question
The following issues must also be addressed:
• assess and resolve the availability of UK reprocessors and end markets.
• establish the dependence on overseas markets and assess any long term risks in dependence on such markets
• address how geographical issues will be considered such as remoteness from markets, collection systems and the related cost implications for businesses and public sector bodies in remote or rural areas?
• demonstrate that reuse has been explored (especially for furniture and WEFE) before materials are recycled

The legislation should apply to all public sector bodies and commercial businesses (especially retail, fast food, travel and entertainment centres) which attract large numbers of members of the public; or in buildings with more than 50 employees, or part of a national chain or franchise that are frequented by the public.

Other Issues to be considered:
• Resources for enforcement of legislation.
• How to assist developers with any costs with “retrofitting” existing sites/developments, for example, through local business rate relief or some similar mechanism.
• Importance of guidance being prepared on what type of provision is to be made for different scales/types/thresholds of development.
• That materials recovered in public spaces would count towards local authority recycling targets irrespective of who owns the collection system or undertakes the collection. Materials collected from businesses not designated as public spaces would be considered as commercial and industrial waste.

Proposal 2: Packaging.

To encourage waste prevention by giving powers to the Scottish Government to make regulations on packaging which would set statutory targets on retailers for packaging reductions.

Question 1: Do you consider that legislation should be made in this area?

SEPA considers it important that the specific application of any such measures are clear in their intent. SEPA does not support the introduction of new measures on recovery (one way of reducing packaging waste) due to the risk of introducing inconsistencies or tensions in the existing UK regulatory systems for packaging. These may not be perfect but they are beginning to work. The cross UK nature of retailing would make this complex and probably highly unpopular.

There is adequate data from statutory returns from compliance schemes at a UK level to evaluate progress in packaging recovery, re-use and dematerialisation. However this is difficult to interpret in a purely Scottish context.
SEPA would suggest the following approach:
• an increased obligation on wholesalers and retailers acting in Scotland to provide improved data on the packaging material entering the consumer market in Scotland — this would improve our data as this tends to be produced at a UK company level and is therefore hard to partition into Scottish data.
• improved measures to penalise excess packaging — probably via a revised Essential Requirements Act in Scotland. This has proved to be an ineffective regulatory system and if designed appropriately would act to place pressure on packaging manufacturers, packer fillers and retailers to further reduce packaging.
• powers to enforce take back of specific packaging materials. This has proved highly effective in some Scandic countries for aluminium packaging for example. If we propose this we should seek for them to be general ‘take back’ and ‘deposit return’ powers as it would be useful in other non-packaging areas such as batteries and some HHW materials (see Proposal 5).
• consideration could also be made for retailers above a certain size to have deposit facilities either in or within the vicinity of their premises to enable packaging materials to be deposited for recycling. This is to some extent linked to the issues raised in Proposal 1.

Proposal 3: Specifying Recyclate.

Question 1: Do you consider that legislation should be made in this area?

SEPA would support legislation in this area to require public bodies to procure goods with a minimum specified recycled content.

Public bodies have significant procurement powers to influence the supply of products with higher recycled content. More effort needs to be made in closing the recycling loop, rather than just focussing on simply increasing recycling targets.

SEPA would have concerns as the practicability and resourcing implications of imposing such a requirement on businesses. It would be more practical to implement this through the manufacturers selling into the UK/EU market via existing producer responsibility powers. In SEPA’s view this would need to be achieved at an EU level. However positive promotion of the benefits of green procurement to business should be ongoing and with increased commitment.

Consideration should be given to imposing a requirement on any private bodies that supply goods or services to the public sector. This supply chain pressure would be one practical way to influence businesses directly.

There is a need to continue support towards recyclate quality via ISO or PAS or British Standards to ensure that the use of recyclate does not diminish quality standards. There is similarly a need to undertake significant awareness
raising to overcome current perceptions that recycled products are inferior quality.

**Question 2: If so, what form should that legislation take?**

- The legislation should lay down the nature of the materials and the contracts to which the duty would apply (including exemptions and whether the requirements would not apply to contracts below a certain value) with a particular focus on paper and paper products (towels and tissue); container-packaging glass; a wide range of plastic consumable goods; building works; grounds and road maintenance contracts. A similar obligation should apply when refurbishing offices and buildings. There is potential for enactment through Building Regulations for new build projects. Refurbishment contracts should also demonstrate that reuse of existing furniture and WEEE has been explored before new products are bought.

- The legislation should be developed in partnerships with experts in sustainable procurement rather than solely from a waste angle. The legislation would need to be based on a clear life cycle analysis of the various product areas to be addressed. Price comparisons would need to be made to quantify the cost to the public sector. Similarly procurement methods should be investigated which would act to reduce the costs of such a requirement through high volume purchasing contracts.

Key elements of any such legislation would include:
1. Type/definition of organisations to be covered.
2. Key product areas to be targeted.
3. Product standards specifying the minimum recycled content.
4. Monitoring and record keeping requirements for verification.
5. Any necessary enforcement powers.

SEPA recommends that consideration should be given to the implementation of such a requirement via a Scottish wide Agency based on some existing body with a national procurement function.

**Proposal 4: Waste Prevention Plans.**

*The responses to the following questions are taken as a whole below:
Question 1: Do you consider that legislation should be made in this area?*

*Question 3: what public bodies and businesses should be covered?*

*Question 2 : If so, what form should that legislation take?*

SEPA considers that legislation is required in this area but largely only for public bodies and larger companies. Public bodies are readily controlled within the wider public estate and as such should be required to demonstrate best practice and best value by driving down the costs of waste management within the public estate.
In general SEPA does not agree that such a requirement should be placed on smaller business for the following reasons:

• The administration of such a scheme would be burdensome on both business and the administering authority

• The operation of the market with disposal costs rising sharply should be trusted to change behaviour with the support of well targeted resource efficiency programmes. In tandem to this carbon and emission trading schemes will act to focus attention on resource efficiency.

SEPA however sees two specific areas where we would support the implementation of waste prevention plans on business:

• We would support an extension of the powers under Pollution Prevention & Control (Scotland) Regulations 2000 to address waste prevention in currently regulated industries.

• In addition to the above, consideration could be given to extending this duty to other large companies in Scotland (delineated by either turnover or employee number) with these powers integrated with those set out above in proposal 3 on specifying recyclate. This may then filter down the supply chain as these companies seek to improve supplier performance. This avoids the implementation of such a duty on SMEs which due to their number would require disproportionate efforts to both monitor and administer and would probably raise questions on the benefits of such regulation in an era of less and better regulation.

• We would support the mandatory implementation of Site Waste Management Plans (SWMP5) with the enforcing body identified. As a national organisation SEPA could be a suitable body to fulfil this enforcement role, helping to ensure the creation of a level playing field. In addition, SEPA already regulates or has an established relationship with many of these industries. SWMP development and enforcement should also be linked to Health and Safety legislation as they also regulate construction sites.

**Site Waste Management Plans:**

• Site Waste Management Plans should mirror what is happening in England where any new development (costing more than £300,000) to submit a Site Waste Management Plan at Planning Stage.

• Implementation of the SWMP legislation in England should be fully assessed in order to ensure that any legislation in Scotland is as effective as possible

**Proposal 5: Deposit and Return.**

*Question 1: Do you consider that legislation should be made in this area?*
SEPA considers that legislation should be made in this area. Such mechanisms are powerful consumer behavioural change drivers. More research is however required into the barriers which prevent businesses from introducing this type of system so that this can be addressed in the future.

**Question 2: If so, what form should that legislation take?**

- SEPA would suggest the development of general powers that would place a take back responsibility on retailers of specific products or powers to implement a deposit refund scheme on retailers of specific products.

**Question 3: Your views on the practicalities of such schemes in Scotland?**

- A deposit system would work but for recycling not return for re-use. Re-use containers tend to have double transport miles (to the retailer and back), increased use of raw materials (need to be more robust) so more lorries to transport (because they are heavier) and increased use of detergents and water (need to be cleaned).
- Full life cycle analysis would have to be undertaken to ensure that the measures were contributing to improving the environment impact of products. We should seek to understand why a once strong deposit and return system on bottles died out. What were the business reasons for these measures not continuing?
- The scheme would have its major applications in non-packaging areas (perhaps with the exception of aluminium containers due to the very high energy savings). Products such as batteries, small electrical items and some HHW products would in our view benefit from deposit refund schemes.
- We believe the public would respond well to such schemes and this would greatly assist recovery in these areas some of which produce problematic wastes.

Careful consideration would need to be given to the structure of any deposit refund system. This requires a central collection agency to hold deposit funds and allocate funds based on returned products. This could prove costly to administer. However a number of working models exist that could form the basis of an options assessment.

**Proposal 6: Mandatory Waste Data Returns from Business.**

**Question 1: Do you consider that legislation should be made in this area?**

SEPA strongly supports a statutory requirement on waste producers to provide data on waste arisings. Increasingly with the complexity of global resource pressures a far clearer perspective on what materials are flowing through the Scottish economy which then arise as waste materials is needed.

An improved understanding of this would assist in identifying a more rapid response to specific resource pressures. Such a measure would also act to focus business on its resource use and provide opportunities for cost savings.

The following applies:
• The principal area where waste data is still lacking is for the waste produced by business, as there is currently no way to collect this directly. A limited amount of information on business waste arisings is available through Special Waste Consignment notes and through the returns for the Scottish Pollutant Release Inventory (SPRI).

• The information on business waste arisings is needed to:
  — aid national policy development;
  — aid in the assessment of capacity needs for the tertiary treatment of residual wastes and in improving technology choices for such treatment;
  — support policy development in organisations such as local authorities, enterprise agencies and others;
  — monitor change and policy impact;
  — help the development of the new National Waste Plan;
  — provide data for planning applications and investment in waste infrastructure;
  — identify potential benefits for businesses
  — and meet internal and external reporting requirements including the Waste Statistics Regulations.

• Currently SEPA does not have sufficient, detailed data to adequately satisfy a number of these. There is a need for information on the type of waste, the quantity of waste, the geographical origin of the waste and the Standard Industrial Classification (SIC) code of the business producing the waste.

• SEPA has attempted to fill this lack of information in two ways; first, directly, by carrying out national business waste surveys and second, indirectly, by using information gathered by the quarterly licensed/permitted waste management site returns. Both have their drawbacks.

  (1) The principal issue with the survey is that it does not provide sufficiently accurate data for SEPA’s needs and those of its stakeholders. For example the 2006 survey showed that the total business waste produced in Scotland in 2006 was estimated to be 7.64 million tonnes with a 95% confidence interval of 2.60 to 13.42 million tonnes. This was mainly because of the poor response from businesses to the survey. A portion of Scottish businesses, about 29,800, were surveyed and there was a usable response rate of 10.8% (3,232). This represented only 2.3% of all businesses in Scotland. It was clear from the survey that some businesses who replied had little knowledge of their waste. The cost of a survey would be about £80,000 at present values.

  (2) The information collected by the quarterly licensed/permitted site returns is good but only deals with the waste managed. It does not collect any information on the producer of the waste and only limited information on its geographical origin. Because of possible double counting issues is also not possible to get completely accurate figures for the waste produced.

• Whilst it would be unfair to place too much pf a burden on business it does not appear unreasonable to require businesses, particularly larger ones, to have a knowledge of their waste and to report this to SEPA. . This would
complement the good work already carried out by Scottish local authorities in increasing waste recycled and reducing waste to landfill. Businesses are part of Scottish society and should be expected to contribute towards a zero waste Scotland. They contribute over two thirds of the annual waste arisings in Scotland.

• There are a number of ways that the reporting burden could be reduced. For example:
  — There could be a de minimus limit under which businesses would not be required to report: of the 148,000 businesses in Scotland in 2006 only 6,680 had 50 or more employees and over 82,500 had less than five. Another approach would be to set a limit based on annual turnover in a similar way to the packaging waste obligations. The limit could be set to balance the need for information with the need to keep the burden on industry to a minimum.
  — SEPA is currently developing an online data collection system for statutory returns, through the Operator Data Returns project. Businesses could potentially use this system for reporting data to SEPA, eliminating the need to create a new data collection system.
  — An alternative approach for collecting the information could be to carry out compulsory business waste surveys on a third of all Scottish businesses annually. This would provide sufficient information for SEPA’s needs.
  — A further alternative would be to undertake a root and branch review of the Duty of Care system and implement it effectively.

• SEPA does not consider such a duty to be a burden to business. Businesses themselves are likely to benefit in a number of ways from this statutory reporting including:
  — identification of cost reduction opportunities through waste minimisation and increased recycling;
  — benchmarking their performance against others in their sector;
  — an enhanced image and reputation by being able to prove good environmental practice;
  — and improved dialogue with the Government and SEPA;
  — more aware of potential future resource pressures (and risks) arising from a rapidly globalising economy;
  — access to education materials/initiatives associated with this obligation.

SEPA believes that placing a statutory duty on businesses to report on the waste they produce would provide the information needed by SEPA and its stakeholders, and more importantly help progress towards a zero waste Scotland, ultimately improve the environment and make Scottish business more profitable and robust in terms of future resource pressures.

• SEPA recognises that the introduction of a new system comes with challenges. There will be a need for a promotional campaign aimed at publicising the benefits to business. Guidance (written and verbal) will need to be available for businesses and ongoing support will need to be provided. There may be initial problems with the quality of returns and with non-returns. However, from the SEPA Waste Data team’s experiences in introducing and
operating the quarterly licensed/permit ted waste management site returns these can be overcome relatively quickly by supporting the businesses.

• DEFRA is currently consulting on a proposal to add the requirement to report the SIC code of the waste producer to the waste transfer note. If this requirement was introduced the SIC code could be requested by a licensed/permit ted site when waste is transferred for recovery or disposal. This would be reported in the returns made by licensed waste management facilities to the Environment Agency.

• This type of system could work in Scotland but would increase substantially the workload on both SEPA and the waste management industry, Its main strength is that it builds on an established system but there may be some reluctance from the waste management industry. SEPA’s Waste Data team believes that this methodology could provide the information required but that it removes the need for businesses to have knowledge of and be responsible for the waste they produce.

Proposal 7: Other Measures to encourage Waste Prevention, including action on single-use carrier bags.

Are there any other areas, not covered by this consultation, where legislation could be made to increase recycling and promote waste prevention?

SEPA considers that consideration should be given to the following additional areas for potential regulatory powers:

A local tax or levy on disposable and single use products should be considered when there are alternatives e.g. disposable picnic ware, razors, nappies, and cigarette lighters. This could include single use plastic or paper bags. However in this latter case SEPA believes we should see how the voluntary code of conduct agreed with national retailers is working prior to implementing any such action on carrier bags;

• Reduced VAT on products that have a high content of recyclate;
• Consideration should be given to encourage products to have a built in 5 year warranty to encourage repair rather than planned obsolescence. We again note that this would not be a devolved matter with significant implications at an EU level;
• Repair services should be VAT free;
• The implementation of landfill bans. SEPA however notes this can be addressed with existing powers;

SEPA considers that resource management is ultimately about materials management. As such powers should be developed that could be used to require specified materials to be managed in ways that represent the Best Practicable Environmental Option (including carbon management benefits).
General Comments

Whatever legislation is developed there needs to be a communication plan and guidance linked to it. The more engagement and guidance provided the better the legislation will be implemented.

SEPA is disappointed to see that the proposal for direct variable charging for waste has been withdrawn from proposals. Householders should equally apply to the Polluter Pays principle and be more aware of the impact that their wasteful activities have. It seems to be more of political decision to pull this option, which is concerning when some difficult and often unpopular political decisions need to be made if we are to seriously move Scotland towards a Zero Waste society. It is difficult in SEPA’s view to justify the challenging recycling targets placed on municipal authorities without the requisite powers to change public behaviour.

The resourcing implications of enforcing legislation also need to be given careful consideration and, where possible, SEPA would support the review of similar legislation with the other UK administrations that could result in consistency of UK legislation and greater environmental benefits.

SEPA
3 October 2008
Climate Change (Scotland) Bill: Stage 1

10:01

The Convener: Item 2 is evidence on waste reduction and recycling, which is included in the Climate Change (Scotland) Bill. We are the secondary committee on the bill and we are scrutinising the provisions on waste, forestry and muirburn. Today’s evidence session is the second and final session on the waste provisions, which are contained in sections 52 to 61 of the bill.

I welcome the first panel of witnesses. We have John Ferguson, unit manager of sustainable energy and resources at the Scottish Environment Protection Agency; Iain Gulland, director of WRAP Scotland; and Dr Colin Clark, head of waste management at Highland Council.

Dr Colin Clark (Convention of Scottish Local Authorities): I am sorry to interrupt, convener, but I am here as chairman of the Convention of Scottish Local Authorities waste network, not as the head of waste management for Highland Council.

The Convener: Okay. That is duly noted.

SEPA’s submission to the Scottish Government’s consultation on waste provisions has been circulated to members as paper RAE/S3/09/4/6. We are not taking opening statements; we will go straight to questions. I think I am right in saying that Alasdair Morgan will open the questioning.

Alasdair Morgan (South of Scotland) (SNP): Dr Clark, does what you just said change anything that you were going to say today?

Dr Clark: No.

Alasdair Morgan: I have a question for WRAP Scotland. SEPA and Highland Council are probably more familiar to members. I notice from the website that WRAP is fully funded by Government. Mr Gulland, will you explain briefly what WRAP does and what its relationship with Government is?

Iain Gulland (WRAP Scotland): WRAP is a United Kingdom organisation that is funded by the four Governments—the UK Government, the Scottish Government, the Welsh Assembly Government and the Government of Northern Ireland. Our role is primarily as a delivery partner. We have now established our Scottish office, which I head up, to deliver a number of programmes to increase the amount of material that is recycled or reused—it is prevented from becoming waste. We work with a range of stakeholders, primarily households or businesses.
We look at opportunities for businesses to reduce the amount of waste that they produce.

We carry out market development exercises to look at what we can do here in Scotland with the material that is coming out of the waste stream, so that we turn it back into products that can be used or put it back into the supply chain. That might involve glass or plastics going back into producing glass and plastic bottles. We work with retailers throughout the UK to help them to reduce their impact in terms of packaging waste, and to minimise food waste in their supply chains and in the food that householders take home.

We tend to work right round what we call the resource efficiency loop. Waste prevention is our principle objective, working with businesses, consumers and the construction industry. We then look at where waste is produced, and the infrastructure for collection and recycling. We are very much involved in looking at the processing of waste materials for onward market development once they have been collected. Finally, we focus on market development, and primarily on considering the opportunities. WRAP Scotland is trying to address those opportunities in Scotland to make use of the materials and turn them into an economic benefit for our country.

Alasdair Morgan: Are any targets set for you, either internally or by Government?

Iain Gulland: We have targets. WRAP Scotland produced a business plan last year in partnership with the Scottish Government. Our target over the next three years—this year and the following two years—is to divert 600,000 tonnes of waste from landfill, which is equivalent to about 400,000 tonnes of carbon savings. That will include an economic benefit—there is potential for £18 million of savings for business if we divert those tonnes. With regard to market development opportunities, our target in economic terms is £20 million-worth of increased turnover.

Alasdair Morgan: Do all three witnesses think that zero waste, as defined—or as described—by the Scottish Government, is achievable?

Dr Clark: Zero waste is, in my view, an interpretation of the European waste hierarchy—no more and no less. The only difference between the waste hierarchy and zero waste happens to be the targets that the Scottish Government has set in relation to the zero-waste concept.

You asked whether zero waste is achievable. I think that pretty much anything is achievable if one tries hard enough. On the continent, Austria is probably the best performing nation at present—its percentage figures for recycling are in the mid-60s, and it has lots of energy from waste to deliver heat and power.

We are looking at a 17-year timeframe to reach a target of 70 per cent. It is not unachievable, although it will be very difficult to achieve, if we consider the maths. I do not necessarily agree with the current interpretation of the 70, 25 and 5 per cent targets, but COSLA hopes to discuss that with the Scottish Government in due course.

Alasdair Morgan: Is that the 25 per cent energy-from-waste target?

Dr Clark: Yes.

Iain Gulland: I think that it is achievable. We are much more aware now of what is achievable in a technological sense. When I got involved in waste management more than 15 years ago, there was an arbitrary idea that we could recycle only 50 per cent within the waste stream. There is growing evidence that more than 90 per cent of what is in the waste stream can be recycled, so we need to focus on the remaining smaller percentage. Throughout the world, it is evident that other nations and provinces are working towards zero waste, as they know that it is now technically possible to achieve that.

Increasing recycling in the European states is, as Colin Clark said, a long-term vision and a journey, but we can now view it as something that can be achieved. There will be many years of issues for us to overcome, but it is technically possible to get to zero waste.

John Ferguson (Scottish Environment Protection Agency): Zero waste is a difficult concept to pin down and define, and there is a lot of variability throughout the world in how people interpret it. It is a good aspirational environment to work in, with regard to trying to derive value from all materials. One could say that waste consists simply of certain materials in the wrong place at the wrong time, with a different economic perspective taken on their value.

Waste management is really about materials management, and about recognising that materials flow through the economy for a range of reasons. Waste is simply a different kind of material in terms of its economic utility. We have to focus on waste more as its component materials, rather than as the complex mix of materials that we tend to deal with in relation to mixed municipal waste or mixed commercial and industrial waste. We can derive value from that through the recovery of materials or the production of energy—those are the two major products. In trying to derive that value, we must understand how the system operates and how we can make it more efficient.

Zero waste is a good aspiration and it helps us to focus on deriving value from all materials, which is important in an increasingly globalised economy, notwithstanding the current economic
difficulties. There is increasing resource pressure—our economy needs resources in order to manufacture—and we must be clear about the resources that are critical to the Scottish economy. Therefore, a strong focus on material value recovery under the auspices of a zero-waste aspiration is a good thing.

Alasdair Morgan: Dr Clark said that a potential 25 per cent limit on the proportion of energy that can be produced from waste might make a zero-waste economy more difficult to attain. Do you agree?

John Ferguson: Sorry, could you repeat that?

Alasdair Morgan: Dr Clark said that the Government's idea of a cap of 25 per cent on the proportion of energy that can be produced from waste would make zero waste—however we define that idea—much more difficult to attain. Do you think that that is the case?

John Ferguson: No, I do not, personally. The cap is quite a smart instrument that recognises public concern about incineration. There is an argument that, in burning mixed waste, we waste raw materials that have no energy value but which have an economic utility as materials. The cap helps us to focus on the need to push prevention, to drive waste out of systems and to recycle more. Pragmatically, it helps us to recognise that, if we have a need for energy recovery, we should focus that energy recovery on appropriate types of waste—those that have an energy value—to displace fossil fuel in the system. I think that the cap is quite a good idea.

Iain Gulland: There is obviously an argument about the compatibility of producing energy from waste and the achievement of zero waste. If we do not have any waste, we cannot get any energy from it. As to how it fits into the strategy, we are on a journey to eradicate waste in Scotland and, as John Ferguson says, it is about minimising the use of resources at source. Does the production of energy from waste have a part to play in that? I am not sure.

The Convener: Perhaps Dr Clark would like to elaborate on his concerns in respect of the 25 per cent cap.

Dr Clark: I do not have too many concerns, but I think that the cap is too prescriptive. I am not advocating that Scotland should move from landfill to incineration. However, Highland Council is running a trial on the Black Isle whereby we have achieved 70 per cent diversion from the kerbside in a very small and specialised trial. I want to use the waste hierarchy to achieve zero waste, but I recognise a pragmatic argument for producing energy from waste.

The situation may be different in different parts of the country, and stating that 25 per cent is the absolute maximum proportion of energy that we should produce from waste is a bit too dogmatic for my liking. Increasing that figure a little bit when it is economically and environmentally appropriate would give Scotland a degree of leeway in meeting its targets and would not diminish the aspiration to achieve a recycling rate of 70 per cent. When energy is produced from waste, material from the front end—metals and so on—is diverted back into the recycling bag and the ash at the back end can be used for road construction and so on. Essentially, that material is recycled in a rounded, integrated process. Saying that only 25 per cent of energy should be produced from waste is a bit too dogmatic for Scotland.

The Convener: It is not the principle of the cap that you object to; it is simply where it is placed.

Dr Clark: It is the principle of the cap.

The Convener: So, you do not want any cap.

Dr Clark: I can see the value in having a cap, but a range would be more appropriate.

10:15

John Scott (Ayr) (Con): May I help you? Might it be because the cap has been set arbitrarily and it is the flexibility in and around that figure—

The Convener: Before we jump to the conclusion that the cap is arbitrary, it would be interesting to discover the basis on which it was set.

Dr Clark: If the 25 per cent cap were set arbitrarily, I would be concerned.

Bill Wilson (West of Scotland) (SNP): It has been suggested that a large level of incineration tends to take materials away from other recycling uses, thereby reducing the potential for recycling. You are not concerned about that, which I suspect is related to the cap.

Dr Clark: The evidence from Europe contradicts that, especially those nations that have been getting to grips with recycling over the past two and a half decades. The problem in Scotland, and in the UK, is that we are so far behind our major competitors and colleagues in Europe. They have been through what we are going through now and they have achieved 50 to 60 per cent recycling targets. They also have an integrated network of energy-from-waste plants that provide heat and electricity to their communities on an integrated basis. I am concerned that I am starting to be labelled as the energy-from-waste man—I do not want that. I am devoted to recycling, but more important, to waste prevention. EFW in the UK has
had a bad press for historical reasons that are fairly easy to explain.

**Rhoda Grant (Highlands and Islands) (Lab):** What are your views on the capacity of the current waste infrastructure?

**Dr Clark:** We have not got much of a waste infrastructure, quite frankly. Up until 2003-04, which was the point at which the strategic waste fund took off, we were married to landfill. We are slowly making the move away from landfill, but as I said previously, it has taken a very long time to do that and it will continue to take many years to get an integrated infrastructure that can deliver what we need. We are a long way from that.

We are short of pretty much every tool that we need to divert waste from landfill. One of the problems with the recylcate market in Scotland, as far as COSLA is concerned, is that there are few materials recycling facilities here and very few in the hands of local authorities. All the recylcate in Scotland is funnelled through very few MRFs.

**The Convener:** What are MRFs?

**Dr Clark:** Materials recycling facilities—people who have to use them to divert waste can be held to ransom. We have a considerable way to go. We need EFW, in-vessel composters, materials recycling facilities and possibly anaerobic digesters. We need the full panoply, but we do not have it at the moment.

**John Ferguson:** The early focus on recycling from 2003 was a good thing, because it allowed us to make major progress rather than focus on the post-recycling residual treatment systems that we needed.

I would have preferred it if we had started to make progress on building infrastructure perhaps two years ago; we are a little behind the game now. However, the Scottish Government is strongly focused on the need for the new infrastructure that Colin Clark identified. The rate at which the infrastructure will have to be developed is a challenge to the planning system.

One of the top 10 significant risks of the past 10 years has been the planning system’s ability to deliver land use decisions for infrastructure development. However, there is a significant opportunity for investment in building capital infrastructure during the economic downturn. We need that infrastructure for the long term and it is probably coming at a good time to help to drive economic stimulation. That has been the risk, but if we can get going and make investments in the right way, we have an opportunity. Colin Clark is absolutely right that we need that infrastructure urgently.

**Iain Gulland:** We at WRAP are working to develop the waste infrastructure in Scotland. The focus of our business plan is to support the development of local authority and private sector collection infrastructures for householders and small and medium-sized enterprises. We work alongside businesses that are interested in developing recycling collection services.

We are engaged in a number of capital grant projects in partnership with the Government, which is putting up money to invest in infrastructure, particularly for anaerobic digestion and in-vessel composting to meet the needs of the requirement to take food waste out of the waste stream. Recently, the cabinet secretary made an announcement about a £5 million investment in plastics processing in Scotland. A lot is on the table to be taken forward to meet the needs of the zero-waste strategy. It is happening; there is activity on the ground.

Private investment is needed, as well as public sector and community sector investment. We are involved in a partnership project with the Community Recycling Network for Scotland to deliver funding for infrastructure that is being run by the community sector. A lot is happening with regard to meeting the needs of the strategy, but it takes time to get some of the kit on the ground. There are planning and investment issues when we look for private sector investment to match the funding that the Government has made available. We face challenges, but we are actively involved in the delivery of the infrastructure.

**Rhoda Grant:** Last week we heard evidence from small businesses that are concerned about their place in the process. Domestic waste is recycled by councils, and large companies have the ability to do their own recycling, but no one has considered how the waste could be collected from small businesses.

**Iain Gulland:** A couple of years ago, our organisation ran a programme to develop small business recycling facilities. We ran a number of pilots and invested in collection infrastructure across the UK, including some facilities in Scotland. The aim was to show that it could be done, and to learn best practice so that we could create a toolkit or best practice guide that we could make available to other businesses.

The problem is that other businesses or local authorities need to come forward to say that they want to run such services and to look at the economics of doing so. We continue to work with businesses, but we do not have a specific programme for that at the moment. We ran our programme for a couple of years, and we might consider running it again. I am well aware that the issue has never been addressed properly, and that there are geographical problems with businesses that are located in remote areas in the Highlands, for example, and which cannot access
recycling services. They rely on the local authority
to do recycling—Colin Clark can answer that
question.

The Convener: I will decide who answers
questions.

Iain Gulland: I am sorry, convener.

We continue to work with businesses that are
interested in developing collection infrastructure
for SMEs. We provide them with as much support
as we can, and with little bits of funding where
required, but it is about finding the entrepreneurs
out there who want to progress such services.

The Convener: We need to make progress.

Elaine Murray (Dumfries) (Lab): Last week, we
discussed the revised European waste framework,
which introduces a hierarchy. Total prevention
of waste is the most desirable; disposal is the least
desirable.

The bill is written in terms of recycling, including
reuse and recovery. The minister has argued that
that is really for convenience of drafting, and it will
not prevent the introduction of the requirements of
the European Union directive. On the other hand,
Dirk Hazell from the Scottish Environmental
Services Association expressed concern that that
was a way of dodging the difficult discussions
around energy recovery, and that, within the terms
of the bill, burning paper and plastics that could
have another use would be rated the same as, for
example, anaerobic digestion, which means
removing methane produced by organic materials
from the atmosphere. Will the different definitions
have an impact? Are you concerned that the bill
does not seem to recognise those differences?

John Ferguson: The term “recycling” is used as
a de facto replacement for the hierarchy, so I do
not think that the bill implies that the hierarchy is
not important. The bill also has a strong focus on
waste prevention and waste minimisation powers.

I am not quite sure where Dirk Hazell’s concerns
came from. Perhaps he was more concerned that
there was not a stronger focus on the role of
energy from waste, given that the Environmental
Services Association that he represents has a
large number of members that are interested in
incineration, particularly in England and Wales. I
think that the perspective that he brought to that
discussion did not accurately reflect the true
meaning of the Scottish bill.

Iain Gulland: To be honest, it stands out that
the bill includes energy recovery under the
auspices of recycling, whereas the waste
framework directive makes a clear delineation.
Arguably, it would be better to clarify that so that
the two pieces of legislation are aligned. However,
I thought the opposite from Dirk Hazell, who
seemed to me to be almost arguing against

himself. If his industry wants to present energy
recovery as part of the solution to climate change,
he probably should not have highlighted that
issue. That is my personal view, not the view of
WRAP. However, I can certainly see his point. I
am not a legal expert on how bills and directives
are written, but I can see that some clarity on the
definitions would be useful.

Dr Clark: If the parliamentary draftsmen and the
Parliament’s lawyers are happy and content that
the provisions cannot be misconstrued in a legal
sense, I think that I am happy with the wording. I
used to deal with regulation and so forth many
years ago, so I tend to like acts and regulations to
state explicitly what they mean in some depth so
that there is clarity for everyone. The more that
interpretation is permitted, the more likely it is that
there will be far more interpretation than people
might have wanted.

The Convener: I advise members that I do not
want to spend the next 15 minutes talking about
the drafting of bits and pieces of language.

Elaine Murray: The point that I want to follow up
with Dr Clark is that the previous emphasis on the
prevention of landfill, which was stimulated by the
landfill tax and so on, resulted in local authorities
having a variety of different approaches across
Scotland. Some local authorities went for recycling
and reuse, whereas others went for energy
recovery. In terms of the hierarchy, will those local
authorities that chose a different path now face a
problem, given that under the hierarchy some
methods are more desirable than others? Might
that present a difficulty for local authorities?

Dr Clark: Individual authorities that have
invested in a particular technology to a larger
extent than the targets would now suggest is wise
might have some problems.

However, on waste prevention, local authorities
are pretty limited in what they can actually
achieve. The tools that local authorities can apply
to prevent householders and communities from
generating waste in the first place are pretty
limited, to be perfectly honest, despite the panoply
of tools—some of which are included in the bill—
that are available. If the crude question is whether
local authorities can significantly prevent waste
from arising by means other than the promotion of
waste awareness, the answer is that we are pretty
limited in what we can do.

On reuse, we can do something. However, in
our operations in Highland—to use that just as an
example—the proportion of waste that we can
refurbish, repair and reuse is actually quite small
in comparison with the whole.
10:30

**Peter Peacock (Highlands and Islands) (Lab):**
Sections 52 to 59 provide for an extensive suite of eight key powers that ministers could use to take future action in secondary legislation. At last week’s meeting, one witness said that they were entirely relaxed about that approach, but others expressed concerns about it, one of which was that it would be better to specify the powers in question in the bill than it would be to wait for secondary legislation. Another view was that the future use of the truncated procedure of a statutory instrument was not the right way to enact such significant powers, and that it would be far better to deal with them in primary legislation. Do you have views about the advantages or disadvantages of using secondary legislation? The bill will give ministers a suite of powers to take action in the future.

**Iain Gulland:** I am not an expert on that but, at the moment, we are quite comfortable with the proposed approach. We are talking about enabling legislation. As part of its zero-waste policy, the Scottish Government has, as we have seen, set out some extremely ambitious targets that will be challenging to meet. The bill is challenging, too, and sets out a clear direction for Scotland. The enabling provisions do the same. They set out the course that we are on and the issues that are being thought about, and enable the Government to reserve the right to come back with more specific legislation.

It is clear that some issues are still being worked on, so it is not a case of saying, “Let’s sit back and see what happens.” My organisation is working on a range of areas to do with the bill. We are working with retailers, businesses and the packaging industry, and we are looking at recycling on the go. There is a lot going on. There is a sense that we have turned a corner on recycling on the go. There is a lot going on. There is a sense that we have turned a corner on resources, not just in Scotland, but on a global scale.

Following the Stern report, businesses and individuals are waking up and looking to see what they can do. They want to come together. Our work with the retailers on the Courtauld commitment has shown that people from quite a diverse sector can get round the table, examine the challenges that their sector faces and start to work out some of their objectives and the journey that they need to go on as an industry. Enabling legislation helps that along. It is almost a way of nudging people in the right direction and keeping them on track. It lets them know that the Government is thinking about such issues, is keen to take action and wants to work with people, but that, ultimately, it can introduce specific secondary legislation if it does not think that progress is being made quickly enough.

**John Ferguson:** In an ideal world, a Scottish waste management bill would have been a better vehicle, but we do not live in an ideal world. There is significant pressure on parliamentary timetables. The pragmatic decision was taken to use the Climate Change (Scotland) Bill as a carrier bill. It does something extremely useful in that it links waste to climate change, the connection between which is strong. In addition, it gives us the flexibility to define secondary legislation according to a separate timetable, as and when we need it.

I have some issues with specific measures, which we might come to in later questioning, although we made the relevant points in our consultation response.

**The Convener:** We have 27 minutes left, so I am not sure that we will have time for that.

**Dr Clark:** Just briefly. I pretty much concur with my colleagues. I would be heartened to see new waste legislation in any way, shape or form, as it is long overdue. However, I would prefer a root-and-branch review of all waste legislation to be carried as soon as possible.

**Peter Peacock:** Thanks for your comments. Given what you have said about the relative priority that should be attached to the various provisions in sections 52 to 59, are there one or two areas on which you would like progress to be made first?

**Dr Clark:** Yes. I could talk about that for ages.

**The Convener:** Don’t!

**Dr Clark:** I will not. I have concerns about most of those areas, but there are two that I think we should get motoring on as quickly as possible. My first priority relates to the information on waste. The municipal waste data are excellent, because the concentration has been on municipal waste, of which there is less than 4 million tonnes in Scotland. Commercial and industrial waste has been left to blow in the wind, frankly.

**The Convener:** Literally.

**Dr Clark:** Aye, literally. Commercial and industrial waste should have been tackled a long time ago. We need good-quality data on that. Perhaps I should not say that we need to force it to go down the same road as municipal waste, but “force” may be the right term.

My other priority is procurement of equipment and apparatus that contain some recycled material. There is no reason why the public sector generally should not procure in that way.

**John Ferguson:** I agree strongly with my colleagues’ view that the procurement process could be used to significantly greater effect and
that having data is essential. In addition, deposit-and-return powers should be extended beyond packaging because that type of instrument engages the consumer more. I am concerned that there is no incentive to collect products such as fluorescent light bulbs, which will come into the waste stream in millions. That type of problem waste is hazardous and will put a lot of mercury into landfill sites. A lot of embedded plastic, electronic material, glass and chemicals can be recovered. We need to stimulate the public's engagement with recovery systems. In that respect, I would extend deposit-and-return powers to encourage the public to take more responsibility by paying for something that they then return.

**Elaine Murray:** I have a question on how the provisions should be enforced. What will be the impact on SEPA in particular of having to undertake additional duties when the Flood Risk Management (Scotland) Bill and the Climate Change (Scotland) Bill are eventually enacted? There may also be an impact, though a lesser one, on local authorities in that regard.

**John Ferguson:** As you know, SEPA has a primary responsibility as a regulator and data collector. SEPA's responsibility for the waste strategy in Scotland started in 1996, when it was established. It had that responsibility until a couple of years ago, when the powers switched to ministers. We published the national waste plan in 2003, so we have a legacy of engagement and staff competence in waste strategy issues. Those people are used more frequently in the regulatory framework to improve how we regulate. SEPA's better waste regulation project is closely aligned to the review of the national waste plan to ensure that we regulate in accordance with the objectives and targets that are set by Scottish ministers. We engage and work closely with the Scottish Government and its officials to ensure that our regulatory functions dovetail closely with wider waste objectives in Scotland.

**Dr Clark:** When I read through the briefing papers, the enforcement bit caught my eye. Every paragraph suggested that significant enforcement duties were likely, which concerns me somewhat. The suggestions about how many hours it would take to enforce duties are wildly optimistic. Anybody who has had to take a case to procurators fiscal under the current criminal environmental law will know that it is difficult to get them to take such cases. I shudder to think what a procurator fiscal will think if cases concerning the enforcement duties start to roll in, given the length of time that it might take to get to court and what might happen in court. I am concerned about that aspect, even though I quite like enforcement.

**The Convener:** So enforcement is all very well if it can be done, which depends on its nature.

**The Convener:** So enforcement is all very well if it can be done, which depends on its nature.

**John Ferguson:** There is a strong emphasis in the bill on voluntary engagement and producer responsibility initiatives, which is a good way to go. We should say to industry sectors in particular that, if they come up with solutions, there will not be a regulatory environment. It is wise to have a primary process of voluntary engagement, which obviates the need for strong regulatory enforcement. Ultimately, however, we must have a sanction if we want to change things.

**Liam McArthur (Orkney) (LD):** There was some disagreement among local authorities that responded to the consultation over whether new statutory powers were required or whether voluntary agreements were a more useful vehicle for achieving improvements in recycling rates. Can or should the Government introduce other positive instruments to improve rates? There is debate over whether this is the best of times or the worst of times in which to take forward the waste agenda but, from your evidence, I detect the view that it is the best of times. You indicate that there is a mood to derive more value from waste and that we have an opportunity to put in place the necessary infrastructure—something that has lagged until now. However, a robust market for recycled materials is needed if that is to happen. What are your observations on the state of the market? What is likely to happen over the next couple of years or so?

**Iain Gulland:** There is a lot in those questions. Colin Clark alluded to the fact that there has been a drop in the overall price that is paid for recyclates that are collected in the UK and across the globe. That is due primarily to the bite of the recession. However, although markets are at a low level, they are stabilising. Material is still moving from Scotland to those markets, some of which are in the far east and some of which are here in the UK.

I am not in a position to forecast what the situation will be in future, but stability is key. The prices that people received for materials six months ago were very high—some would say unsustainably high—and a fall in the prices of those commodities was due. However, the materials still have a value. There is certainly an environmental value to taking them out of the waste stream, as part of the climate change agenda, whereas a liability is associated with putting them into landfill. We can still get value from them by using them to produce energy from waste, through incineration. There is still an economic model for waste; the majority of processing industries in the UK have been able to adjust to the situation.

**The Convener:** I do not mean to be rude, but you talk a lot about the UK. However, it would be a fundamental issue for all of us if we thought that...
we were shipping stuff hundreds of miles to somewhere else. Can we think about recycling in the context of Scotland, rather than the UK market?

Iain Gulland: The problem has been that in Scotland there is a limited market for materials, apart from glass and organics. The majority of our paper leaves Scotland and goes to other parts of the UK and abroad. I refer to the UK because that is the market. Even now, our home-grown market is not as large as we would like it to be.

The Convener: So developing a market more locally is an issue.

Iain Gulland: Exactly. WRAP Scotland is keen to develop such a market—that is our focus. It is a bit like all the other issues that relate to climate change. If we can be more self-sufficient, we will be much more resilient as a nation in situations like the global downturn that we are now experiencing. If such a downturn were to happen again—hopefully, we will have many hundreds of years in front of us before it does—we would be much more resilient if we could deal with matters in this country. That is what we are trying to do, by building up markets for waste.

In the current situation, there is a huge opportunity. I have been in my job for seven months, but it has changed radically in that time, simply because of what has happened in the markets. When I met people seven months ago to talk about market development, they were interested in this country but, as long as the Chinese were paying high prices, materials were going straight from local authorities, through brokers, to the far east. It was difficult for Scottish industries to gain a foothold in the marketplace, because they could not compete. Now the markets are depressed and the Chinese are no longer offering the same prices—that is basic economics—so there is a great opportunity for us to build an industry in Scotland for the future.

I turn to the issue of waste savings. During the boom, industry focused on profit, but now it is focusing on the bottom line. Resource efficiency is about the bottom line as well as the environment—it is about savings. We are working hand in hand with the construction industry in Scotland, which is keen to attend meetings and seminars to hear about resource efficiency and how to minimise waste, simply because that is about savings. Anything that can impact on its bottom line is significant at the moment. The construction industry is engaged in the process, as are many other industries. This is an excellent time to build the resource-efficient economy that we are looking for in Scotland.

10:45

John Ferguson: The issue is cyclical; we have had it before and we will have it again. The previous comment was on infrastructure. We need to be flexible in our infrastructure. For example, when the recycling markets for paper fall, we should be able to displace into energy markets.

We need more indigenous markets, because we have the potential for economic development. That dovetails well with the emerging work that we are doing with Scottish Enterprise on developing in the environmental technology sector. Waste is a strong element of that wide and diverse sector.

To stimulate more recycling, I think that we are going to have to bite the bullet of charging the public for their waste. It is a complex issue. I would not call it direct variable charging; I would call it direct variable savings. I would incentivise the public to save money. In most countries in Europe, charging works well to drive recycling rates up. I know that it is unpopular, but it is important.

The Convener: That can work only where it is possible to uplift the material, but there are huge parts of Scotland where physical reasons prevent that.

John Ferguson: It is horses for courses. Instruments can be designed to work in different ways in different geographies and different socioeconomic areas. Europe has rural areas too.

The Convener: Perhaps Dr Clark will come in on this point. I can speak from experience of Perth and Kinross Council, which cannot uplift separated waste from 10,000 households. The areas where the houses are cannot physically be accessed—I know, because I live in one of them. As a result, there is undifferentiated waste. You could not fine those households.

John Ferguson: Agreed.

The Convener: I wonder whether Dr Clark will comment. My guess is that the problem is much greater in the Highlands and Islands than it is in a place such as Perth and Kinross.

Dr Clark: I am not an advocate of pay-as-you-throw, for a whole raft of reasons.

The Convener: There are too many areas in which to throw at 2 o’clock in the morning, without paying.

Dr Clark: I make no criticism of my colleagues, but the debate constantly comes back to municipal waste—the stuff that local authorities pick up. As I have said before, that amounts to less than 4 million tonnes. That includes commercial waste, which is a whole other debate. A huge rump of commercial waste just gets landfilled. It is out with the context of the landfill directive, but if I landfill it, I am subject to that directive.
I want to respond to issues that Mr McArthur raised. Recycling to high levels takes more than infrastructure; it also takes time. If we created all the infrastructure tomorrow, we would not immediately get 60 or 70 per cent recycling. It takes time. Europe has taken that time, but we decided to ignore completely the landfill diversion debate until only a very few years ago. That is partly why we are now rushing to get infrastructure. Recycling has come to the fore partly because the Chinese and other markets have closed off.

Because we have been in such a rush, we have often gone for the cheapest options. As a result, the quality of the recyclate that we have collected has perhaps not been all that it should have been. Those are self-inflicted wounds. What we started five years ago, Europe started 30 years ago. We have to play catch-up, because of the landfill directive—particularly, the landfill directive targets for 2013.

John Scott: A moment ago, the convener mentioned the possibility of Scotland taking a different approach from that of the United Kingdom. Would the witnesses care to talk a little more about that?

The Convener: Is there a difference between Scotland and the rest of the UK in terms of waste reduction? If so, what is it?

Iain Gulland: The situation is the same—the challenges are the same. Householders in England and in Scotland are all trying to reduce waste.

The Convener: If everybody is trying to achieve the same aim, is avoiding divergence important? Given where we start from, is that possible? Does Scotland diverge from the rest of the UK? Do Scotland and the rest of the UK diverge from the rest of the EU? The issue is different approaches.

Iain Gulland: The targets in Scotland are higher, but that is not a problem—Scotland is leading on that in the UK. Other people in the UK and Europe are looking at that. Somebody must lead and push the envelope.

The Convener: I am sorry—perhaps we are not framing the questions in the right way. Having different approaches opens up the possibility of folk saying, “It’s easier for us if we ship our stuff off to them.” That raises cross-border issues, particularly for people such as Elaine Murray, who represents a constituency that borders England. If we have a different set-up from England, whoever has the more attractive set-up might be inundated. That goes, too, for the whole of the EU.

Iain Gulland: Yes—I guess that that is an issue. It is obvious that retailers that operate throughout the UK look for UK-level agreements. If they aspire to achieve targets, they want what they are asked to do in England, Scotland and Wales to be similar. It is beneficial to have a common approach. However, it is encouraging that Scotland has set higher objectives, to try to bring England or other parts of the UK up to its level, with the support of retailers.

The opposite is also true. As far as I know, waste from Northern Ireland is still coming into Scotland, because landfill is cheaper here than it is there. Such activity is happening already. There are issues that need to be considered.

The Convener: What about the EU scenario? The same issue applies to the whole of the EU.

Iain Gulland: Absolutely. However, recycling is undertaken for economic and environmental reasons, which means that distances are important. It is not economic or environmental to truck organic waste over long distances or even out of Scotland—that defeats the purpose. The drivers for recycling are not just costs but sustainability and climate change. People will not be allowed to drive materials all over the country, because that will not add up for the climate.

The Convener: What does “People will not be allowed” mean? I am not sure how people will be prevented from doing what you describe. That takes us back to the enforcement issue.

Iain Gulland: Forcing people is not the way to proceed. If we are challenging people to buy locally and ethically and thinking about such things as ecological clauses in public procurement, that will drive people to think of local solutions and local pragmatic approaches to doing stuff. That will swing the pendulum away from people trucking green waste all over the country simply because that is the most economic way to operate, which I do not think that it will be, given the cost of petrol and diesel.

John Ferguson: Cross-border consistency is important, but it is not a reason not to do things differently, when that is justified. The transboundary movement of waste is carefully regulated by legislation. As Iain Gulland said, moving waste involves a cost. Increasingly, that cost pressure will reduce the movement of waste over illogical distances.

The Convener: We have had no difficulty in shipping material to China.

John Ferguson: Let us be clear. If we are to import China’s goods, China needs the raw materials to produce those goods, but I am not talking specifically about China. The trade in goods is international, as is the trade in raw materials. That is not to say that we should not try
to develop indigenous markets and economic development potential and to manufacture more in this country, but trade in goods is international, as are commodity movements. We must recognise that reality of the globalised economy.

The Convener: We have a couple of minutes left. We have talked about differences between countries. Equally, differences exist between local authorities, so I have a question for Dr Clark. Does COSLA have a view on the impact of differences between local authority recycling collection schemes? Has COSLA discussed introducing consistency across local authority boundaries? We have talked about consistency across legislative boundaries, but starting with local authority boundaries might be useful.

Dr Clark: You are right that there is not a great deal of consistency in how local authorities collect waste, what they collect and the frequency with which they collect. The reasons for that are historical—different local authorities started off at different points. Some have been recycling for years, whereas others have not been doing it for very long. Some authorities had facilities to start with, whereas some had no infrastructure and had to scrape it together quickly to put recycling services in place. However, I am not particularly concerned about how the waste is physically collected, because that is not the critical point in the process. I return to my earlier point about infrastructure. The critical issues arise once we have collected the waste: what are we going to do with it and where are we going to do it? We still do not have the necessary infrastructure, although that is understandable because we have just started.

Iain Gulland talked about local infrastructure. He knows that grass, other green waste and food waste are being chucked throughout Scotland because there is little in the way of infrastructure for in-vessel composting and other measures. We have a fair old way to travel to make the infrastructure local. However, I emphasise that we have a real opportunity—

The Convener: Are discussions on-going in COSLA about consistency across boundaries, or is that conversation just not having had?

Dr Clark: A conversation is taking place between officers. We know what everybody is doing and we can tap into that. For example, if a new collection service for tenements needs to be set up, we know who is doing that and we know the problems and attractions of the various systems. However, there is not a conversation about a one-size-fits-all approach for all local authorities.

The Convener: I have a quick question for all three witnesses. If you could put one more measure in the bill, what would it be? Is there anything that is not in the bill that you think should be in it?

John Ferguson: We should ban sending biomass from commercial and industrial waste to landfill.

Dr Clark: We should make commercial waste subject to the same legislative requirements as those to which municipal waste is subject.

Iain Gulland: My immediate reaction was to think along the same lines as John Ferguson. We should consider banning particular waste streams from going to landfill.

The Convener: I thank all three witnesses. We probably could have taken three times as long but, unfortunately, the timetable for stage 1 does not permit us to do that. If anything occurs to you when you go away, you can get in touch with us. The clerks are always happy to hear from witnesses even after they have given evidence. Equally, if anything occurs to us, we might get back to you and say, “We should have asked you this”, so be prepared for that. You are welcome to sit in the public gallery to listen to the next evidence, which will be from the Cabinet Secretary for Rural Affairs and the Environment.

I welcome, 15 seconds ahead of schedule, the second panel of witnesses: Richard Lochhead, the Cabinet Secretary for Rural Affairs and the Environment; Simon Stockwell, the waste strategy team leader; Kim Fellows, the deputy director for waste and pollution reduction; and Kevin Philpott, the waste regulation senior policy officer. Is Louise Miller coming?

11:00

Kevin Philpott (Scottish Government Environmental Quality Directorate): We think that she is, but she does not appear to have arrived yet.

The Convener: So she may show up—okay, there is no problem.

There is a letter from the cabinet secretary on the table, which members received this morning. We will move straight to questions for the cabinet secretary.

John Scott: Good morning, cabinet secretary. What progress is being made in reviewing the national waste plan?

The Cabinet Secretary for Rural Affairs and the Environment (Richard Lochhead): It is a pleasure to be here to discuss an important issue for the environment in Scotland.

We are making progress with the national waste plan. The provisions that we will discuss today are
just one piece of a much bigger jigsaw in tackling waste and protecting Scotland’s resources. Much of the other work that we are undertaking will be taken forward in the national waste plan. We will launch a consultation in June, and we hope to have the final version of the new plan by early next year. The steering group that will help us with that plan will meet on 12 February to work up the consultation document.

John Scott: What is your response to concerns that the current waste infrastructure will not support the implementation of a zero-waste policy?

Richard Lochhead: A zero-waste policy is an ambitious policy. It is also an aspiration. Since we announced our zero-waste policy, it has attracted support from local authorities and private sector organisations throughout Scotland, as well as from members across the Parliament. Such an ambitious aspiration requires infrastructure to be in place for recycling, recovery and other measures, and a lot more infrastructure will be required if we are to meet our zero-waste target in the coming years. We have some infrastructure in Scotland, but we have nowhere near enough to meet our targets for 2013 and beyond. We are addressing that in our discussions with local authorities.

John Scott: How do you propose to deliver the greater volume of infrastructure that will undoubtedly be needed?

Richard Lochhead: Many local authorities are working on their infrastructure plans for the future. As zero waste is also an economic opportunity, there are private sector proposals for facilities that are either being built or proposed for various parts of Scotland. It is an issue for both the public and the private sector.

We have allocated part of our zero-waste fund to local authorities to help them with their infrastructure plans, which many of them are working on just now, and we will allocate more resources for that in the next financial year. We are also discussing with COSLA how we can ensure that that funding is used for infrastructure.

Rhoda Grant: Concerns have been raised with us about waste from small businesses—not so much municipal waste as waste from the private sector. The infrastructure to deal with that waste does not appear to be in place, especially for small businesses that cannot deal with it themselves. What plans does the Government have to address that? Does it have a vision?

Richard Lochhead: As you know, local authorities currently take a lot of commercial waste; there are private sector routes for commercial waste, too.

We have to address the issue from two angles. First, we have to work with businesses to reduce the amount of waste that they produce, which I am sure we would all agree is the number 1 priority in the waste hierarchy. It is in their economic interests as well as their environmental interests for businesses to do more in that regard.

Secondly, on infrastructure, we have listened carefully to the submissions to our consultation on the bill and to the evidence given to the committee by small business representatives, and I am considering how we can help small businesses with some of the challenges they face. I noticed that there are calls for exemptions for small businesses from some of the bill’s provisions—we will have to consider whether that is feasible. We do not want to say that small businesses do not have a role in tackling waste in Scotland, but nor do we want there to be a disproportionate impact on small businesses, which produce smaller amounts of waste compared with much larger commercial operations. We have to strike a balance.

John Scott: The elephant in the room discussed by the previous panel is the fact that commercial and industrial waste is not addressed adequately. Will you talk about your plans for that?

Richard Lochhead: Thanks to the efforts of previous Administrations, supported by the work of this Administration, Scotland has made huge progress on municipal waste and household recycling. We have gone from recycling less than 6 per cent of our waste before devolution to recycling more than 32 per cent now. The signs are that the rate will continue to rise, which is great news.

The Government believes that we must now concentrate a lot more on commercial and industrial waste, which accounts for 85 per cent of Scotland’s waste mountain. That will be addressed by the national waste plan and by some of the provisions in the bill. As I hope that the committee has noticed, there is a pretty big emphasis on commercial and industrial waste in the bill. An issue that we have to fix at the beginning of the process is ensuring that we get accurate information—one of the provisions in the bill addresses that. Although much of the 85 per cent of waste that comes from the commercial and industrial sectors is already reused or recycled, we need better information, and we need to focus more on that in future. We are addressing that through the provisions that the committee is discussing today. The national waste plan will put a lot more emphasis on industrial and commercial waste, particularly construction waste.

The EU waste framework directive sets out targets for construction, industrial and commercial waste. We have a lot more work to do in Scotland
with regard to our own targets for that sector, but the EU directive is already before us. The big issue of bringing that sector in from the cold will be at the heart of our future plans.

**Peter Peacock:** The bill provides for significant enabling powers, an approach that has given rise to both favourable and negative comment. What is the rationale for using that approach? Are there specific measures that are not yet policy ready, or is there some other reason?

**Richard Lochhead:** There are several reasons. First, I have been tackled many times by members of all parties who have called for much more ambitious measures to be taken to tackle Scotland’s waste problem. We now have a zero-waste policy in place, which requires much more radical and ambitious proposals, and we need the tools at our disposal to reach the targets that we have set.

Waste contributes to climate change—2.5 per cent of greenhouse gas emissions in Scotland come from waste. Last week, the committee heard from Professor Jim Baird from Glasgow Caledonian University, who reckons that about 6 to 8 per cent of our 80 per cent target for reducing emissions by 2050 would be met by tackling waste management in Scotland.

**The Convener:** That is 6 to 8 per cent, not 68 per cent.

**Richard Lochhead:** I wish it was 68 per cent, as then we would know how to reach the target.

The bill gives us an opportunity to provide for enabling powers to introduce secondary legislation if it is needed in future. The alternative is to do nothing in the bill and waiting for a slot in the legislative timetable, whether it is in this or the next session—it is unlikely to be this session—for a waste bill. That would lead to further delay, and I think that we would all agree that there is a degree of urgency in implementing some measures. The bill is therefore a good vehicle for introducing enabling powers.

The nature of some of the provisions in the bill means that we require to do a lot of work to ensure that we put the best provisions in place if we go down the route of secondary legislation. Some of the provisions will take more time than others. For example, it could take several years to get a blueprint for the best deposit-and-return system for Scotland. By using the opportunity presented by the bill, we can start that work now, but it might take some time to introduce the secondary legislation.

The other dimension is that we are not sitting doing nothing. A lot of voluntary agreements are now in place, and my preference is for the voluntary route to deliver results as soon as possible. There are some signs that that might happen, but it is clear that the prospect of legislation helps to concentrate minds and encourages many of the various players to cooperate with the Government and Parliament in achieving some of our ambitious targets. It is worth having the backstop of the legislative route, in case it is required at some point in the future.

**Peter Peacock:** It is helpful to have that on the record.

Last week, we heard evidence from the Federation of Small Businesses and from at least one other witness that, notwithstanding what you have said, it is not appropriate to use secondary legislation for some of the provisions because their impacts could be substantial for small businesses and other parts of the business sector and that the better way would be to use primary legislation, on which there can be fuller debate and scope for amendments. What is your comment on that?

The other criticism that we have heard—to the extent that there has been any criticism—is that you might never use the enabling powers in the bill but some people will want you to use them very quickly. What timescales are you thinking about for the use of those enabling powers? I recognise that you cannot be absolutely precise about that.

**Richard Lochhead:** Your first question relates to the role of secondary legislation. I hope that we have made it clear that we intend to have a full consultation process on the secondary legislation and that there will be ample opportunity for parliamentary committee scrutiny. The secondary legislation will be affirmative, so I will have to come before the committee, which will have the opportunity to scrutinise—

**The Convener:** From a process point of view, if anything is brought before us during this session of Parliament, the committee is likely to want to treat it as if it was a bill at stage 1 and therefore to schedule evidence sessions. We will therefore need the longest possible notice of anything happening. Can you commit to giving us that?

**Richard Lochhead:** I can commit to that, and I welcome your comment, convener, because it helps to reinforce the assurance that we want to give to small businesses and other sectors that the Scottish Government will conduct a proper consultation. Taking the secondary legislation route will allow the committee to scrutinise our proposals in detail.

For the reasons I have already outlined, having enabling powers in the first place will help us to achieve our targets. I am introducing secondary legislation under the Animal Health and Welfare (Scotland) Act 2006, in which there are enabling powers. The committee will have the opportunity to scrutinise that, and lots of consultation will be
done on the various measures. That is similar to what will happen under the Climate Change (Scotland) Bill. I hope that I have reassured the committee. We aim to give you ample notice of what will happen under the Climate Change legislation, there is only the possibility of accepting it. Although there is an obvious role for enabling legislation, there is a degree of urgency about it so, although I cannot give a strict timetable at this point, that is another provision that will probably come ahead of some others.

I have already used the example of the deposit-and-return schemes, which will require a lot of detailed work. The feedback from the consultation process, the parliamentary parties and wider Scotland, as well as the response at the time of our announcement of the consultation, shows that there is a lot of support for deposit-and-return schemes. However, it is a complex, detailed area. Other countries have deposit-and-return schemes that work, but Scotland is not the same as other countries so we will have to put a lot of work into ensuring that we can produce a scheme that works in Scottish circumstances. That will require a lot more work and will be further down the road.

11:15

Peter Peacock: You just happen to have listed the three things that are dealt with in the first three sections of the chapter of the bill that we are discussing—sections 52, 53 and 54.

Richard Lochhead: There was no intention in that.

Peter Peacock: Can the committee take it that the order of the sections in the bill alludes to some sense of policy priority, or is that coincidental?

Richard Lochhead: It is entirely coincidental. When I gave you those examples in response to your question, I was not aware that that was the order in which they appear in the bill.

Elaine Murray: I have a question on the use of secondary and primary legislation. Although there are mechanisms by which ministers and committees can work together to ensure the maximum scrutiny of secondary legislation, and although there is an obvious role for enabling legislation, there is only the possibility of accepting or rejecting secondary legislation—there is no possibility of amending it.

A lot of secondary legislation on puppies, kittens and various other things is currently coming through under the Animal Health and Welfare (Scotland) Act 2006, but the contentious issue of mutilations and tail docking was included in the original bill, which gave members the opportunity to amend the legislation at stages 2 and 3. Is there not an argument for putting in this bill some of the more contentious measures that it is proposed to introduce through secondary legislation? That would allow members to lodge amendments at stages 2 and 3.

Richard Lochhead: That is always an argument when the choice is between enabling powers and detailed provisions in primary legislation, but I emphasise the urgency with which we need to tackle the waste situation in Scotland and its contribution to climate change. As WWF Scotland is always saying, we are using resources as though we have three planets rather than just the one, and other political parties are constantly asking for action on packaging and other issues to tackle waste in Scotland. The enabling powers in the bill, which are partly a response to those demands, will allow us to make some progress.

Let me speak briefly about contentious provisions. One of the potentially contentious provisions is for deposit-and-return schemes. As I said earlier, I detect widespread support for them, but there is some nervousness about such schemes among the business community. Our approach will be to set up a working group that includes businesses that have strong feelings about the schemes to ensure that we have the right schemes, that they are delivered to the right timescales and that they are suited to Scottish circumstances. I hope that any secondary legislation that is introduced—even prior to the consultation—will result from input from the relevant bodies in Scotland.

The Convener: You have talked quite a bit about the provision for deposit-and-return schemes. Is it your view that it might be the most contentious provision in the bill? If it is not, which one might be?

Richard Lochhead: I think that they are all worthy of support.

The Convener: That is not what I asked, cabinet secretary. I asked which provision is the most contentious.

Richard Lochhead: I know what you are asking. It is a difficult question to answer because it would depend on whom you spoke to. I have listened to the evidence that you have received.
**The Convener:** You have also been sent all the written submissions.

**Richard Lochhead:** Yes. The business community has strong feelings on the proposed measures that will impact on business. The Scottish Environmental Services Association has views on future infrastructure, as its members build infrastructure and have an interest in it. Environmental non-governmental bodies are supportive of all the proposed measures because they will help Scotland’s environment. I am sure that several of the provisions will be contentious to certain sectors in Scotland, but I am not in a position to rank how contentious the proposals are.

If we want to reduce the amount of waste that is produced in Scotland and increase the reuse and recycling of the waste that we produce, we must be ambitious and radical. I look at what other countries in Europe are doing and achieving, and I see that they are managing. When I consider where Scotland is starting from, my view is that we have to be more ambitious and radical.

**The Convener:** The issue arises from the possibility of putting something very contentious in the bill. I am trying to discover whether any issue obviously stood out as being the most contentious and therefore amenable to the treatment that Elaine Murray suggested. I do not know whether your officials have a view on that. Obviously not.

We have dealt with the order of priority for implementing the provisions and such matters. Elaine Murray wants to talk about voluntary agreements.

**Elaine Murray:** The minister has touched on the importance that he places on voluntary agreements, and we have discussed in the chamber being able to reach the ambitious targets that are coming over the horizon. What impact are the current policy levers and voluntary agreements having on reducing waste? How is that impact being measured so that you can ensure that you achieve the targets that you wish to achieve in future years?

**Richard Lochhead:** We have, since we came into office, put a lot of effort into voluntary agreements. There are a few new voluntary agreements—a few firsts—and others have built on previous voluntary agreements and taken them a stage further.

The voluntary approach is working and is making progress. You may recall that we had a supermarket summit last year—around November, I think—which the First Minister chaired and at which I was present. One outcome of that summit was the voluntary agreement to reduce use of carrier bags in our supermarkets by 50 per cent by spring this year. The signs are that progress has been made towards that target. We will, of course, find out in due course the extent to which progress has been made. Since then Tesco, for instance, has decided not to display carrier bags on its counters—they are kept below the counter. Other practices have also changed in our supermarkets.

Therefore, there is evidence of progress as a result of voluntary agreements. A voluntary agreement has also been struck with the construction industry to reduce its waste. I think that that was a first—I see my officials nodding. The voluntary route is clearly the preferred route, but given the importance of the issue, we must be able to pass legislation if required.

**Elaine Murray:** What you have said is useful. How has the reduction in the use of plastic bags been measured? The bill’s provisions could result in secondary legislation that would introduce a plastic bag tax. Is that your stopgap? Is that the stick if the voluntary agreement does not work? Are you laying in place a number of sticks that can be used?

**Richard Lochhead:** We must say to the business community and the wider community that we are serious about our ambition to move towards being a zero-waste society. Many examples exist of how other countries are achieving their ambitions in a range of ways. The enabling powers and provisions in the bill and the debate that is now taking place show that the Government and Scotland are serious about the future.

I have said that a lot of progress has been made on carrier bags with retailers coming on board, but time will tell how successful the measure has been. Of course, the UK Government decided to put the provision that we are discussing into its Climate Change Bill and asked me whether we want it to apply to the whole of the UK, but my response was that we have our own bill in Scotland and our own voluntary agreement, which was signed in November—and has, of course, since been adopted by the rest of the UK—so it made sense for us to decide on the provision in Scotland. That is why it is before the committee today as a proposal for inclusion in our bill.

**Elaine Murray:** For clarification, you would not expect to use the provision in question unless voluntary agreements did not work.

**Richard Lochhead:** That is fair comment. I would not expect to use the provisions if we achieved the same objective outwith legislative routes. However, we are not at that point and it is important that Parliament and the Government have the wherewithal to achieve our objectives for Scotland.

**Alasdair Morgan:** Do you have a particular figure in mind that would mean that the agreement...
on carrier bags was not working? In other words, what is your target?

Richard Lochhead: We have to take one step at a time. The national waste plan is still to be consulted on. It will examine the bigger picture, and people will present their views on a wide range of issues. We might decide at that point that the provisions will have a greater role in the future in response to a new waste plan or whatever. I will ensure that the committee is kept up to date with progress on the current voluntary agreement. I cannot until spring 2009 make a judgment on the carrier bags agreement with the retailers.

Alasdair Morgan: I will, if I may, press you a bit. You must have some idea about what would constitute success in reducing carrier bag use. We are not going to eliminate them entirely, but at what point could we decide that we do not even need to think about legislating?

Richard Lochhead: We have to consider that one step at a time with regard to the voluntary agreement. If the voluntary agreement were not delivering and not achieving the target by spring 2009 I would—following further discussions with the retailers on why that was the case—take the view that there might be a case for legislation.

The Convener: The target is a 50 per cent reduction by spring 2009.

Richard Lochhead: Yes.

The Convener: If you get to 45 per cent, you might say "Well, okay, we're just about there", but if only a 20 per cent reduction is achieved, you might say, "Hang about—".

Richard Lochhead: We need to be reasonable and proportionate. We would consider the results.

Liam McArthur: You have reflected on the progress in improving recycling rates, as initiated under the previous Government. We would all accept that although it was very welcome, it started from a very low base and it started very late, in comparison with our European counterparts. Furthermore, it took place in economic good times, whereas we now face an economic storm. I have been reflecting on the points that Elaine Murray and Alasdair Morgan have made about the amount of bite that voluntary agreements have. What impact will the current economic situation have on the zero-waste strategy? Do you expect voluntary agreements to operate as they have done hitherto?

Richard Lochhead: That is a very interesting question—I look forward to reading the committee's views on that when you report.

The answer has two or three dimensions to it as there are several ways in which the economic downturn could impact on our zero-waste plans and on the provisions that we are discussing today. We will wish to consider the impact on the economy and on the business community of any provisions that we make in the future. Secondary legislation will not be made in the immediate few months from now, so we will have to monitor the economic situation, but I can assure the committee that we will be sensitive to the impact of any provisions on the business community and the economy in general. That applies right across Government; it is not confined to the bill.

There are two key areas that we are monitoring closely and in which there is a direct impact on our targets. I cannot give the committee a definitive answer on the exact situation just now, but the first of those two areas is the market for recyclates, which is clearly influenced by the economic situation, not just in this country but internationally. Many of the markets for those materials are international markets. We are monitoring the situation—markets in which recycled collections are of good quality seem to be holding up. In other cases, storage is being considered by local authorities and other bodies, and SEPA is helping to co-ordinate storage of materials until the markets get better.

The second issue is the impact on landfill. Ironically, our landfill targets might be assisted by the economic downturn, in that less waste is produced when there is less economic activity, which illustrates how the impact of the economic downturn might be that it helps with some targets. Other targets, for instance those for recycling, might become more challenging, although there is no evidence of that at the moment. It depends on how the markets respond to the economic downturn.

11:30

Liam McArthur: As you said, some people say that this is the worst time to be taking forward the strategy and some say that this is precisely the moment to do so—for example, John Ferguson at SEPA and Iain Gulland at WRAP told us that they believe that there are opportunities to make strides in the current economic climate. Is the Government considering positive incentives that could be implemented quickly, rather than going down the route of introducing the statutory requirements that are alluded to in the bill?

Richard Lochhead: An important dimension of this debate involves the opportunities that are available to people. For example, businesses can cut costs by cutting waste. Households can do the same thing, so we have put some effort into our food-waste campaigns, which pass on simple tips to help household budgets by reducing food waste. The feedback from some of the companies that are involved is that their services are in quite
high demand, which suggests that companies are interested in cutting waste as a way of cutting costs.

**Liam McArthur:** Most of the positive incentives in that area seem to be in the form of awareness-raising and information-spreading initiatives.

The previous panel talked about there being an opportunity to introduce infrastructure that should have been introduced before now. Are you considering positive incentives in that regard?

**Richard Lochhead:** That is an important point. The wider response of the Government to the economic downturn involves efforts to stimulate economic activity in our communities. We have been discussing with the Convention of Scottish Local Authorities ways of using resources such as those that have been made available through transfer of money from the zero-waste fund to local authority budgets in order to implement infrastructure projects as quickly as possible. That will not only help with councils’ zero-waste targets, but will stimulate economic activity as people will be employed to construct that infrastructure. We have already taken action to transfer money to local authorities for the next financial year, and are discussing with COSLA the levels of resources that will be transferred for the subsequent financial year. That will give local authorities a good lead-in to the infrastructure projects.

**Bill Wilson:** You referred to the possibility that there will be some reduction in landfill waste because of the downturn in economic activity. I would like an assurance that, when we are recording those levels, we will not confuse the results of our attempts to deal with waste with the results of the economic downturn. There is always the possibility that we will take our eye off the ball and that, when economic activity recovers, the waste levels will bounce back as well.

**Richard Lochhead:** I totally agree. I assure you that we are not taking our eye off the ball. One of the benefits of creating the infrastructure to which I just referred is that it will ensure that we are going down the road towards becoming a zero-waste society. Irrespective of the impact of the economic downturn on landfill, we will not take our eye off the ball in terms of the wider environmental objectives. The levels of waste are measured, and SEPA and others will publish information about landfill rates in due course.

**Bill Wilson:** There is always a chance that businesses might seek to gain competitive advantage by not complying with voluntary agreements. What level of non-compliance would concern you and what action would you take?

**Richard Lochhead:** I cannot give you a simple answer to that question just now. Clearly, that will depend to a great extent on the detail of secondary legislation, which will set out exactly what is required of various people, including the business community.

With secondary legislation or other legislative tools, agreements must be enforced in a way that ensures that businesses that are taking action to cut their waste and help the environment are not disadvantaged. That is why, in all legislation, penalties are available.

**Bill Wilson:** If you exempt some of the smaller businesses from provisions in the legislation, they might gain a competitive advantage. Would that be of concern to you?

**Richard Lochhead:** All legislation has to be proportionate. If there were a case for exempting small businesses, it would involve the creation of a level playing field for the small businesses. You are never going to get a level playing field between small businesses and massive multinational companies—I am not sure that you can approach the issue in terms of small businesses versus bigger businesses. What is important is that, if there is an exemption for small businesses, we correctly determine the level below which businesses are exempt, and ensure that that is proportionate.

**The Convener:** I have a question about amendments at stage 2, but before I ask it, I will give other committee members an opportunity to ask further questions of the cabinet secretary. Does anyone have a question? It seems not. You are getting off very lightly today, cabinet secretary.

**Richard Lochhead:** Please do not say that, convener; it will just stimulate people.

**The Convener:** I would like to return to the discussion that we were having about potentially contentious elements and so on. It would be useful for us to know whether there is any intention to lodge stage 2 amendments in respect of waste management. I should say that, when we asked a similar question when we were considering the Flood Risk Management (Scotland) Bill, we got a helpful and useful answer.

**Richard Lochhead:** I might ask officials to contribute in a second or two, because there is a lot of discussion about stage 2 amendments at the moment.

**The Convener:** I realise that it is still early days.

**Richard Lochhead:** I can give you an assurance that I shall write to the committee in the very near future to outline potential stage 2 amendments.

We have been considering stage 2 amendments in relation to deposit-and-return schemes. We do not have the power to set up a deposit-and-return clearing house. In other countries, because not
every company would have the wherewithal to operate its own deposit-and-return scheme, clearing houses operate for whole sectors and put in place all the necessary arrangements. We would require enabling powers to give us the ability to set up such a clearing house. Kevin Philpott will say a little more.

The Convener: I realise that this is early in the process, but I am seeking an indication of whether there are going to be stage 2 amendments relating to waste management. Obviously, there are.

Kevin Philpott: The only stage 2 amendments that we are considering at this point relate to deposit-and-return schemes and are, as the cabinet secretary indicated, to do with setting up a body to fill the clearing-house role. Specifically, we need to be able to set up that body and tender its functions.

The Convener: That is the situation at the moment, but that does not rule out the possibility that other amendments might emerge.

Kevin Philpott: Time is ticking, but you are right to say that that possibility is not ruled out.

The Convener: I thank the cabinet secretary and his officials. I see that Louise Miller appeared—I am sorry, I did not register that you were there.

If anything occurs to us, we will be in touch with you in short order. I think we are seeing you again in connection with forestry.

Richard Lochhead: You will see Mike Russell.

The Convener: Okay.

As we are running a little ahead of schedule, I suspend the meeting.

11:38

Meeting suspended.
SUBMISSION FROM HIGHLAND COUNCIL

Highland Council has made a parent submission to the Transport, Infrastructure and Climate Change Committee.

APPENDIX 1

CONSULTATION ON FORESTRY PROVISIONS IN THE SCOTTISH CLIMATE BILL - RESPONSE BY THE HIGHLAND COUNCIL

GENERAL COMMENTS

1. This consultation is to be welcomed. It strongly argues the role of forestry in helping to combat climate change and it is important that that role be fully maximised as well as gaining the support of the Scottish people. The Minister for Environment is to be applauded in bringing forward this debate and the crucial role for forestry.

2. The proposal to offer leases and cutting rights over parts of the national forest estate, has however resulted in a vigorous debate both within and outwith the forest industry, not to mention Commission employees themselves. The proposal represents a fundamental sea-change in the way the estate is managed. It is of concern that such a significant proposal has “come out of the blue” and is perhaps premature given that FCS is currently undertaking a wider options review of the national forest estate.

3. For FCS to pursue any significant programme of woodland creation will be dependent on the availability of suitable and affordable land. This is seen as a potentially major constraint and perhaps puts the argument for incentives (existing and additional) to be mainly placed with existing land owners and occupiers.

4. It is reported that leasing some 25% of the national forest estate could provide some £200M for reinvestment. It is not clear if the current economic downturn has been factored into the above assumptions. Timber prices have fallen some 25% in the past six months and are likely to fall further.

5. There is no guarantee that all sums raised would necessarily go into forestry related climate change activities. In the event that £200M was made available, it is unlikely that the forestry industry would be able to spend such a sum in one financial period.

6. The annual net cash cost of FCS is around £90M (08/09). Timber receipts are crucially put against that cost. These amounted to some £43M in 08/09. The potential, very significant loss of receipts (estimated in the order of a third and perhaps more given likely sawlog content) places real concern over the ability of FCS to continue its present function and the delivery of multiple benefits to the Scottish people.

7. It is not clear if any lease and cutting rights agreement will require the timber to supply Scotland’s wood processing sector or if it will be available for export.
RESPONSE TO SET QUESTIONS

Question 1: What are your views on allowing the Forestry Commissioners to enter into joint ventures with the intention of participating in renewable energy programmes on the national forest estate?

Response: The Highland Council (THC) warmly welcomes the opportunity for the Forestry Commissioners to enter into joint ventures with developers and local communities and subject to the following considerations;

- Secure and maximise opportunities to benefit from joint ventures, including an equity stake in investments.
- Joint ventures that involve community ownership.
- Extend range of joint ventures to include biomass, especially wood fuel.
- Appraisal process requires to consider development on peat and carbon flux issues.
- Public Sector Reform Bill may offer a wider use and benefits from joint ventures.
- Working with Carbon Trust (‘Partnership for Renewables’) to develop and manage on site renewable energy projects.
- Opportunity for partnerships with LA’s in providing heat and power for local communities.

Question 2: What are your views on allowing Scottish Ministers and Forestry Commissioners to offer leases and cutting rights over parts of the national forest estate?

Response: THC has very strong reservations over these proposals and does not support them. A criticism of the consultation paper is that it offers limited detail, and no business case to underpin the proposals. THC main concerns are as follows;

- Lack of business case – to demonstrate overall public benefit and forestry’s contribution to climate change.
- Scale of proposals and control retained by one party.
- Impact on the function and funding of the remaining part of the national forest estate.
- Loss of regional presence.
- Impact on the stability and development of timber markets as presently underpinned by FCS.
- Impact (immediate and longer term) on FCS employees and the communities they live in.
- Loss of community acquisition opportunity through the National Forest Land Scheme.
- Loss of a wider range of non-market benefits as provided through FCS and which will be greater than provided through any lease arrangement.
• No guarantee that funding raised will be placed specifically to forestry related climate change measures.
• Potential for further leases.
• Member states of the E.U. have generally supported and protected their national forests.

Question 3: What are your views on (i) transferring the proceeds from leases and cutting rights to a not-for profit trust for investment in woodland creation; (ii) transferring the landlord’s interest in this land to a not-for profit trust; and (iii) Ministers stipulating the constitution of such a not-for profit trust.

Response: Please refer to the response to Question 2.

• What problem does the Trust resolve – option of increased accountancy flexibility to FCS?
• How will it operate – membership, structure and powers?
• How do you guarantee that Trust reflects public interest?
• Results in reduction of other Government funding?

Question 4: Are there other actions which need to be taken, or are there other changes in legislation which need to be made, in order to allow the public and private forestry sector to contribute to Scotland’s target of reducing emissions by 80% by 2050? If so, please outline what these are.

Response:
• Fully maximise opportunities for joint ventures.
• Consideration of only cutting rights over a greatly reduced scale and range of sites.
• Opportunities for some considered and limited expansion of the ‘Repositioning Programme’.
• Early and significant refinement of SRDP, including simplified application and approval process.
• Targeted funding (e.g. Locational Premiums).
• Early revisit of fiscal support to encourage increased investment level and industry confidence.
• Active encouragement of agricultural sector to plant trees and use wood fuel.
• Proven benefits of communities and FCS working together to deliver a wide range of rural benefits (Sunart Oakwood Initiative).
• Woodland creation partnerships with other public agencies and land based organisations (e.g. SNH, MOD, Scottish Water, National Trust, RSPB, Woodland Trust).
• Audit of public land suitable for woodland creation.
• Maintaining and enhancing carbon stocks in trees or soils through longer term management and role of unmanaged woodland.
- Redistribution of Government spending to forestry.
- Carbon Trading.
- Opportunities of ‘Futures Market’ in raising funds at this time.
- Urgent need for an integrated Land Use Policy.
- Early update of Indicative Forestry Strategies with a clear promotion for woodland creation.

Highland Council
February 2009
Consultation paper on potential legislative measures to implement Zero Waste

Proposal 1 – Duties on Public bodies and businesses to provide recycling facilities

To further encourage recycling by giving a power to the Scottish Government to make regulations which would impose duties on public sector bodies and businesses to provide recycling facilities for customers, staff and, where appropriate, members of the public. The regulations would specify which bodies and businesses were to be subject to this duty and the nature of the recycling facilities that would be required.

Question 1: Do you consider that legislation should be made in this area?

Proposals to specify certain businesses to have recycling facilities for certain materials is probably not essential. Market forces will increase the amount of recycling available in public areas as landfill costs increase and recycling infrastructure improves. Also the public expectation to recycle more will add pressure to provide recycling facilities.

The alternative of a code of practice would be a better start. The implications to require large retailers to provide recycling facilities in their car parks will help in recycling the vast majority of packaging, but may reduce the amount of material collected by local authorities and reduce LA recycling rates. A realignment of targets should reflect any drop occasioned by such action.

Question 2: If so, what form should that legislation take?

Not Applicable

Proposal 2 – Packaging

To encourage waste prevention by giving powers to the Scottish Government to make regulations on packaging which would set statutory targets on retailers for packaging reductions.

Question 1: Do you consider that legislation should be made in this area?

The Producer Responsibility Regulations and Packaging (Essential Requirements) Regulations have been in place for a while, but there has been few cases brought forward on excess packaging. The PRN system may have
helped improve market prices but does not seem to have little impact on the volume of packaging produced. The targets are such that most of the obligations can be met with back door recycling from retailers.

The main issue with packaging is although manufacturers are reducing the overall weight the recyclability of products particularly grocery products remains difficult in some instances particularly where laminate or composite materials are used. Re-design of the packaging or the product may help but so too would recovery capacity in Scotland. The growth of internet shopping could potentially have an effect on the generation of more packaging which previously was not created. This could be difficult to legislate for, given the global nature of the market and more mundanely if Scotland takes a different stance to the rest of the UK.

**Question 2: If so, what form should that legislation take?**

Applying statutory packaging targets on retailers may reduce the amount of waste generated as the existing legislation does not seem to encourage a change in design of unnecessary packaging. Regulation of the targets may be problematic as it is not obvious which organisation would be responsible.

**Proposal 3 – Specifying recyclate**

To encourage recycling by taking powers to enable the Scottish Government to place a duty on public bodies and businesses to specify a minimum percentage of material made from recyclate in procurement contracts.

**Question 1: Do you consider that legislation should be made in this area?**

The key issue relating to the recyclable content of products is the performance of the product compared with a similar product made from virgin materials. There is little doubt that where large quantities of recycled plastics are used in some products, performance suffers. It is therefore possible that where a minimum percentage of plastic is specified and used without first assuring the market of the performance of the product public bodies will be compelled to purchase less well performing goods which may ultimately cause greater consumption rather than less. Thus where any such duty is proposed the emphasis should be on the specification of performance and quality of product.

**Question 2: If so, what form should that legislation take?**

Not Applicable

**Proposal 4 – Waste Prevention Plans**

To encourage waste prevention and recycling by taking powers to enable the Scottish Government to place a duty on public bodies and businesses to have waste prevention plans.
Question 1: Do you consider that legislation should be made in this area?

See Proposal 1. Market forces will compel public bodies and businesses to reduce and recycle waste without the need for further legislation.

Question 2: If so, what form should that legislation take?

Not Applicable

Question 3: What public bodies and business should be covered?

Not Applicable

Proposal 5 – Deposit & Return

To encourage recycling and reuse by taking powers to enable the Scottish Government to introduce deposit and return systems.

Question 1: Do you consider that legislation should be made in this area?

Deposit and return systems have been in place before and are widely used in Europe and North America. There are schemes whereby an additional tax is added to certain packaging which can be redeemed at certain outlets. The majority of the public do not claim the levies back and it is left to “binners” going round the streets to pick up cans etc to claim back the money.

Alupro have run a cash for can scheme for years to encourage groups and individuals to collect aluminium cans, but this seems to have been superseded by other incentive schemes.

Other reverse vending schemes where supermarkets take back various bottles etc and the member of the public receives a discount on their shopping would encourage more re-use on suitably designed containers. In the case of plastics these may have to be made more durable and heavier than existing designs to withstand several uses.

Supermarket return schemes could also divert tonnage away from local authority schemes and potentially reduce the local recycling rates. As recycling targets rise there may be an issue where Local Authorities may not be able to reach the 60 or 70% recycling rates without some system to reward any tonnage collected through reverse vending at supermarkets to be credited to the relevant local authority. There are already incidents at some supermarkets in England & Wales where these systems are being trialled, but the retailer is not providing tonnages figures unless the local authority is rewarding them financially with recycling credits.
**Question 2: So what form should that legislation take?**

A levy or tax on packaging products which are not easily re-usable or a deposit for more durable packaging which can be refilled more easily. Essential these are the same but there is a different mechanism for collection of the tax/deposit.

**Question 3: Your views on the practicalities of such schemes in Scotland?**

These type of schemes work in many countries in Europe and individual States/Provinces in North America and Australia. There is no reason to why they would not work in Scotland.

**Proposal 6 – Mandatory waste data returns from business**

To ensure more effective planning and policy making on commercial and industrial waste by taking powers to make regulations requiring businesses to send waste data returns to SEPA.

**Question 1: Do you consider that legislation should be made in this area?**

The voluntary scheme run by SEPA last year asking businesses to return information on the amount of waste and types of bins they used turned out to be unsuccessful. Annual waste transfer notes should contain most of the information required and further information will just add to the administrative burden. SEPA already collate enough data without having to deal with more. The quarterly data returns submitted by waste management licence holders probably takes up a huge amount of time already without asking for similar information from every business.

**Question 2: If so what form should that legislation take?**

Not applicable

**Question 3: Do you have any views on the kind of businesses to be covered?**

Not applicable

**Proposal 7 – Other measures to encourage waste prevention, including action on carrier bags**

The Scottish Government would also welcome other ideas on legislation which could help to prevent waste.
Question 1: Do you consider that legislation should be made in this area?

The issue of plastic carrier bag use has now been the subject of wide debate for several years. Several of the largest retailers have already changed the way in which they offer single use plastic bags to shoppers without the need for legislation. It would also seem that the public have in general responded well to the changes by adopting different habits. This would therefore seem to be one area where voluntary measures have and will continue to make a real difference. Therefore the Council can see no need for specific legislative measures to be taken but would support further and continuing publicity on the simple measures which shoppers can take to reduce the impact of single use plastic bags.

Question 2: If so, which areas should these powers cover?

Not Applicable

Question 3: Are there any other areas, not covered by this legislation could be made to increase recycling and promote waste prevention?

Not Applicable

Highland Council
February 2009
Executive Summary
WRAP Scotland welcomes the opportunity to respond to the Climate Change (Scotland) Bill, launched by the Scottish Government.

In summary, our three key points are as follows:

- WRAP Scotland welcomes the introduction of a section dedicated to waste management in the Climate Change (Scotland) Bill. We applaud the decision of the Scottish Government to link resource efficiency and waste management with the climate change agenda.

- We would like to take this opportunity to refer back to the previous consultation responses that WRAP Scotland submitted to the Scottish Government, which can be found in the annex to this response.

- We would like to highlight that the Scottish Government might need to introduce legislation in order to ensure the creation and smooth implementation of the enforcement authority in charge of monitoring the deposit and return scheme, as stated in paragraph 58(7)(i) of the Climate Change (Scotland) Bill.

Introduction to WRAP & WRAP Scotland

1. WRAP (the Waste & Resources Action Programme) is a not-for-profit UK company providing recycling and resource efficiency programmes for Defra, the Scottish Government, the Welsh Assembly and the Northern Ireland Assembly. The organisation was formed in 2000 to implement a number of the actions set out in the Government White Paper Waste Strategy 2000.

2. WRAP works in partnership to encourage and enable businesses and consumers to be more efficient in their use of materials, and to recycle more things more often. This helps to divert waste from landfill, reduce carbon emissions and improve our environment.

3. Since its creation, WRAP’s work has contributed to reductions in greenhouse gases (CO2, but also methane), by decreasing the amount of waste going to landfill, promoting recycling, creating markets for recycled materials and encouraging waste minimisation.

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4. Consistent with the adoption of the Zero Waste Policy by the Scottish Government, WRAP has established a specific WRAP Scotland team to lead and develop dedicated programmes in Scotland to support the Government, local authorities, businesses and community sector in the delivery of increased waste prevention, recycling, reuse and composting infrastructure and services.

5. This consultation is, therefore, highly relevant to our work.

GENERAL COMMENTS ON THE CONSULTATION

6. WRAP Scotland welcomes the introduction of a section dedicated to waste management in the *Climate Change (Scotland) Bill*. We applaud the decision of the Scottish Government to link resource efficiency and waste management with the climate change agenda.

7. We would like to take this opportunity to refer back to the previous consultation responses that WRAP Scotland submitted to the Scottish Government, which can be found in the annex to this response.


9. We believe that this previous response gives a comprehensive picture of WRAP Scotland’s position on the management of waste in Scotland in respect to the areas highlighted in the proposed Climate Change (Scotland) Bill.

10. WRAP Scotland would like to confirm that any proposed Scottish deposit and return scheme, as outlined in paragraph 58(2)(b), will return the full deposit to the customer. To our knowledge there are a number of schemes around the world which only a proportion of the deposit is returned to the consumer thus allowing income to be generated to cover the costs of administering the scheme.

11. Finally, we would like to highlight that the Scottish Government might need to introduce legislation in order to ensure the creation and smooth implementation of the enforcement authority in charge of monitoring the deposit and return scheme, as stated in paragraph 58(7)(i) of the *Climate Change (Scotland) Bill*.

Submitted by:
WRAP
5 March 2009
CONSULTATION ON PROPOSALS FOR A SCOTTISH CLIMATE CHANGE BILL: A CONSULTATION DOCUMENT

Response from WRAP
(Waste and Resources Action Programme)

Executive Summary
WRAP welcomes the opportunity to respond to the Consultation on Proposals for a Scottish Climate Change Bill, launched on 29 January 2008 by the Scottish Government.

Our response focuses on the environmental benefits of recycling and waste minimisation activities, and suggests that these should be considered as important elements of the response to the challenge of climate change.

Introduction to WRAP

1. WRAP (the Waste & Resources Action Programme) is a not-for-profit UK company providing recycling and resource efficiency programmes for Defra, the Scottish Government, the Welsh Assembly and the Northern Ireland Assembly. The organisation was formed in 2000 to implement a number of the actions set out in the Government White Paper Waste Strategy 2000.2

2. WRAP works in partnership to encourage and enable businesses and consumers to be more efficient in their use of materials, and to recycle more things more often. This helps to divert waste from landfill, reduce carbon emissions and improve our environment.

3. In particular, WRAP Scotland supports the Zero Waste Agenda of the Scottish Government to create a zero-waste, resource-efficient society. To achieve this, WRAP is working in collaboration with several Scottish delivery bodies.

4. Since its creation, WRAP’s work has contributed to reductions in greenhouse gases (CO₂, but also methane), by decreasing the amount of waste (and, in particular, biodegradable waste) going to landfill, promoting recycling, creating markets for recycled materials and encouraging waste minimisation. WRAP is in the process of setting up CO₂ reduction targets for

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each of our programmes, to start from June 2008, when our next Business Plan comes into operation.

5. This consultation is, therefore, highly relevant to our work.

**General Comments**

6. WRAP welcomes the creation of a Scottish Climate Change Bill as a key commitment from the Scottish Government to tackling the effects of climate change. Also, we applaud the challenging targets proposed, and the Scottish Government’s commitment to creating and enabling new means of reducing emissions.

7. We note that the Scottish Government intends to review the National Waste Plan, as well as to consult separately on legislative measures to include in the Scottish Climate Change Bill. However, we would like to take this opportunity to comment on the measures identified in the Scottish Climate Change Bill.

8. The draft Scottish Climate Change Bill focuses greatly on energy efficiency as the main method of cutting CO₂ emissions. However, we believe that there should also be a strong focus on having a sustainable waste strategy in place, as well as resource efficiency and sustainable consumption, and production policies and measures.

9. To illustrate how important is to have a good waste strategy, it is worth noting that, according to WRAP and Defra calculations, current levels of recycling in the UK save more than 18 million tonnes of CO₂ a year through avoided primary material production – equivalent to the annual use of five million cars, or 14% of UK transport sector emissions³. In the case of Scotland, municipal waste recycling saved 1.2 million tonnes of CO₂⁴, which is equivalent to taking 395 000 cars off the road for one year in Scotland, or 18% of cars in Scotland.

10. Regarding resource efficiency, over-consumption will result in higher-than-necessary greenhouse gas emissions, regardless of the efficiency of production and transportation. Therefore, an effective climate change strategy needs to address resource efficiency and demand measures, as well as supply efficiency measures.

11. A range of new and existing techniques can be used to address non-energy and non-CO₂ greenhouse gas emissions. In particular, measures to improve resource efficiency can have a high impact on CO₂ and non-CO₂ emissions savings. We have highlighted three of these below:

- Waste minimisation
- Recycling; and
- Food waste minimisation.

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Waste minimisation

12. The top rung of the waste hierarchy is waste minimisation or waste reduction, where actions are taken to stop waste from arising in the first place. Actions during a product’s life cycle can result in greenhouse gas emissions at the point of extraction, processing, transportation, manufacture, use and disposal. If a product is used only once or is used inefficiently, the energy and greenhouse gas emissions from the preceding and following steps will be sub-optimal.

13. Given that, on average, one tonne of finished product requires the extraction from the ground of around ten tonnes of material\(^5\), the material savings to be made through waste minimisation are obvious. However, what is perhaps less obvious is the embedded energy associated with finished products – in other words, the energy it took to produce them – and the potential that waste minimisation has to save this embedded energy.

14. As an example, the manufacture of one tonne of primary aluminium requires 55 gigajoules (15,400 kilowatt hours) of energy\(^6\). Now if, through waste minimisation activities (such as eco-design), the lifetime of an aluminium product could be doubled, this would cut the waste of embedded energy by 50% over the lifetime of the new, longer-life product.

15. The sustainable design and use of products can provide significant benefits across all sectors of society. The manner and rate of resource consumption can be addressed through Government initiatives (e.g. the phasing-out of conventional light bulbs), legislation and taxation policies.

16. WRAP has worked with 112 local authorities in England and Scotland to provide over 1.6 million home composting bins since 2004. As a result, more than one-third of English and Scottish households are now composting at home, thanks in part to WRAP support. And each person who composts at home saves not only the embedded energy in the compost they would have otherwise had to buy commercially, but also avoids the emissions of methane (a greenhouse gas 23 times more powerful than CO\(_2\)) that their organic waste would have generated in a landfill site.

Recycling

17. In May 2006, WRAP published *Environmental Benefits of Recycling\(^7\)*, a specialist review of international studies which shows how increased recycling is helping to tackle climate change. The report shows that in the vast majority

\(^5\) See, for example, The Strategy for Sustainable Farming and Food: Facing the Future (Defra, 2002), page 11 (in relation to food production).


of cases, the recycling of materials has greater environmental benefits than incineration or landfill.

18. As mentioned in paragraph 9, the current recycling figures for Scotland are equivalent to taking 18% of cars off the road in Scotland. In the case of the UK, the current rates of recycling these materials saves 18 million tonnes of CO₂-equivalent greenhouse gases per year⁸, which equates to taking 5 million cars off UK roads⁹.

19. The message of this 2006 study is unequivocal. Recycling is good for the environment, saves energy, reduces raw material extraction and combats climate change. It has a vital role to play as waste and resource strategies are reviewed to meet the challenges posed by European Directives, as well as in moving the UK towards more sustainable patterns of consumption and production, and in combating climate change by reducing greenhouse gas emissions.

20. As recycling rates increase, the CO₂ savings will also increase as a result. According to a recent Defra report, every UK household could reduce CO₂ emissions by 540 kg per annum through increased recycling¹⁰. WRAP’s work on increasing the number of committed recyclers should help households to move towards this target.

Food Waste Minimisation

21. Savings can also come from avoided food waste, reduced energy consumption and reduced demand for raw materials. These savings are typically higher than recovering energy through incineration or other means, as they conserve the embedded energy (and greenhouse gases) represented by the materials.

22. Regarding food waste, WRAP estimates that the 6.7 million tonnes of food waste produced by householders in the UK every year is responsible for 30 million tonnes of CO₂ equivalent over its life¹¹. Even assuming that half of this food waste is inedible (e.g. bones), the potential exists to avoid 15 million tonnes of CO₂ equivalent.

23. In Scotland, WRAP’s internal research¹² estimates that around 650,000 tonnes of food waste are produced by Scottish households every year. This is the equivalent of 2.9 million tonnes of CO₂ emissions a year. WRAP’s Love

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¹⁰ DEFRA (2008) A Framework For Pro-environmentalBehaviours


¹² WRAP estimate based on 19% food waste calculated for England.
Food Hate Waste campaign\textsuperscript{13} highlights the environmental costs of the food wasted in Scotland.

24. Reducing this wastage, as well as food wasted in commerce and industry, can have a significant impact on emissions of nitrous oxides and methane, the two main greenhouse gases other than CO\textsubscript{2}.

25. Eunomia’s report \textit{Dealing with Food Waste in the UK}\textsuperscript{14} stresses that the best environmental option is to have a separate collection of food waste coupled with anaerobic digestion. As well as producing energy, this option contributes to reducing the tonnes of waste that go to landfill.

\textbf{Conclusion}

26. There is a danger that when discussing how to tackle climate change, the most obvious areas, such as energy efficiency measures, become the focus of the discussion.

27. Resource efficiency measures can also contribute directly to the mitigation of the UK’s greenhouse gas emissions. Research has shown that activities such as recycling, reduction of food waste and waste minimisation have a clear and direct impact on the total emission of CO\textsubscript{2}, methane and other gases that contribute to climate change.

28. We would therefore urge the Scottish Government to ensure that the Scottish Climate Change Bill’s remit is wide enough to consider the wider resource efficiency and sustainable consumption and production agendas in taking its work forwards.

\textbf{Submitted by:}
Policy Officer
WRAP
www.wrap.org.uk
25 April 2008

\textsuperscript{13} \url{http://www.wasteawarelovefood.org.uk/index.asp}
\textsuperscript{14} Eunomia (2007) \textit{Dealing with Food Waste in the UK}
CONSULTATION ON POTENTIAL LEGISLATIVE MEASURES TO IMPLEMENT ZERO WASTE

Response from WRAP

(Waste and Resources Action Programme)

Executive Summary
WRAP welcomes the opportunity to respond to the Consultation Paper on Potential Legislative Measures to Implement Zero Waste, launched on 25 July 2008 by the Scottish Government.

In summary, our three key points are as follows:

- WRAP welcomes the efforts that the Scottish Government is making to move towards a Zero Waste society and to implement the necessary measures to achieve this goal.

- WRAP operates at the top end of the waste hierarchy, which gives priority to reducing waste at source, reusing products and recycling materials.

- WRAP believes that the decision to introduce legislation in the seven areas highlighted is for the Scottish Government to decide. However, WRAP strongly encourages making every single effort to reduce the waste our societies produce, recycle as much as possible and minimise our greenhouse gas emissions.

Introduction to WRAP

29. WRAP (the Waste & Resources Action Programme) is a not-for-profit UK company providing recycling and resource efficiency programmes for Defra, the Scottish Government, the Welsh Assembly and the Northern Ireland Assembly. The organisation was formed in 2000 to implement a number of the actions set out in the Government White Paper Waste Strategy 2000.\(^{15}\)

30. WRAP works in partnership to encourage and enable businesses and consumers to be more efficient in their use of materials, and to recycle more things more often. This helps to divert waste from landfill, reduce carbon emissions and improve our environment.

31. In particular, WRAP Scotland supports the Zero Waste Agenda of the Scottish Government to create a zero-waste, resource-efficient society. To achieve this, WRAP is working in collaboration with several Scottish delivery bodies.

32. WRAP operates at the top end of the waste hierarchy, which gives priority to reducing waste at source, reusing products and recycling materials. One of the major programmes within our current business plan aims to address waste reduction issues as they arise in the food sector. WRAP introduced the Courtauld Commitment in July 2005 as a means of securing the commitment of major retailers to concrete actions to address packaging waste reduction.

33. Since its creation, WRAP’s work has contributed to reductions in greenhouse gases (CO₂, but also methane), by decreasing the amount of waste going to landfill, promoting recycling, creating markets for recycled materials and encouraging waste minimisation.

34. This consultation is, therefore, highly relevant to our work.

General Comments

35. WRAP welcomes the efforts that the Scottish Government is making to move towards a Zero Waste society and to implement the necessary measures to achieve this goal. We applaud the challenging measures proposed as a key commitment from the Scottish Government to tackling some of the causes of climate change.

36. WRAP notes that a Zero Waste society does not only emphasise the reduction of the use and consumption of resources. Actions during a product’s life cycle can result in greenhouse gas emissions at the points of extraction, processing, transportation, manufacture, use and disposal. If a product is used only once or is used inefficiently, the energy and greenhouse gas emissions from the preceding and following steps will be sub-optimal.

37. Given that, on average, one tonne of finished product requires the extraction from the ground of around ten tonnes of material ¹⁶, the material savings to be made through waste minimisation are obvious. However, what is perhaps less obvious is the embedded energy associated with finished products – in other words, the energy it took to produce them – and the potential that waste minimisation has to save this embedded energy.

38. As an example, the manufacture of one tonne of primary aluminium requires 55 gigajoules (15,400 kilowatt hours) of energy ¹⁷. Now if, through waste minimisation activities (such as eco-design), the lifetime of an aluminium product could be doubled, this would cut the waste of embedded energy by 50% over the lifetime of the new, longer-life product.

¹⁶ See, for example, The Strategy for Sustainable Farming and Food: Facing the Future (Defra, 2002), page 11 (in relation to food production).
PROPOSAL 1: Duties on Public Bodies and Business to Provide Recycling Facilities

Question 1.1 Do you consider that legislation should be made in this area?

39. WRAP believes that the decision to introduce legislation in this area is for the Scottish Government to decide. However, WRAP strongly encourages small and large businesses to have recycling schemes and to have separate materials collections on their premises, since it has been proven to have many benefits, not only for the environment, but also for the reputation of the businesses.

40. WRAP’s SME Recycling Feasibility Trials Evaluation Report concluded that 97% of those who work for an employer that started a recycling scheme on its premises are satisfied with the scheme mainly because it is easy to maintain and implement. Additionally, over a third of businesses involved said recycling had improved their reputation within the local community. Furthermore, recycling was perceived as a cost-effective method of dealing with the business waste, simply because it was often cheaper when compared with general waste disposal. In many cases, businesses were able to save money on services like paper recycling. Finally, 36% explained that another benefit of recycling at work was the general feel good factor from doing something useful and worthwhile.

1.2. If so, what form should that legislation take?

41. WRAP has no views on this issue.

PROPOSAL 2: Packaging

2. 1. Do you consider that legislation should be made in this area?

42. WRAP has no opinion on the need to introduce legislation in the field of packaging in order to encourage packaging waste prevention. However, WRAP has played a major role in introducing the Courtauld Commitment, a voluntary agreement between WRAP and major UK grocery organisations, aimed at working towards creating less packaging. The Courtauld Commitment is a powerful vehicle for change, and in 2008, has led to zero growth in packaging despite increases in sales and population.

43. As regards packaging, we believe that there are significant opportunities to promote the use of packaging technology as a means of achieving further packaging reduction whilst, at the same time, helping the public to consume more of the food that they buy, thus wasting less of it.

http://www.wrap.org.uk/downloads/SME002_-_final_evaluation_report_-_web_version_-_11_03_08.603a0c3d.5154.pdf
2. 2. If so, what form should that legislation take?

44. WRAP has no views on this issue.

**PROPOSAL 3: Specifying Recyclate**

3. 1. Do you consider that legislation should be made in this area?

45. WRAP supports any scheme that provides reliable and up-to-date information to the consumer, so that he or she is empowered to make informed decisions. Consequently, WRAP would welcome the proposals to require the specification of a minimum percentage of recyclate material.

46. WRAP is currently working, under the auspices of the Courtauld Commitment, in order to develop consistent labelling that informs consumers how widely packaging items are recycled.

3. 2. If so, what form should that legislation take?

47. WRAP has no views on this issue.

**PROPOSAL 4: Waste Prevention Plans**

4. 1. Do you consider that legislation should be made in this area?

48. WRAP strongly believes in working on the top of the waste hierarchy, waste minimisation or waste reduction, where actions are taken to stop waste from arising in the first place. Consequently, WRAP welcomes any waste reduction measures that implement changes in the way our society creates waste.

49. For example, the sustainable design and use of products can provide significant benefits across all sectors of society. The manner and rate of resource consumption can be addressed through Government initiatives (e.g. the phasing-out of conventional light bulbs), legislation and taxation policies.

50. However, we consider that it is for the Scottish Government to decide whether making legislation is the most effective way to achieve the desired outcomes.

4. 2. If so, what form should that legislation take?

51. WRAP has no views on this issue.

4. 3. What public bodies and businesses should be covered?

52. WRAP has no views on this issue.
PROPOSAL 5: Deposit and Return
5.1. Do you consider that legislation should be made in this area?

53. WRAP believes that it is for the Scottish Government to decide. WRAP’s\textsuperscript{19} report on refillable packaging and refill systems concludes that such systems have the potential to:
   - Divert a significant quantity of discarded packaging from landfill each year;
   - Provide significant savings for the retailer; and
   - Provide added value to the customer.

54. Refills are well established in the UK for stationery products such as pens, ink cartridges and toners. Some household cleaners and laundry products are also available in refills.

55. However, there is a significant opportunity to expand the refill product range in the UK, provided that social attitudes can be changed with good point-of-sale literature/advertising. Many food and non-food products in the UK could utilise a refill system if suitable pack technologies were available.

5.2. If so, what form should that legislation take?

56. WRAP has no views on this issue.

5.3. Your views on the practicalities of such schemes in Scotland?

57. WRAP has no views on this issue.

PROPOSAL 6: Mandatory Waste Data Returns from Business

6.1. Do you consider that legislation should be made in this area?

58. The availability of detailed data would be welcomed, but we believe that it is for the Scottish Government to decide.

6.2. If so, what form should that legislation take?

59. WRAP has no views on this issue.

6.3. Do you have any views on the kind of businesses to be covered?

60. WRAP has no views on this issue.

\textsuperscript{19} WRAP (2008) Potential Refill Solutions for the Food and Non-Food Retail Sectors – Feasibility Study \url{http://www.wrap.org.uk/downloads/Refills_06_food_and_non_food_Report.2db5be7.5518.pdf}
PROPOSAL 7: Other Measures to Encourage Waste Prevention, Including Action on Single-Use Carrier Bags

7. 1. Do you consider that legislation should be made in this area?

61. WRAP believes that there are many measures that can be introduced to encourage waste prevention. For example, promote the repair of electronic equipment or support the use of reusable nappies.

62. Regarding carrier bags, we believe that it is for the Scottish Government to decide if legislation should be introduced. WRAP would like to see a substantial reduction in the environmental impact of free single-use carrier bags. Recent developments show that there is now clear momentum from retailers, although more clearly work needs to be done.

63. In February 2007, WRAP, the UK Governments and 21 of the UK’s leading high-street and grocery retailers reached an agreement to reduce the environmental impact of carrier bags by 25% by the end of 2008.

64. One year on, interim results indicate a 14% reduction in the environmental impact of carrier bags as measured by the use of virgin plastic. The total number of bags used by the signatories was reduced by one billion bags from 13.4 billion to 12.4 billion. However, performance had been very variable, with retailers reporting activity ranging from a 70% reduction in virgin plastic use to an increase of 22% in one case.

65. The carrier bag agreement between retailers and Government highlights valuable examples of ways forward, such as the maximum amount of reuse for carrier bags, the widespread adoption of bags for life and the use of recycled content in bags.

7. 2. If so, which areas should these powers cover?

66. WRAP has no views on this issue.

7. 3. Are there any other areas, not covered by this consultation, where legislation could be made to increase recycling and promote waste prevention?

20 Asda, Boots, Co-operative Group, Debenhams, DSG Retail Ltd (Dixons and Currys), Early Learning Centre, E H Booths & Co Ltd, Halfords plc, Home Retail Group, John Lewis Partnership (John Lewis and Waitrose), Marks & Spencer, The Musgrave Group plc, Next Group plc, Nisa Todays, Primark Stores Ltd, Sainsbury's Supermarkets Ltd, Somerfield Group, Spar (UK) Ltd, Tesco, Travis Perkins (Wickes), Wm Morrison Supermarkets plc

21 WRAP (2007) Joint Statement on Reducing the Environmental Impact of Carrier Bags
http://www.wrap.org.uk/retail/about_us/carrier_bags.html
WRAP (2008) Carrier Bag Statement
67. There are many areas where more could be done. WRAP would be happy to support the Scottish Government with any measure that is taken forward.

WRAP
9 October 2008
RURAL AFFAIRS AND ENVIRONMENT COMMITTEE

EXTRACT FROM THE MINUTES

5th Meeting, 2009 (Session 3)

Wednesday 11 February 2009

Present:

Rhoda Grant (Committee Substitute)  Liam McArthur
Alasdair Morgan                      Elaine Murray
Peter Peacock                      John Scott (Deputy Convener)
Bill Wilson

Apologies were received from Roseanna Cunningham (Convener), Karen Gillon.

The meeting opened at 10.01 am.

Climate Change (Scotland) Bill: The Committee took evidence on the Bill at Stage 1, in a roundtable discussion, from—

Stuart Goodall, Chief Executive, Confederation of Forest Industries;

Allan Mackenzie, Representative of Forestry Commission Trade Unions;

Dr Calum Macdonald, Forestry Commissioner and Chairman of the National Committee for Scotland, Forestry Commission Scotland;

Lisa Duggan, Landscapes Manager, Loch Lomond and the Trossachs National Park Authority;

Angus Yanwood, Convener of the Woodland Task Force, Scottish Environment LINK;

Janice Cassidy, Policy Officer, Scottish Rural Property and Business Association;

Gavin Ellis, Director, Scottish Tourism Forum;

Michael Russell MSP, Minister for Environment, Scottish Government, Anne Cairns, Solicitor, Rural Affairs Division, Scottish Government, Jo O'Hara, Head of the Natural Heritage Management Team, Scottish Government, Bob McIntosh, Director, Forestry Commission Scotland, and David Henderson-Howat, Policy Adviser, Forestry Commission Scotland.

Scottish Environment LINK agreed to provide the Committee with supplementary information in relation to the section of the Bill on muirburn. In addition, the Minister agreed to provide supplementary written information in
relation to the Scottish Government's proposal to lease Forestry Commission Scotland land.

**Climate Change (Scotland) Bill (in private):** The Committee reviewed the evidence heard earlier in the meeting.
SUBMISSION FROM CONFOR

ConFor (Confederation of Forest Industries) represents forestry and wood using businesses from nurseries and growers to wood-processing end-users. It has by far the largest membership of any representative body in the sector and works closely with members who own and/or manage the majority of Scotland’s actively managed non-public forests and who process the large majority of wood from those forests.

Delivering a low carbon economy

In the context of the current consultation on the Climate Change Bill it is important to recognise that the forestry and wood-using sector is well positioned to help deliver the Bill’s aim of developing a low carbon economy in Scotland. The sector contributes nearly £1 billion a year to Scotland’s economy, provides employment for 20,000, in particular in rural areas, and has capacity for growth.

The sector is one of the few in Scotland that can boast that the more it expands the greater carbon benefit it provides.

This benefit is realised through planting trees in the right places, and using wood to substitute for more energy-intensive materials. Unutilised wood or solid wood at the end of its useful life can also be used to generate renewable energy.

In order to inform its response to the consultation ConFor organised a number of meetings for businesses across the sector to be briefed on the consultation and to feed into ConFor’s response. Over 100 people attended, and we have received numerous comments that have been used to inform this paper. We therefore trust that this response will be given due weight when being considered by the Committee.

Climate Change (Scotland Bill) – proposals on forestry

1. Do you envisage that the Forestry Commission could play a greater role than it does at present in reducing greenhouse gas emissions or in alleviating or responding to the effects of climate change? If so, what suggestions would you make?

As part of the Scottish forestry and wood-using sector the Forestry Commission (FC) is already playing a valuable role in responding to the challenges of climate change. More can be achieved through a greater focus on partnership activity with the private sector, in part because these businesses can deliver outputs more cost effectively.

1 cebr report for the Forestry Commission and ConFor (2006)
As an example, the FC is currently raising £15m a year to deliver 2,000 hectares of planting (£7.5m per/1000 ha). £15m in grants to the private sector would deliver 5,000 ha (£3m per/1000 ha).

The FC should support and help deliver a more coherent approach to climate change mitigation. Current activities by FC focus overwhelmingly on supporting the development of the wood fuel market, and do not do enough to promote the use of wood in construction where the carbon and employment benefits are greater.

The public sector should take a lead in promoting the greater use of wood in construction, in particular through its use in public buildings and publicly-funded house building. The FC should do more to recognise and promote the benefits of a hierarchy of wood use that sees wood fuel make its most appropriate contribution to a low-carbon economy in Scotland.

Through the FC’s role in research, it has the capacity to do more to support silvicultural and tree breeding improvements that will make forestry more profitable and increase its carbon impact, as well as supporting the greater use of wood products.

2. Do you consider that either of the Government’s consultation proposals (on entering into joint ventures and on leasing cutting rights) would enhance the Forestry Commission’s role in dealing with greenhouse gas emissions and climate change?

The FC is already able to undertake renewable energy projects on its land and therefore the big opportunity from both joint ventures and leasing (or an alternative mechanism) would be the opportunity to raise additional money - in the case of leasing by realising, upfront, the value of the estate. This money could be used to deliver increased new planting through the private sector.

It is likely that any forest considered for leasing (or an alternative) would be composed of productive softwoods. While the private sector believes it can manage such forests more efficiently, and against the same standards as the FC, this would make only a minor difference to their role in carbon sequestration.

ConFor would wish to raise one important point regarding renewable energy projects on forest land, in particular wind farms. There is potential for a significant loss of productive forest with consequent negative carbon impacts. ConFor has pressed for action to minimise forest loss and to ensure that compensatory planting takes place.

3. Do you envisage any implications for nature conservation, biodiversity or recreational interests from the two proposals and, if so, what are they?

There may be impacts where a renewable project joint venture results in a loss of forest area. Productive softwoods provide valuable biodiversity benefits that are rarely properly recognised.
If leasing of commercial forests owned by FC was to take place we would expect little or no impact on nature conservation, biodiversity or recreation. It is expected that any areas to be leased would have no significant recreational use such as mountain biking or visitor centres, and that the current level of access would remain as provided for under legislation. The Land Reform Act applies equally to private and publicly owned land.

The leased forests would be productive softwood forests and therefore would be managed in that manner by a lease-holder. The same standards of management would apply – the Government’s UK Forestry Standard, and most likely the independent certification standard UKWAS that the private sector, FC, environmental and access groups all endorse.

Questions have been raised about lost potential to secure new and additional biodiversity benefits from these forests or on the cost to groups, such as car rally organisers, of exceptional use of these forests. It is important to note that the FC does not provide public goods for free. These are paid for by public subsidy to the FC. The private sector, including forestry businesses and organisations such as RSPB and Woodland Trust, is able to provide additional benefits if public subsidy is available.

4. Do you believe there are any implications for rural employment from the two proposals and, if so, what are they?

If the joint venture proposal went ahead and this raised additional funding which could be used in forestry then this will have a positive impact on jobs overall.

Leasing of 100,000 ha, if it was undertaken, would result in some displacement of employment between the public and private sectors.

If, and there are currently no guarantees, money raised from leasing and joint ventures was made available to deliver increased new planting then this would stimulate additional employment – see answer to question 5 below.

5. Do you have any other views on these two proposals from the Government?

The proposal to lease forests contains insufficient information on which to determine its impact on Scotland’s forestry and wood-using businesses. ConFor would wish to reiterate the central message from its response to the consultation, that:

- there is benefit in delivering increased new planting;
- this could be delivered by a variety of mechanisms and requires improvements to the SRDP;
- ConFor is keen to utilise both its and its membership’s expertise in developing a way forward that addresses legitimate concerns raised.
In terms of delivering new planting we would note that good information is available on where and how best to establish new forests to maximise carbon sequestration while securing other economic and environmental benefits. Current sustainable management standards provide a firm basis for Scotland to really begin to achieve a target of 25% forest cover.

ConFor recognises the benefit of delivering this within the context of a broad land-use policy. However, there is land currently available and planting a very small part of this now while developing a policy to guide future activity is vital to help secure jobs in the sector at a time of economic downturn.

Internationally agreed climate change targets focus on 2050. If Scotland planted 15,000 hectares a year with 9,000 ha being productive softwood forests then it would deliver the Government’s target of 25% forest cover by 2050 and provide significant, additional carbon benefits - up to 33.5 MtC.

**TABLE:** Estimated carbon sequestration for additional productive and broadleaf forest under new planting regimes of 10,000 ha/yr and 15,000 ha/yr from 2010 to 2050

<table>
<thead>
<tr>
<th>Planting regime over period 2010-2050 inc.</th>
<th>Productive softwoods</th>
<th>Broadleaves</th>
<th>Total</th>
<th>Total Est. carbon sequestration to 2050 (MtC)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>New planting (ha/yr)</td>
<td>Carbon sequestration (MtC)</td>
<td>New planting (ha/yr)</td>
<td>Carbon sequestration (MtC)</td>
<td>New planting (ha/yr)</td>
</tr>
<tr>
<td>10,000 ha/yr</td>
<td>6000</td>
<td>15.5</td>
<td>4000</td>
<td>6.9</td>
</tr>
<tr>
<td>15,000 ha/yr</td>
<td>9000</td>
<td>23.2</td>
<td>6000</td>
<td>10.3</td>
</tr>
</tbody>
</table>

**NB** On a sustainably managed basis, at 10,000 ha/yr, the total additional forest would continue to sequester 1.1 MtC/yr after 2050, and 1.6 MtC/yr on a 15,000 ha/yr planting regime.

Such a planting programme would secure significant jobs and investment benefits. For productive softwood forests this is estimated at around 180 new jobs in planting and up to 900 for harvesting, transport and wood processing. Current investment in the sector is running at £100m a year and this would increase significantly.

**Increased use of Scottish wood**

Wood products are low energy materials that can save significant amounts of carbon when substituted for other building materials. Research shows that average savings of 0.8 tCO2e can be achieved by replacing 1 m3 of concrete/bloc/bricks with 1 m3 of sawn timber2. Long-term wood products also provide a benefit through their potential storage capacity, estimated at 0.9 tCO2 in 1 m3 of wood3.

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3 Dr A Fruhwald, Hamburg University in CEI-Bois (2006) Tackle Climate Change: Use Wood
ConFor calculates that over the period to 2050 the additional productive forest area achieved from planting 9,000 ha/yr of productive softwoods could provide, based on current proportions, an additional 33.5M m$^3$ timber available to the construction market. This then gives the potential for substitution of materials delivering emissions savings of 27mtCO$_2$. This would be a tremendous resource for Scotland.

Wood can also be used to generate renewable energy. ConFor has campaigned for this to focus on wood that currently has no market, and to promote its use locally and in generating heat. It has also noted that carbon and jobs benefits are higher in solid wood products, not least because these can be used and re-used, and then be made available to generate energy at the end of their useful life. There is a danger that current and evolving public policy could provide such large incentives to burn wood that jobs are lost and the carbon emissions potential of wood is not fully realised.

*Scottish broadleaves and softwoods*

ConFor represents people who own and work with broadleaf woods. We support efforts to manage broadleaf woods sustainably and to develop markets for hardwoods. It is important, however, when talking about climate change mitigation, jobs and investment to recognise the scale and potential of Scotland’s diverse forest and wood-using businesses.

Including Scots Pine, Scotland produces over 6 million tonnes of softwood each year, while hardwood production, including non-native species, is just over 400,000 tonnes for the whole of the UK with the majority of this estimated to be in England.

Scotland is internationally competitive in growing softwoods and producing wood products that have a large market and where there is scope for significant growth. The businesses in the sector are mainly Scottish owned or headquartered.

The sector is unusual in that it combines successful, modern manufacturing with land management that is governed by environmental standards that are second to none.

The sector suffers from an image hang-over from the planting of last century, driven by the FC which did not deliver the multi-purpose forests that are being established today. Those single-species, forest blocks are now being restructured to improve their biodiversity and visual impact. Using lessons learnt from the past there is scope now for a modern forestry and wood-using sector that all Scotland can be proud of.

Unfortunately Scotland’s broadleaf woods are largely unmanaged and provide limited amounts of timber for wood fuel and for small businesses that produce furniture, flooring, etc. The potential for use in construction is limited by the lack of quality trees and the established, highly competitive operations on mainland Europe that dominate the hardwood market. This will not change in
the near future as hardwoods take up to 150 years to grow (against 40 for softwoods).

There is scope for development of the broadleaved resource and of hardwood markets, but by far the largest opportunity for sustainable growth and climate change mitigation sits with the softwood resource, and public policy and its delivery must reflect that.

Stuart Goodall
ConFor
29 January 2009
SUBMISSION FROM FORESTRY COMMISSION TRADE UNION

The Forestry Commission Trade Unions (FCTU) have submitted a full response to the Consultation on the Scottish Climate Change Bill, but we aim in this response to focus on the five questions posed in the Questions for Consultees from the Committee and have answered them in the order set out.

Question 1. Greater role for Forestry Commission Scotland (FCS)

FCS has built up a significant capital asset from the funds allocated by Government over its 90 year history and it has already started to use this asset to contribute to Climate Change planting targets. There is scope to do more on this. The current programme known as ‘Repositioning’ is to raise £15m per year over the three years of the Public Expenditure round from 2007-8 to 2009-10. This is focussed on areas of forest which contribute least to the aims of the 2006 Scottish Forestry Strategy (SFS). The money has then been used to acquire new planting land in areas closer to communities or where planting can contribute to the 10,000ha target for Scotland.

The key aspect to selection of these sites is that it considers all three of the legs of sustainability – economic, social and environmental. It is only when a scoring system shows low values in all of these, that they are considered for sale. The impact on staff is minimal as sales are dispersed around Scotland and there is no element of flooding a market. At the moment, the investment market in woodland is good and prices realised meet expectations.

Question 2. Effects of Joint Ventures and Leasing on FCS role in climate change.

Joint ventures have been widely accepted as allowing added value to the role of FCS. While they can only lease land for non-forestry purposes at present, this provision in the bill will generate greater opportunities for FCS to facilitate developments, particularly in wind and hydro power generation. Initial survey of the FCS estate has shown great potential and income from this should flow in the period about 5-10 years from now.

Leasing as presented by the Consultation document has been widely condemned by the public and is opposed very strongly by the Trade Unions. It considers only the economic aspect of sustainability and fails to recognise the added value of FCS staff in areas where the environment has less natural attractions for environment and tourism. Considerable staff resource and funding has been put into remote rural areas such as the Galloway Forest Park by such ventures as the 7Stanes Mountain Biking facilities.

Question 3 Implications for Nature Conservation or biodiversity.

Joint ventures could release funds for additional planting and if this is the right trees in the right place, as set out in the SFS, could have great benefits for the environment, with protection of peatlands and other Priority Habitat Types currently under threat from over-grazing, opportunities for expansion of native
woodlands and increased development of the woodland environment which has been so successful in allowing parts of Perthshire to be badged as ‘Big Tree Country’

With respect to tourism, the success of the Joint Venture between FCS and the Caravan and Camping Club GB in creating ‘Forest Holidays’ has shown the potential for this provision to be added to future Scottish legislation not linked purely to Climate Change.

Question 4 Implications for Rural Employment.

There is provision under the National Forest Land Scheme (NFLS) for communities to buy areas of FCS land, but this means many small communities cannot consider this option due to the large sums of capital they would have to raise. A better option would be to allow them to enter into Joint Ventures with FCS to lease the land or work in partnership with FCS to generate local employment opportunities. Heat generation from woodfuel is a particularly good example, with the necessity to increase the use of local sources of fuel and Combined Heat and Power schemes. The reduction in transport on fragile rural roads would be of particular benefit. Leasing as proposed at present will take this opportunity away from some of the most remote communities as the private manager is unlikely to have the same public benefit priorities as FCS.

Question 5 Other views.

We have set out our views above and welcome the opportunity to subject these to questioning by the Committee and expand on the detail on 11th February.

Forestry Commission Trade Union
4 February 2009
1) Do you envisage that the Forestry Commission could play a greater role than it does at present in reducing greenhouse gas emissions or in alleviating or responding to the effects of climate change? If so, what suggestions would you make?

As a land manager, producer and transporter of forestry products as well as a regulatory authority and producer of best practice guidelines there are a number of areas where the Forestry Commission could play a greater role. These include:

- Making greater use of existing landholdings for renewable energy generation, as proposed.
- Developing markets for wood products.

There is a need to create both local and national markets for timber products. Localised demand will encourage investment and better management of our woodland resource and limit the need for the transportation of products across the country. There needs to be a significant commitment to using more timber products in house building (including insulation products) and further assistance to put in biomass boilers in homes etc. Without development of the demand side we will have a lot of forests (that do help mitigate climate change) but no end markets for the raw material.

- Encouraging more land into forestry

More planting could be encouraged if it were allowed on land that receives Single Farm Payment. This would increase planting and would need no additional government investment.

Early indications suggest that the rate of take up of forestry options under Rural Priorities would be increased if the rates of payment were more attractive.

Woodlands in and around town (WIAT) should continue to be supported as they not only contribute to mitigating climate change but also help to absorb localised pollution and limit leisure travel by providing a full range of recreation facilities within easy travelling distance of major centres of population.

- Developing innovation and best practice in forest roads and timber transport

More sustainable forms of timber transport should be developed to reduce road haulage, specifically options and potential subsidies for rail and water transport should be investigated.
With increasing intensity of rainfall, greater encouragement should be given to non-standard engineering solutions for forest roads. Improved designs must reflect the changing climate and aim to minimise erosion and land slippage.

2) Do you consider that either of the Government’s consultation proposals (on entering into joint venture and on leasing cutting rights) would enhance the Forestry Commission’s role in dealing with greenhouse gas emissions and climate change?

LLTTNPA supports the proposal to allow the Forestry Commissioners to enter into joint ventures to develop renewable sources of energy on the national forest estate. This appears, in principle, to be a practical way for the Forestry Commissioners to increase the profitability of the national forest estate while contributing to the mitigation of climate change.

The NPA supports joint ventures between FCS and local communities which provide opportunities for the development of sustainable and affordable community renewable energy schemes. The development of sustainable and affordable energy generation is particularly important for those rural communities, off mains supply, that remain heavily reliant on fossil fuels for heating. This will help to engage and empower communities, creating local solutions for some of the issues of climate change. Any income generated from joint ventures with developers and local communities should be used directly to fund further measures to mitigate climate change.

Within the National Park, medium (generating between 1MW and 20MW with multiple turbines) and small-scale (generating below 1MW) wind renewable energy projects will be supported where, the siting, design, access and scale of the proposal does not create a detrimental impact on the landscape, natural or cultural heritage or has any adverse impacts on local communities or the rural road network. Large-scale wind renewable projects are unlikely to be acceptable. Within the National Park boundary, small-scale (generating less than 1MW) are likely to be acceptable where there is no significant environmental or landscape impact. Energy generation from biomass heating or combined heat and power combustion plants are likely to be acceptable in the National Park where the siting, scale and design, future support infrastructure and production of raw materials, do not have adverse impacts on the natural or cultural heritage of the area or on local communities.

There is an urgent need to undertake a feasibility study on the national forest estate to assess the potential for income generation from renewable energy schemes taking into consideration development constraints. If the potential is sufficient to generate adequate funding for FCS to make a significant contribution to climate change mitigation, leasing of land may not be necessary.
3) Do you envisage any implications for nature conservation, biodiversity or recreational interests from the two proposals and, if so, what are they?

We would draw your attention to the potential impact on bats, a European Protected Species, of siting wind renewable projects within forestry. Early indications suggest that bats may be particularly vulnerable to the localised disturbance created by turbines and this requires further research before specific proposals are developed.

Other key species which may be impacted upon by micro-renewables and associated infrastructure such as tracks, borrow pits etc include red squirrels, otter, water vole, birds, such as raptors and some fish species etc. Guidance would need to be developed to minimise impacts on the natural heritage, prior to this policy being progressed.

The Forestry Commission and Forest Enterprise work to best practice guidelines and aim to combine economic forestry with biodiversity (this is a duty for them under the Nature Conservation (Scotland) Act 2004), minimising landscape impact, community involvement and access and recreation. It is difficult to see how commercial operators, to whom the biodiversity duty does not apply, will be able to maintain this balance and continue to deliver to high standards.

Whilst land is unlikely to be removed from access rights, the provision of well managed, quality access provision; which is important for a visitor destination such as the National Park, is likely to deteriorate if large areas of the National Forest Estate are leased out.

The siting and scale of micro-renewables can have significant effects on landscape and biodiversity. Cumulative effects can combine to magnify these impacts. In dealing with a single landowner (the Forestry Commission) planning authorities will have greater ability to seek plans and appraisals which can address the potential for cumulative impact. This will become more complex if multiple interested parties come forward individually and potentially in competition.

4) Do you believe there are any implications for rural employment from the two proposals and, if so what are they?

The majority of woodland management is mechanised and involves time limited amounts of skilled/unskilled labour on individual sites. Consequently the majority of private woodland managers subcontract works and an increasing number use management firms to manage contracts and apply for state aid and subsidies where appropriate.
As such leasing arrangements are unlikely to have significant long term impacts on the number of permanent rural jobs in forestry. Rural jobs might be increased if the number of local markets for wood produce were increased as more jobs could be created in the processing and finishing of products.
Micro-renewables are creating new jobs in manufacture and installation; however these are unlikely to be rural as staff are concentrated in manufacturing areas.

5) Do you have any other views on these two proposals from the Government?

The consultation document does not provide enough detail on the proposed offer of leasing and cutting rights over areas of the National Forest Estate to the private sector to fully comment on this proposal. However, we have concerns that the basic principal of selling cutting rights or leasing sections of publicly owned land undermines the concept of a National Forest Estate and may, in the long-term, undermine its economic viability. Whilst leasing may release capital for the delivery of climate change objectives, the disposal of 25% of the most profitable estates may limit opportunities for FCS to cross subsidise work on their less profitable estates. It may also limit opportunities for savings arising from economies of scale.

As a theoretical argument, if the Forestry Commissioners wish to release capital then a case could be made for a disposal policy. This should look across the range of assets, rather than simply at the most profitable and might include small scale disposals to communities or investors. Income could then be used for future acquisition or planting schemes.

However, the NPA remains concerned that either leasing or disposal could undermine the concept of an economically viable, publicly valued National Forest Estate.

The NPA strongly supports the current consultation arrangements on FE Forest Design Plans. All current FDP’s have been subject to stakeholder engagement, including the NPA. FE has a strong policy commitment to improving the environmental value of the National Forest Estate, providing for recreation and conserving the historic environment above and beyond the minimum required by the UK Forestry Standard. The NPA is concerned that leasing of land to a third party, with the principal management objective of profitable timber production, will result in erosion of the environmental value and non-timber interests of the estate and the wider benefits forestry brings to the general public. The NPA is further concerned that leasing 25% of the Forest Estate may lead to pressure to increase timber production on the remaining forest estate, which again may result in a reduced commitment to conserving and enhancing non-silvicultural interests.

The proposal, as outlined in the Consultation Paper, does not discuss funding arrangements for management of the National Forest Estate by the private sector. If third party managers were to be eligible for funding through SRDP (and any subsequent funding mechanisms), and it is difficult to see why leasing/cutting rights would be attractive to the private sector if funding were not made available for management, additional funding would need to be made available through SRDP for planting/management to minimise the
impact on other landowners who would potentially be affected by the additional pressure on the limited funding currently available.

A rigorous selection process for leasing sites will need to be put in place to ensure that other interests are not compromised as a result of change of tenure and management objectives.

With reference to not-for-profit trusts, FCS is a public body, acting for the public interest, so the benefits of transferring profits made from joint ventures or leasing to a not-for-profit trust are not immediately apparent. Indeed, at first glance the added layer of administration may give little advantage.

FCS has led many Challenge Funds over the years and has proven this to be a workable and successful model for prioritising spending to achieve maximum public benefit. The NPA recommends the establishment of a Climate Change Challenge Fund, funded through the revenue received from joint ventures. A Climate Change Challenge Fund could finance a range of measures such as new planting or the use of forests to reduce emissions or mitigate the effects of climate change while keeping the money in the public domain and having it administered through a tried and tested mechanism.

Loch Lomond & The Trossachs National Park Authority
29 January 2009
SUBMISSION FROM SCOTTISH ENVIRONMENT LINK

Scottish Environment LINK (LINK) welcomes the opportunity to give written and oral evidence to the Committee on the forestry proposals in the Climate Change (Scotland) Bill. Established in 1987, LINK is the forum for Scotland’s voluntary environment organisations - 33 member bodies representing a broad spectrum of environmental interests with the common goal of contributing to a more environmentally sustainable society. LINK provides a forum and network for its member organisations, enabling informed debate, and assisting co-operation within the voluntary environmental sector. LINK assists communication between member bodies, government and its agencies and other sectors within civic society. Acting at local, national and international levels, LINK aims to ensure that the environment is fully recognised in the development of policy and legislation affecting Scotland.

Introduction

In principle we welcome the fresh look at how the Forestry Commission Scotland (FCS) can deliver for climate change but we are particularly uncomfortable, as we have highlighted before\(^1\), with woodland creation for carbon sequestration becoming the primary driver for the government and the National Forest Estate (NFE). LINK has repeatedly expressed its view that the best way to respond to climate change is to first reduce greenhouse gas emissions by moving away from carbon based energy production, reducing energy consumption and energy loss. We see carbon sequestration as one of the secondary responses that feature further down the list of the multiple benefits forestry provides.

The plans proposed in the recent consultation and the enabling powers in the Climate Change (Scotland) Bill are controversial and as yet, they have not been fully explained or costed. Our detailed concerns on these proposals are presented below.

It is LINK’s view that these proposals require more considered thought and discussion. As a result we are unhappy with the wide reaching enabling powers in Section 47, Sub-sections 1, 2 and 4 being included in the Bill. Rather we would like to see any specific powers that may be identified, brought forward in the future, after they have been properly explored and consulted upon.

We do however welcome the inclusion of Sub-section 3, a), b), c) and d) (i) which allows the FCS to enter into joint ventures for renewable energy projects because these proposals are specific, directly relevant to the Bill’s aims, and help to enable objectives already set out in the Scottish Forestry Strategy (SFS).

Question 1. Do you envisage that the Forestry Commission could play a greater role than it does at present in reducing greenhouse gas emissions or in alleviating or responding to the effects of climate change? If so, what suggestions would you make?

It is LINK’s view that there has been a clear change in policy drivers for forestry in the last 18 months, in favour of forestry and woodland creation for climate change ‘mitigation’. LINK has always accepted that creating new woodland contributes to the process of carbon sequestration but it cannot sequester more than a small proportion of the total carbon emissions generated each year.

Government efforts to reduce CO₂ emissions are best concentrated on mitigation activities such as better insulation of the existing housing and office stock, reduction of transport emissions and restructuring our energy supply away from carbon based energy sources.

The National Forest Estate, whilst having a role to play in carbon sequestration, has a greater role to play in climate change adaptation and making space for nature. Unfortunately climate change adaptation has not been properly considered in these forestry proposals.

Therefore, LINK believes, carbon sequestration should not be a primary driver for woodland creation. Rather it should be one of a range of benefits arising from long term, multi-benefit forestry. This would mean carbon storage can be assured in perpetuity and the woodland creation can provide additional benefits to society, such as new and enhanced public access, greater biodiversity, and landscape maintenance and enhancement.

LINK believes that to properly address these issues and to look at the role of carbon across all types of land use in Scotland, we need a Sustainable Land Use Strategy to be implement a holistic approach to integrated land use and delivery of multiple public benefits.

Question 2. Do you consider that either of the Government’s consultation proposals (on entering into joint ventures and on leasing cutting rights) would enhance the Forestry Commission’s role in dealing with greenhouse gas emissions and climate change?

JOINT VENTURES:
In principle we have no objection to legislation being amended to allow FCS to undertake joint ventures with renewable energy companies, subject to appropriate safeguards, because we support the principle of injecting new resources into forestry and climate change delivery. These joint ventures would be directly contributing to the government’s renewable energy targets and could provide funding and expertise in developing our renewable energy sector.

Any joint ventures would require careful consideration and we would expect safeguards to be in place to prevent inappropriate developments and an adverse effect to habitats that must be retained to enable adaptation to climate change. These safeguards should include the following requirements:
• That there is protection for other public benefits such as: Plantation Ancient Woodland Sites (PAWS), woods of high nature conservation value, biodiversity, priority open ground habitats, public access and recreation provision.

• That FCS will undertake full Environmental Impact Assessments on the joint ventures.

• That all proposals will follow the full planning process and any supplementary planning guidance on preferred locations for renewable projects.

Any money raised from such ventures would need to be properly reinvested in climate change actions and a protocol may need to be developed to ensure this delivers the greatest possible environmental benefit, including emissions reductions and wildlife adaptation.

CUTTING RIGHTS
There is considerable concern that by implementing this proposal, other non-timber production public benefits would not be well served. This is largely because the income that the FCS generates from the leased production forest may impact on other multi-benefit forestry it carries out on the rest of the estate.

For these proposals to be considered further, LINK would expect that:

• The economic case is properly laid out. This has not yet happened and therefore it is not possible for us to comment on the financial aspects of the proposals with any confidence.

• A full and satisfactory Strategic Environmental Assessment is undertaken on the fully costed proposals.

• A proper assessment is undertaken of the impact on the remaining FCS activities and ability to deliver the SFS. At present the FCS carry out a complicated balance of economic, social and environmental activities (including for the landscape and the historic environment) within their forests. Transferring the more commercial parts of the national estate for a period of perhaps 75 years could potentially and severely constrain funding of the social and environmental aspects of FCS activities.

• There is a full explanation of how enhanced delivery of non-market benefits will take place. For example meeting the commitments of the Scottish Biodiversity Strategy, UK Biodiversity Action Plan, EU Birds and Habitats Directive and the biodiversity theme of the SFS.
Evidence is provided that all the capital raised from the leases would be reinvested into forestry and associated climate change actions. So far there have only verbal ‘in principle’ assurances which are inadequate. In the absence of clearly set out protocols and structures we are not be able to further consider the proposals.

Accessibility must be retained if the land is leased. There is a significant difference between a right to access and accessibility.

Any company or body leasing the land would have to ensure that the land was certified against the UK Woodland Assurance Standard (UKWAS) for the entirety of the lease.

There is concern that releasing over 100,000ha of new land into the Scottish Rural Development Programme (SRDP) may lead to increased competition for woodland management funds, without increasing the SRDP budget. LINK would wish to see assurances that high quality land management for biodiversity, landscape conservation, historic environment and access would not lose out.

Question 3. Do you envisage any implications for nature conservation, biodiversity or recreational interests from the two proposals and, if so, what are they?
LINK is concerned that the woodland expansion elements of these proposals could threaten the conservation of open ground habitats and species, either by woodland creation, or lost opportunities to restore such habitats. For that reason, LINK urges the Scottish Government and its delivery bodies not to repeat the woodland expansion mistakes of the past, and to actively reverse the biodiversity damage created by inappropriate afforestation. Woodland expansion in Scotland must be carried out sensitively to ensure the protection and enhancement of important biodiversity and the delivery of multiple public benefits.

Question 4. Do you believe there are any implications for rural employment from the two proposals and, if so, what are they?
LINK does not have a specific view on the employment implication of these proposals because it is largely outside of our members’ direct remit. We would however say that we would not want to see a reduction of actively managed woodland in Scotland and it would be a disadvantage to the forestry sector if valuable skills and knowledge is not retained within the industry.

Q.5. Do you have any other views on these two proposals from the Government?
Within the FCS consultation document, there was a suggestion of creating a not-for profit trust (NFPT). This suggestion strongly implies a social and environmental purpose for such a body (i.e. public rather than commercial benefit), as well as some stakeholder representation in its governance arrangements, but this is not explicit in the proposals and that gives us some cause for concern.
LINK would need to see the following guarantees in order to further consider the proposal:

- All income from the lease of land and cutting rights to be invested through the NFPT into multiple public benefits through forestry and related climate change actions. This means investment in climate change adaptation as well as ‘mitigation’.
- The NFPT is constituted to deliver forestry related public benefits and priorities as laid out in the Scottish Forestry Strategy and in particular in relation to climate change ‘mitigation’ and adaptation.
- The NFPT will enable creation of significant areas of new native woodland.
- All woodland creation funded through the new structure should be UKWAS certified.

LINK would not support the idea of the NFPT using lease and cutting rights income to solely create new production forests. All new woodland created should be multi-purpose and provide significant public benefit. If the NFPT creates new woodland in the same proportion as the current estate, it will create 87% exotic species – this would be contrary to the vision of the SFS and would not be supported by LINK. In order to achieve the current SFS vision, more than 6,000 hectares of native woodland is required per annum for the next 50 years (35% of the enlarged forest cover of 25% land area). We cannot see the logic of the NFPT creating more production forest to sell or lease off and create more in a cyclical fashion.

LINK Woodland Task Force,
3 February 2009.

The following member organisations have agreed this statement:

Archaeology Scotland
Association for the Protection of Rural Scotland
Bumblebee Conservation Trust
Butterfly Conservation Scotland
Friends of the Earth Scotland
National Trust for Scotland
Ramblers'Association Scotland
RSPB Scotland
Scottish Native Woods
Scottish Wildlife Trust
Woodland Trust Scotland
WWF Scotland
SUBMISSION FROM SRPBA

The SRPBA welcomes the opportunity to provide comments to the Rural Affairs and Environment (RAE) Committee on the provisions relating to forestry in the Climate Change (Scotland) Bill. Under section 47 of the Bill, the Scottish Ministers would be given the power to modify the functions of Forestry Commission Scotland (FCS) if they consider it necessary or expedient to meet greenhouse gas emissions reduction targets under the Bill or for other climate change reasons.

The SRPBA responded to FCS’s Climate Change and the National Forest Estate: Consultation on Forestry Provisions in the Scottish Climate Change Bill on the 27 February. This consultation paper indicated that the Scottish Ministers are considering using the section 47 power to enable FCS to (i) enter into joint ventures with developers on FCS land with the intention of participating in renewable energy programmes, and/or (ii) offer leases and cutting rights over parts of the national forest estate. It is suggested that FCS could use the money generated by these proposals on climate change related projects, such as forest creation.

1. Do you envisage that the Forestry Commission could play a greater role than it does at present in reducing greenhouse gas emissions or in alleviating or responding to the effects of climate change? If so, what suggestions would you make?

The SRPBA believes that FCS could play a greater role in reducing greenhouse gas emissions than it does at present. We consider that the proposal to allow Forestry Commissioners to enter into joint ventures with developers with the intention of participating in renewable energy programmes on the national forest estate seems to be a sensible suggestion. FCS can currently lease non-forested land for any purpose (but not forested land) and has done so for several projects including windfarms. The SRPBA believes that FCS could get better value for Scotland by entering into joint ventures with developers and receiving a share of the profits, thus generating more funds for investment in woodland expansion. Therefore, FCS would be contributing to reducing greenhouse gas emissions by (i) entering into renewable energy projects on the national forest estate and (ii) investing the money raised in planting more trees which lock up carbon, can be used as a renewable fuel resource, are easily recycled and can substitute for more energy intensive materials, thereby reducing carbon emissions.

2. Do you consider that either of the Government’s consultation proposals (on entering into joint ventures and on leasing cutting rights) would enhance the Forestry Commission’s role in dealing with greenhouse gas emissions and climate change?

As stated in our response to question 1, we believe that granting FCS the powers to enter into joint ventures with the intention of participating in renewable energy programmes on the national forest estate will enhance their contribution to reducing Scotland’s greenhouse gas emissions. However,
based on the limited amount of information available to date, the SRPBA does not think that the leasing proposal would enhance FCS's role in dealing with greenhouse gas emissions and climate change. It is proposed that the money raised from leasing would be put back into future planting which would have benefits for climate change. However, we are apprehensive that the money raised will not necessarily be put back into the forestry sector. The proposed leases will last for 75 years, during which time governments will change and agendas will change. In practice, the government cannot guarantee that money raised will be reinvested into the forestry sector. Any lease arrangement that attempts to ensure that the public's interest in the national forest estate is retained is likely to be very complex, possibly not 100% effective in the long run and very expensive overall. Furthermore, a 75 year lease does not relate to rotation length and this may lead to the demand for a lease roll over or sale of land.

3. Do you envisage any implications for nature conservation, biodiversity or recreational interests from the two proposals and if so, what are they?

The SRPBA envisages that the money raised from joint ventures will be reinvested back into the forestry sector for future woodland creation. With this additional income stream FCS will be able to fund biodiversity projects and ameliorate recreational opportunities on the national forest estate. However, if the leasing proposal goes ahead, FCS may stand to lose 25% of their land area but because this would include some of their most productive forests they may lose approximately 33% of their income, thus increasing their unit costs. Therefore, less money would be available for nature conservation, biodiversity and recreation. If FCS loses its income stream due to the introduction of a 75 year lease to a private company, there must be a guarantee that any shortfall in finances will be met by the Government in order to continue providing the public benefits noted above.

4. Do you believe there are any implications for rural employment from the two proposals and, if so, what are they?

The SRPBA believes that allowing FCS to enter into joint ventures could potentially create jobs in rural areas of Scotland. On the other hand, if 25% of the national forest estate is leased, including some of the most productive areas of forestry, then it is inevitable that FCS will not be able to fund as many positions as at present. The Minister has argued that there could be an increase in jobs available if the leasing proposals go ahead because the money raised from leasing could be reinvested back into the forestry sector and more positions could be created. However, there is no guarantee that the money will be put back into the forestry sector and the lessee will be under no obligation to employ existing FCS staff because they may already have their own staff.
5. Do you have any other views on these two proposals from the Government?

General comments

- The consultation period was unusually short from 4 November 2008 to 27 January 2009, including the Christmas and New Year breaks. A consultation period of three months is considered more usual and any shorter period makes it difficult for stakeholders to gather opinion and respond fully. We appreciate that the closing date is set early due to the fact that the Climate Change (Scotland) Bill has already been introduced in the Scottish Parliament. However, this suggests that there is some urgency to the government’s proposals and it appears that they are all a bit ‘last minute’. It has been rumoured that a single investor has already approached the Scottish Government to lease land and this would require the government to rush through enabling powers. The SRPBA is aware that the Minister has dismissed these claims but we would still like to raise them as concerns held by some of our members. In general, the whole consultation process seems rushed and this is evident from the consultation paper itself which lacks any detail about the joint ventures or leasing proposals. This lack of clarity makes it more difficult to formulate a definitive view.

- Before even contemplating whether the joint ventures and leasing powers are a good thing we need to address the main question in the consultation - should the government have enabling powers built into the Climate Change (Scotland) Bill to allow joint ventures and leasing? If it is granted enabling powers then sufficient checks and balances need to be contained within the primary Act to give the forestry industry some comfort that the detailed secondary legislation will be properly consulted upon and scrutinised. We would require confirmation that the secondary legislation will be passed using the affirmative procedure in parliament so that the relevant committee has the opportunity to scrutinise and ask questions of the government. This would give stakeholders an opportunity to engage with MSPs if any changes are required. We do not feel that negative resolution is appropriate in these circumstances.

- The SRPBA would like to know timing for the secondary legislation. We would like to know when we could expect to see draft regulations and need some assurance that the industry will be given sufficient time to scrutinise them. The primary Act must contain an obligation upon Scottish Ministers to consult.

Joint Ventures

- Some have questioned whether or not FCS has the appropriate skills to enter into joint ventures since their expertise is in managing state owned woodland, not renewable energy projects. However, Forestry Commissioners do have experience in management and commerce, consequently they are suitably equipped to enter into joint ventures. FCS can provide the land and management expertise while the other partner(s) can contribute their experience in overseeing renewable energy projects. Therefore, successful joint ventures are achievable.
However, we would like to add one point of caution regarding joint ventures: FCS would have to participate in any losses if projects failed and therefore risks would be taken with taxpayers’ money.

Leases and cutting rights
- How many leases will there be – one lease of the whole 25% of the national forest estate to a single (possibly foreign) investor or a number of leases to private sector interests in Scotland? The former option would be very unpopular with the public as well as some of our members but based on discussions to date it seems more likely.
- Will lease(s) be renewed or extended after the initial period of 75 years? If so, is this not just a sell-off in another name?
- FCS is generally regarded as a good neighbour. How can this benefit to landowners be preserved with the new tenants?
- How will the future of the processing sector be guaranteed beyond honouring existing contracts?
- The SRPBA does recognise that potential lessees will need to make their woods work hard to generate a return and they will have an interest in a competitive and vibrant market for their products. However, unlike FCS they could mothball their timber at times of low prices thus creating supply problems. Private growers have not generally been willing to enter into long term contracts with sawmills since they prefer to sell at times of better prices only and cannot therefore be relied on to maintain continuity of supply.
- Instead of offering leases to new investors, the SRPBA believes that more planting would take place if the rules of the Single Farm Payment, which facilitate ‘armchair farming’, were changed. There are costs and risks involved with planting trees on bare land whereas one can let that land remain bare and receive money for doing so in the form of a Single Farm Payment. Reform of these rules would remove one barrier to increasing planting. It would seem illogical to simply increase grant rates for forestry without firstly addressing this Single Farm Payment barrier. By planting on bare land, land managers could be contributing to a mosaic of land uses in Scotland which would provide both themselves and the wider Scottish population with multiple benefits such as biodiversity benefits, diversification of sources of income and helping to tackle climate change. The SRPBA strongly encourages the development of a rural land use framework for Scotland and we welcomed initial discussions on this topic in September 2008. Scotland needs a framework in order to identify the most appropriate land uses for each area in order to ensure our limited land resource is carefully used.
- The SRPBA believes that if funding was made more readily available to the private sector, they would be willing to increase planting to meet government targets. The SRDP needs to be simplified and streamlined to encourage private foresters to plant, grant rates for new planting schemes need to be increased and restocking grants (including for Sitka spruce) need to be reintroduced because this would ensure that there is no delay between felling and replanting. Private owners and investors have not lost their appetite for planting, as demonstrated by the large oversubscription
to the Ayrshire locational premia under the old SFGS. In short, if the incentive is present, the private sector will provide the forests.

SRPBA
January 2009
SUBMISSION FROM SCOTTISH TOURISM FORUM

The Scottish Tourism Forum is delighted to respond to the consultation on the Scottish Climate Change Bill on behalf of its members.

The Forum is the Scottish independent industry body representing tourism and hospitality businesses across many sectors, trade associations, local marketing groups, trade suppliers and businesses that earn their living from tourism or have an active interest in tourism and its importance to Scotland. The Scottish Tourism Forum is positioned as the national strategic voice of the industry and partners need look no further.

STF has a membership base of trade associations, area business groups and individual businesses. Within our membership we have forty five trade associations representing sectors right across the industry and we reach an estimated 6,000 businesses through this network.

STF is funded through its membership with a purpose to unite tourism interests and add value to members’ businesses. We bring public and private players together, to encourage the voicing of opinion about problems, priorities and solutions.

The value of tourism to Scotland is £4.2b annually and the industry has set itself the ambition to grow the economic value to over £6.1b by 2015, by adopting the strategies in the Tourism Framework for Change reviewed strategy. We feel our comments are reflective of this ambition recognising the enablers and barriers to drive growth even during these challenging economic times. The Scottish tourism industry by definition must be here and as such any investment in to tourism is an investment in to Scotland’s future and directly to its communities.

We recognise the important role, both at present and into the future the Forestry Commission plays in its stewardship of around 10% of the countryside of Scotland. This asset is one that is enjoyed by both tourists and local communities alike, it is also seen as having a key potentially role in the further development of the tourism offer in Scotland.

The consultation looks specifically to address four main questions and our response to this is as follows:

1. What are your views on allowing the Forestry Commission to enter joint ventures, with the intention of participating in renewable energy programs on forest estates?

The STF see this area as an opportunity for effective local partnerships to be involved at an early stage of planning, to vision and deliver a range of sympathetic initiatives that would be used to engage with visitors and local communities, assisting in the promotion of good practise and driving increased use of the forestry estate.
2. What are your views on allowing Scottish Ministers and Forestry Commission to offer leases and cutting rights over parts of the national estate?

Concerns have been raised over the potential conflicts between areas that have been leased out and their use for recreation. One of the strengths of the Forestry Commission's activities is their understanding of the needs and potential opportunities within their estate leading to sympathetic development of tourism projects. The role of the Rangers is vital, a much valued resource at the local level, working in partnership to unlock untapped potential (e.g., Dark Sky's) and working with communities to deliver benefit to both tourism and local communities. If long-term leases are applied, this could potentially stifle the further development of these opportunities.

The Commission operates in a fashion that is sympathetic in meeting the potential opposing needs of recreation against timber production and reassurance would be needed to avoid local issues arising.

The current arrangements operated by the Forestry Commission provide opportunities for local operators to be used. It is likely the beneficiaries of the leasing would be able to use national level contracts and this could have a real impact to employment in the local area. If national contracts are applied, this would potentially see higher carbon emissions and lower profits from the timber operations.

We understand the criteria for the selection of properties for inclusion in surplus property list, these should be looked at carefully and the development potential should also be identified in partnership before decisions are made.

3. What are your views on (1) transferring proceeds from leases and cutting rights to not-for-profit trust, for investment in woodland creation; (2) transferring the landlord’s interest in this land to not-for-profit trust; (3) ministers stipulating in the constitution of such a not-for-profit trust.

The Forum does not have particular opinions on this question.

4. Are there other actions which need to be taken, or are there other changes in legislation which need to be made, in order to allow the public and private forestry sector to contribute to Scotland’s target of reducing emissions by 80% by 2015? If so, please outline what these are.

We would fully support Government in its goal to reduce carbon emissions and are not aware of any unforeseen issues relating to legislation.

The Scottish Tourism Forum would be delighted to provide further evidence or information around the points raised if required.

Scottish Tourism Forum, January 2009
Climate Change (Scotland) Bill: Stage 1

10:04

The Deputy Convener: We will now take evidence on the Climate Change (Scotland) Bill. The committee was appointed as the secondary committee on the bill and we agreed to scrutinise the provisions on waste, forestry and muirburn. Today, we will take evidence on section 47, on forestry, and touch briefly on section 46, on muirburn.

I welcome the witnesses to this round-table discussion, the aim of which is to generate open discussion between witnesses and members. We want to get as much information as possible from the session. I remind everybody that, for ease of officially reporting what has been said, it is best if only one person at a time speaks. That rather contradicts the idea of having a lively discussion, but it makes it easier to report what has been said. Please refer to the table plan in front of you from our clever clerks, which should show where you are sitting and who is around you. On behalf of the committee, I welcome everybody who is here to give evidence.

To break the ice, I invite everybody around the table to introduce themselves briefly. Stuart Goodall can start. It is nice to see you.

Stuart Goodall (Confederation of Forest Industries): Thank you very much; it is nice to see you, too.

I am the chief executive of the Confederation of Forest Industries, which represents forestry and wood-using businesses in Scotland, from people who work in forests and people who own forests to sawmill and panel-board companies.

Alasdair Morgan (South of Scotland) (SNP): I am a member of the committee.

Allan Mackenzie (Forestry Commission Trade Unions): I am a Forestry Commission trade union representative.

Bill Wilson (West of Scotland) (SNP): I am a member of the committee.

Dr Calum MacDonald (Forestry Commission Scotland): I am chairman of the Forestry Commission’s national committee for Scotland.

Peter Peacock (Highlands and Islands) (Lab): I am a member of the committee.

Lisa Duggan (Loch Lomond and the Trossachs National Park Authority): I am landscapes manager for Loch Lomond and the Trossachs National Park Authority.

Angus Yarwood (Scottish Environment LINK): I represent Scottish Environment LINK, which is Scotland’s network for the environment movement. I am convener of its woodland task force.

Liam McArthur (Orkney) (LD): I am a committee member.

Janice Cassidy (Scottish Rural Property and Business Association): I am a policy officer for the Scottish Rural Property and Business Association.

Rhoda Grant (Highlands and Islands) (Lab): I am a Highlands and Islands Labour MSP.

Gavin Ellis (Scottish Tourism Forum): I am a Scottish Tourism Forum board member.

Elaine Murray (Dumfries) (Lab): I am a committee member.

The Deputy Convener: Thanks very much.

I will ask some questions to get the conversation going. In the absence of a formal early consultation process, what are your views on how the Scottish Government has taken into account the expertise of organisations and witnesses such as you in representing and developing the forestry proposals? Are you happy with how much you have been consulted so far? Have you been consulted too little?

Stuart Goodall: We welcome the Scottish Government’s desire to support the growth and development of the forestry wood-using business sector in Scotland and we share the objectives of delivering an increase in new planting and finding funding for that. However, we would have preferred more time, or perhaps an opportunity prior to the consultation, to focus on alternative ways of achieving those outcomes. As the minister has said, he has been open to alternative ideas during the consultation period, but it has been difficult to make proposals. If a proposal is put in front of somebody, people will generally focus on that. The Christmas and new year period has also made it difficult to get any debate going. We certainly found it difficult to come up with something substantive in the available time. We have worked on that further since we made our submission, but we would still like to have more debate about how things could be delivered as opposed to simply saying yes or no to the proposals in front of us.

Angus Yarwood: We are interested in expanding the debate and in not looking at the forestry proposals in a silo. We want the issues to be considered holistically across the land use sector, and we want a sustainable land use strategy to be brought forward.
As Stuart Goodall says, the timescales were unfortunate. It is also unfortunate that the Forestry Commission reports that have come out in the past few weeks were not available to us before the bill was published. It would have been useful to have seen the Scottish Government’s proposals on woodland expansion before we had to comment on the bill. That is because the bill deals with reducing our climate change emissions overall and I do not think that these proposals, which focus on carbon sequestration, are necessarily the primary way in which we should consider contributing to achieving the bill’s overall intention.

The Deputy Convener: That is quite interesting.

Bill Wilson: I have a follow-up question on what Angus Yarwood said about sustainability. In considering flooding, the committee has discussed sustainability fairly regularly. Should the bill require a commitment to sustainability, perhaps with reference to economic measures or to forestry?

Angus Yarwood: We would support such provisions. Scottish Environment LINK was keen for the Flood Risk Management (Scotland) Bill to refer to sustainability and we would like similar provisions in the Climate Change (Scotland) Bill.

The Deputy Convener: You spoke about sustainable land use. Do you have a view on integrated land use policy and on the overarching policy that forms the context for the provisions?

Angus Yarwood: Do you mean integration with all land uses?

The Deputy Convener: Yes.

Angus Yarwood: Forestry should be considered in that vein. As I said, having silos does not help much. Like other organisations that have submitted evidence, we would like an holistic view to be taken of how we use our land in Scotland. A much greater proportion of carbon emissions and greenhouse gas emissions comes from land use as a whole in Scotland, so we need an action plan across the board.

Elaine Murray: I will follow up the argument about carbon sequestration. I know that one view is that carbon sequestration should not be the primary reason for planting trees—there are many other reasons for planting trees—and that carbon can be sequestered by other methods, such as the reinstatement of peat bogs. Does anybody have comments on the certainty of the science? Should we address climate change in that way rather than plant trees for other desirable reasons?

Stuart Goodall: We have been very interested in carbon sequestration in forestry for years. I have liaised closely with the Forestry Commission, whose forest research arm has done an awful lot of studying and work on the subject. It has done world-leading research, which we have supported.

The common opinion is that forestry is about much more than sequestering carbon—that is our approach, too—and that tree planting should be part of an integrated land use policy.

You asked about the strength of the research. The research is pretty conclusive—if a tree is planted in the right place, it will sequester carbon, which is a benefit. The wood product locks up carbon, especially if it has a solid wood use such as construction and it can be used to displace more energy-intensive materials such as concrete, steel and plastic. That contributes significantly to mitigating the effect of climate change.

The Forestry Commission is considering more sensitivity in the types of planting, the trees that are planted and where they are planted, to understand the benefit more accurately. However, it is clear that such planting has a benefit and that we have enough information to plant trees to achieve that benefit.

Alasdair Morgan: Am I right in saying that people’s concern is not so much about the bill as it is about the Government policy that might drive how the bill is used? The bill will make almost identical changes to those that were passed at Westminster in 2006 in relation to the Forestry Commission south of the border. What concerns were expressed when those changes were made? Did devastating results flow from those changes?

The Deputy Convener: Calum MacDonald might be the person to answer those questions.

10:15

Dr MacDonald: The bill contains two sets of forestry provisions. The provisions on joint ventures replicate the legislation that was adopted south of the border, but the leasing proposals are new and different.

It is true to say that there is still work to be done on the science of carbon capture. However, the basic principle of carbon being captured in woodland is now accepted. As Stuart Goodall said, we are working to get more precise figures on how that operates.

It is also true to say that carbon capture is not the only benefit of a forestry programme, as there are also social, community and economic benefits. Over a number of years, forestry policy has developed to emphasise that wider range of benefits rather than being driven by only one factor.

Angus Yarwood: That is definitely the view of Scottish Environment LINK. There are multiple drivers for forestry, and carbon sequestration is
somewhere down the secondary list of actions that the Government can take to combat climate change. It is absolutely true that you can sequester carbon in woodlands, but you have to use the right tree in the right place at the right time. Carbon sequestration is a secondary benefit of forestry, which comes after the provision of space for wildlife in the interests of securing biodiversity; access and recreation; product substitution, which Stuart Goodall mentioned; and a range of other benefits.

The Deputy Convener: So you are slightly at odds with the Government’s view that carbon sequestration is a primary benefit. Do you think that the bill should address other issues first?

Angus Yarwood: We would certainly like the issue of adaptation for wildlife habitat networks to be included more prominently in the bill. The Forestry Commission is doing a lot of good work in that area, such as its beetle project, which maps the movement of species, but we would like all that work to be linked together in a sustainable land use strategy that encompasses all those elements.

Alasdair Morgan: I accept that but, given that, sadly, we all produce carbon—although we might prefer it if we did not, as then we would not need to sequester it—is the Government’s policy, as set out in its forestry strategy, of achieving woodland cover of 25 per cent by 2050, which is a 50 per cent increase on the current position, an aim that it should be pursuing?

Angus Yarwood: We wholly support the Government’s forestry strategy. We were closely involved in its development, along with other stakeholders. We would like forestry cover to be at that level and we also agree with the strategy’s aim of ensuring that 35 per cent of the cover is made up of native trees, as opposed to 17 per cent, which it is at the moment.

We do not want the mistakes of the past to be remade. Planting must be done as part of an holistic package, and it would be a backwards step if areas of land that have not been properly assessed were to be planted.

Gavin Ellis: The Scottish Tourism Forum is grateful for the chance to speak today, as tourism is an integral part of the Scottish economy.

I back Angus Yarwood’s point that the issue that we are discussing is about the economy. I also chair a tourism framework for change group—that strategy’s aim is to grow tourism by 50 per cent—so I am aware that forestry has many benefits for places such as Mull, with its sea eagles, Dumfriesshire, with its mountain biking trails, and the Culbin forest in Moray. Further, there are health benefits across the country. Physically, forestry is Scotland’s largest tourist attraction.

Liam McArthur: As our outgoing convener has said previously, the committee shares the concerns that have been expressed about the timeframe of the consultation. Given the points about the need for an integrated land use strategy and the forestry provisions in the bill coming ahead of their time, is there a concern that the proposals may not be in the right legislative vehicle? Would it be more appropriate for them to be set apart? The debate about the climate change impacts derives from the fact that the measures are in the Climate Change (Scotland) Bill. You are all working hard to say that there are other benefits as well. Concerns have been raised about the variety and range of enabling powers that the bill creates. Is it the most suitable vehicle for the measures on forestry?

Dr MacDonald: Speaking from the point of view of the national committee for Scotland, I can say that the Forestry Commission is comfortable with that approach. We feel that we have a role in tackling climate change. There might be arguments about the science at the edges—Forest Research is helping to develop that—but the fundamental principle that forestry plays a role in tackling climate change is accepted widely, including by us. We have a duty to be part of tackling climate change and we are comfortable with being covered by the bill.

Stuart Goodall: One key point is about the challenging timescale. It would have been ideal to have had a longer timescale and an opportunity to consider how forestry can contribute to tackling climate change in the context of a wider land use policy and the wider benefits that forestry provides. However, we are where we are and we have the Climate Change (Scotland) Bill. We can see the sense and attractiveness of including the forestry measures in the bill. If money is being raised from forestry, whether through leasing, joint ventures or some other mechanism, there will always be the pressure of what happens with the funding that is raised. I cannot speak for other people round the table, but everybody whom I represent from across the forestry spectrum would be unhappy if money that was raised from any part of the forestry sector, including the Forestry Commission, could be diverted elsewhere. At least with the bill, that money can be hypothecated. When new planting is delivered, because it has a significant climate change benefit, as well as other benefits, a strong case can be made for ensuring that the money is retained.

We therefore have a split position. We would have liked more time to consider the measures, but we understand that the bill might be a good place for them.

The Deputy Convener: Given the questions about the shortness of the consultation and the
inexactness of the science, and given the suggestion that one year of planting will not make a lot of difference in carbon sequestration terms, is the bill the right place for the measures, or should they be in a later piece of legislation?

Angus Yarwood: The powers in sections 47(1) and 47(2) are very broad. As Stuart Goodall said, we would like a longer discussion and more opportunity for all the stakeholders to get involved. We would prefer it if a later legislative opportunity was taken to introduce specific powers, once it has been determined what they should be. However, section 47(3), on joint ventures and giving the Forestry Commission more powers to consider renewable energy projects, has wide support. Scottish Environment LINK supports subsection (3) because—

The Deputy Convener: We will come to that subsection in a minute.

Angus Yarwood: It is important to us because it makes a contribution towards the bill’s overall aim, which is to reduce greenhouse gas emissions.

Janice Cassidy: We think that forestry sits well within the Climate Change (Scotland) Bill. Although the science of carbon sequestration might not be exact, forestry can provide other benefits, as Stuart Goodall mentioned. Wood can be used in construction and is a less energy-intensive material than concrete. Wood can also be used for energy in biomass. Forestry can provide many other benefits in helping us to reduce carbon emissions, so carbon sequestration is only one part of the issue. For that reason, we think that the forestry provisions sit very well within the bill.

Stuart Goodall: I should make it clear that we have been pushing hard for an increase in new planting and for the Forestry Commission to meet its target—which was set not just by the current Government but by the previous Administration—of planting 10,000 hectares a year. Ideally, we want a 15,000 hectare planting programme. Such a programme would release the benefits that we have discussed, which are not just to do with having productive forests. The Woodland Trust is a member of our confederation, so we support having a broad mixture of forestry.

Because of the drop-off in planting from the 1980s onwards, in 25, 30 or 35 years the availability of productive timber will experience a hump and then a trough before it starts to increase again. If we can fill in that trough with some planting now, we will be able to supply a significant additional sustainable volume of timber for Scotland’s businesses that will provide significant jobs, investment benefits and climate change benefits. If we cannot fill in that trough, everyone will predicate their business decisions on the bottom of the trough and we will lose a big opportunity. Instead, we will have a short-term spike of opportunity that will then disappear. We would be disappointed if that additional energy and potential funding to support new planting were lost. We need to tackle the issue now. We cannot keep putting it off.

Angus Yarwood: As I said, the powers in subsections (1) and (2) are very broad. We support the Subordinate Legislation Committee’s suggestion that the nature, scope and extent of the modification powers should be restricted.

Peter Peacock: I want to tease out that point a bit more. I understand the point that Calum MacDonald, Stuart Goodall and Angus Yarwood have made, which is that it is appropriate that the bill should include a section on forestry to signify that forestry has a role to play in climate change. However, that is very different from saying that the forestry provisions in the bill are in all circumstances appropriate. For example, there are two fundamentally different provisions, one of which deals with joint ventures and one of which deals with leasing. Within leasing, there are probably variations of what might be done. The Forestry Commission has probably been working on joint ventures for some time, but the leasing proposal is rather more recent. Notwithstanding what Calum MacDonald and others said about the principle of including forestry within the bill, do they think that there is a distinction between the joint ventures work and the leasing proposal? Does the commission’s national committee for Scotland have a clear view on that? How do other witnesses feel about that?

The Deputy Convener: I think that Lisa Duggan also wants to respond to that point.

Lisa Duggan: One of our concerns is that, although forestry sits well within the bill, the bill does not promote dialogue. As Stuart Goodall mentioned earlier, we have not really explored the other options. Although we support providing more land for forestry, there has been limited consultation on the proposals in the climate change action plan, so we have not explored other mechanisms for doing that. One of our big concerns is that options for more integrated environmental projects, such as wood pasture, have not been considered and are not even contained in the action plan, even though they might sit better with current upland agricultural schemes. We are just concerned about how quickly the proposal is going through.

10:30

Dr MacDonald: The two provisions are different, but a common rationale links them in the context of the bill: to generate income that will be used to
speed up the rate of afforestation and achieve the 25 per cent target. In that way, they are linked.

I get a sense that, because it is a question of science, a question mark still hangs over some of the discussion. The science may be inexact—to use the deputy convener’s word—but so is most science. I emphasise again that, despite that, the science is not in doubt that forestry can play a role in tackling climate change and in carbon capture. On page 10 of the Scottish Parliament information centre briefing on the bill’s forestry provisions, there are figures for the number of tonnes of carbon a year that could be sequestered if we reached the 25 per cent target for woodland cover. The only inexactness of the science is that the figure could be higher. Research that we are doing at the moment shows that it is quite a modest estimate. Forest Research is working on the figure, which will be available in the coming year.

The Deputy Convener: So the figures are low-end estimates.

Dr MacDonald: As I said, scientists in Forest Research and internationally are still continuing that work. However, the basic, core principle is established and accepted and, according to the work that we are doing at the moment, the estimates in the SPICE briefing are quite conservative.

Elaine Murray: There is a carbon sequestration balance between the tree above ground and the tree below ground. The National Trust for Scotland said:

“there is a need for better understanding of the balance” in the release of carbon.

“If cyclical cropping is encouraged then the benefits of sequestration will be consequently limited.”

Are you concerned that, if a commercial company came in and rapidly recycled or disturbed harvested ground, the amount of sequestration would be limited if the trees were not given enough time to grow and the land was not given enough time to recover? Are you concerned that, if a commercial company came in with such a leasing arrangement, you would not achieve some of the good that you could do if you managed the forests differently, or that you might even undo some good that has been done?

Dr MacDonald: I do not want to discuss the leasing proposals now, because I think that you will come to them later. I was focusing on the key question of carbon capture. It is true that different ways of managing the ground, planting and the length of cycles have an impact and that, if we want to maximise carbon capture, we must take those elements into account.

Rhoda Grant: I am picking up that the 25 per cent target is a good thing but that the bill’s method of achieving it is causing concern. How could it be achieved and paid for aside from leasing?

Stuart Goodall: I want to clarify a previous point. As Calum MacDonald says, there are different ways to consider the carbon element of how we fell and replant. Ultimately, the longer that we take to replant, the more opportunity we lose to sequester carbon in growing trees, so that has to be offset. If we introduce a standard that takes account of carbon, it will apply to the private and public sectors. Our businesses are working with the Forestry Commission on that, so I do not foresee any difficulty for us. That is not a principal concern about the effect of private sector planting on carbon capture. It is minor.

What was the other point?

The Deputy Convener: We will broaden the discussion out into leasing.

Stuart Goodall: The question was about other ways of raising money.

The Deputy Convener: Yes. What are your key objections to leasing and what are your alternatives?

Stuart Goodall: We seek an increase in new planting to achieve the 25 per cent target. The Forestry Commission’s latest paper, which was published yesterday, is good. It sets out why we should plant and how we can achieve the target, and states that we need to plant 10,000 to 15,000 hectares a year. The current objective is 10,000 hectares a year, and it has been in place for some time. If we are looking to deliver 25 per cent forest cover by 2050—which is an opportunity to maximise carbon benefits within the timeframes that people are discussing—planting 15,000 hectares a year would achieve it.

If we want to plant 10,000 hectares a year, we are looking at another £7 million to £10 million per year to pay for it, over and above the existing funding; 15,000 hectares would require something like £24 million to £30 million per year. Our understanding from the financial memorandum is that joint venture income would raise £10 million per year by 2012 and £30 million per year by 2020. The joint venture income could be hypothecated for new planting, the bulk of which, we argue, has to take place in the private sector, because it is more cost efficient—the Forestry Commission would have to buy the land and plant it up, which is more expensive. If we go down the proposed route, we could deliver the new planting targets from joint venture income.
The Deputy Convener: I imagine that the Forestry Commission would have something to say about that.

Dr MacDonald: Are you asking about hypothecation?

The Deputy Convener: Yes, and taking money that the Forestry Commission has earned and putting it into the private sector to enable it to plant trees.

Dr MacDonald: The Forestry Commission already distributes money to the private sector, so we are quite comfortable with that. We see the achievement of the 25 per cent target as collaboration between the private sector and the Forestry Commission. Obviously, you would not expect me to say anything other than that I would be keen for any money that is raised from joint ventures or by the commission to be spent on achieving forestry strategy targets.

The Deputy Convener: I will bring Angus Yarwood in here. We want to talk about leasing in particular.

Angus Yarwood: We support that. Money that is raised should go to meet Scottish forestry strategy targets. However, we are also keen for a good proportion of the money that is raised to go towards delivering the multiple public benefits, particularly in terms of the native woodland aspiration in the strategy.

The Deputy Convener: Has it been guaranteed that the money that is raised will go back into forestry?

Angus Yarwood: There has not been enough detail on that.

Alasdair Morgan: Do the figures that we have been given rely on the rough proportion of, say, native woodland to cash crops being the same as it is today? Presumably, if we raise the proportion of native woodland or reduce the amount of cash crop that is being rotated, the cost will go up. To what extent is that an influence?

Stuart Goodall: The target is to plant 15,000 hectares per year of native woodland and productive forestry. The target set by the Woodland Trust, Scottish Environment LINK and others is 6,000 hectares per year, while we are looking at 9,000 hectares per year. It is coincidental that those figures add up to 15,000 hectares per year; no back-door deal has been done between the various parties around the table, it is just a happy coincidence. The target is achievable. Productive forestry is self-financing in normal circumstances. Native broadleaf forests are not self-financing, so there needs to be ongoing grant support and other similar activities.

In the past, the private sector delivered 80 per cent of new planting and the Forestry Commission delivered 20 per cent. So to pick up on what Calum MacDonald said, taking a mixed approach can be a way of managing the cost of planting so that it does not become a significant burden on the Forestry Commission and leave it unable to deliver its other objectives. There is a lot of experience and understanding within the various parts of the public, private, business and environmental sectors that will make that approach work.

Bill Wilson: Stuart Goodall mentioned planting 10,000 to 15,000 hectares per year, which is quite a rapid acceleration of forestry planting in the coming years. He also thinks that it might have to be done mainly by the private sector. I am thinking back to the history of private sector planting, such as that which occurred in the flow country. Is anyone around the table concerned about such a rapid expansion of forestry being undertaken predominantly by the private sector? The question is not just aimed at Stuart Goodall.

Stuart Goodall: I would rather hear the views of some of the others around the table. We have spent a lot of time over the past 25 to 30 years developing standards and ways of identifying where to plant to avoid a flow country situation. From our point of view as representatives of the business sector, we have no desire—and it is not necessary—to get into a bunfight with farmers, environmental organisations or anybody else.

We have pushed for an integrated land use policy, and we feel that there is scope for taking forward a planting policy that integrates with farming and protects food production—that is important. We want the right tree to be planted in the right place—an issue that is raised continually—and we believe that such a policy will deliver the benefits of productive forestry and other sustainable benefits without conflicting with and damaging other land uses.

Bill Wilson: Can that be done on a voluntary basis, or will the Government have to set clear guidelines in advance?

Stuart Goodall: It is important that there are robust standards for planting, and those are already in place. The United Kingdom Government’s UK forestry standard, which is developed by all parties, is in place, and there is also, if required, an independent certification standard, which all parties have bought into and which is independently audited.

With regard to the number of hectares that are planted, we were planting 24,000 to 25,000 hectares a year back in the 1960s and 1970s. I am not saying that we should return to that approach, because it was very hard-headed and not particularly sympathetic to the landscape or to...
environmental and other interests. However, that level is achievable, but only if the planting is done in an integrated way. If it is presented as just getting on with it, we will run into the same problems as before, and we do not want that.

**Liam McArthur:** To return to Alasdair Morgan’s earlier question, if sequestration is viewed as an inexact science, perhaps the value projections—whether those involve planting 10,000 or 15,000 hectares—are inexact, too. Given the economic downturn and current market conditions, how much volatility is there in the numbers that you have quoted in relation to the return for the public purse that can be used for planting?

**Stuart Goodall:** There should not be too much volatility on the joint venture side. The joint ventures, and forestry in general, are an extremely attractive proposal when we are faced with the challenge of economic downturn—and economic growth, I hope, in the future—and tackling climate change. Wood is a unique renewable product that provides huge opportunities for sequestering carbon. The detail is inexact, but the broad pictures are robust, and the ability of wood to substitute for other materials and to provide biomass energy and all the other things means that it is an attractive material.

An increasing pent-up desire to deliver new planting has been evident, but because of the unavailability of grants for a couple of years, due to the closure of the grant scheme and the difficulty of getting the new grant scheme up and running, new planting has not been happening to the extent that we would expect. We feel that if those measures are put in place, planting will happen. I am referring to the joint venture income—sorry, I should have answered that question upfront.

With hydro opportunities, wind farms and other issues, we have concerns about the impact on deforestation. The Government is driving those things, and public subsidies are available. Those ventures will happen, and it is a pretty reasonable bet that the money will be raised.

**Liam McArthur:** We have had debates in relation to other areas about whether an economic downturn is the best of times or the worst of times to introduce measures that reduce waste or tackle climate change. Do you foresee any danger of there being pressure to go for lower-cost options? Will the strategy remain consistent over the medium to long term, and will the private sector be happy to subscribe to it?

**The Deputy Convener:** In fairness to everybody, I think that we have established that joint ventures are a good thing.

One of the privileges of being convener for the day is that I can focus our questioning on areas that are slightly more controversial. One area on which I would like to tease out information from our witnesses is leasing. There has been a lot of debate on the subject, much of which has focused on whether leasing is a good or a bad thing. Perhaps Allan Mackenzie will say something about the difficulties that are involved.

10:45

**Allan Mackenzie:** Thank you for the opportunity to do so and for the invitation to participate in this discussion.

As we have said, the Forestry Commission trade unions oppose leasing. We have proposed a variety of different avenues for consideration. Our opposition is focused first and foremost on the effect that leasing might have on staff members who are transferred from the public to the private sector. Staff are frightened about issues such as their future employment prospects and long-term pension provision. The committee should also take account of the groundswell of support from other parts of the forestry industry, the general public and others. We are greatly concerned about the lack of financial detail in the proposed leasing option. I refer to the effect that it could have over time on the public purse in Scotland.

One avenue for consideration is the opportunity loss from areas that are leased out for purely commercial gain. The forests that are being considered for leasing—some of which I helped to plant around 35 or 36 years ago—are in their first rotation. Elsewhere in Scotland, the opportunity that allows has been used to open up forests, create more diversity, ensure better access and provide downstream benefits to local communities. By leasing forest areas, those opportunities may be lost to the Scottish people.

A variety of issues are involved in our opposition to the leasing option. That said, we are keeping an open mind on the possibilities of the other options. Like others around the table, we feel that the joint ventures option is a way of bringing in the income that is required to offset the need for the private sector to plant more trees in Scotland.

**Gavin Ellis:** The Scottish Tourism Forum is concerned about the conflict of interest that is inherent in the commercial realities of private enterprise. Also, over the past five to 10 years, the Forestry Commission has taken extremely big steps in integrating recreation, health and education benefits with our forests. We are also concerned about not being able to develop the tourism opportunities that the dark skies of the Highlands offer. Our forest resource is fantastic for driving sustainability in communities that do not have many other options. We want to help to
develop those options. Our concern is that the baby might be thrown out with the bath water.

**The Deputy Convener:** I will bring in Lisa Duggan, as I want to hear all the arguments against leasing before bringing in witnesses who think that it is a good idea.

**Lisa Duggan:** I support what Gavin Ellis said. Visitors come to our national park because of the woodland and the positive recreational opportunities that forests provide. The park includes woodlands that are privately owned but to which access rights apply. However, the welcome that visitors get in such areas is not positive. They are told, “If you want to come in, you can. We are not going to lock the gate.” That contrasts with the Forestry Commission approach, which is one of saying, “You are welcome to walk here. These are the signs for you to follow. Here is what we have put in place for camping. These are the other management guides that we have put in place.”

I also support what Allan Mackenzie said. Forestry Commission staff in the park provide an essential service. In addition to providing the practical forestry work that private woodland operators might also provide, they are an essential part of the community. They do the rangering and they live in the community when they are off duty. The park does not want to lose those two important elements. The other thing that the Forestry Commission does particularly well—and perhaps better than a private woodland owner would do—is biodiversity. We work extensively with the Forestry Commission to consider how to manage public access and improve biodiversity. That work involves a big time commitment and quite a large financial commitment, which I cannot envisage many private woodland operators being willing to make.

**Elaine Murray:** Although it is proposed to lease 25 per cent of the total cover, it is the most commercially viable forests that will be leased, which in some areas could account for up to 40 per cent or even 60 per cent of forests.

**The Deputy Convener:** You can substantiate those figures, of course.

**Elaine Murray:** Yes. It has been argued that in productive forests such as the Galloway forest the proportion could be up to 60 per cent.

Mr Goodall, although your members purchase much timber from the private sector, I understand that the Forestry Commission guarantees supply, so that at times of reduced production your members can be assured of a supply. Are you concerned about the effect on your members of the possible loss of large parts of the most commercially viable forests and the possible loss of a guaranteed supply?

**Stuart Goodall:** I am happy to respond to your question, but first I want to make a point quickly. I need to be honest and say that the private sector cannot deliver the same level of environmental and recreational protection that the Forestry Commission can provide. That is because the Forestry Commission is Government funded. If the private sector was given grants and support to deliver that protection, it could do so. If organisations such as the Woodland Trust can deliver biodiversity benefits, woodland owners can deliver recreational benefits. However, that is not the current situation. The Forestry Commission can provide those benefits because it is funded to do so; we are not funded to provide those benefits—I do not argue with that point.

You asked about the impact of leasing on security of timber simply. It is very much about confidence. I represent members who are responsible for the overwhelming proportion of primary processing in Scotland—sawmills, wood panel companies and the like. Those people have confidence in the Forestry Commission’s ability to provide timber regularly, whether times are bad and prices are a bit lower, which is the case now, or times are good. The Forestry Commission provides long-term production forecasts, which it is pretty good at meeting. The private sector is not able to do that in quite the same way.

In the context of the proposal to lease land for 75 years, concern has been expressed that, although there might be opportunities to secure supplies of timber in the short term through existing contracts, security of supply will not be guaranteed 25, 30 or 75 years hence. That is of concern. We do not want companies to reduce investment, which is beneficial to everyone, so we are keen to consider alternatives that maintain the current security of supply.

**The Deputy Convener:** Let us get to the nitty-gritty. Are you saying that 75 years is the wrong timescale? Jean Balfour said in her submission that a lessee who had felled their crop and was not likely to be the beneficiary of replanting might be less than enthusiastic about cultivating that forestry. Should the length of leases be in sync with the planting cycle?

**Stuart Goodall:** Our understanding is that the purpose of proposing a 75-year lease was simply to have a period of time in place. The period sits slightly awkwardly with replanting cycles. We are talking about 100,000 hectares of Forestry Commission land, not all of which will have the same planting periods. It will always be the case that for some forests, two rotation periods will be involved, whereas for others, only one will be involved. Almost any period could be chosen.

There is a concern about the security of supply. Our fundamental point is that it will be extremely...
difficult for anyone to provide assurances for more than five or 10 years of secure supply. Sawmill operators, manufacturers and small companies that put £250,000 into a piece of harvesting kit want to know that there will be activity. I am not saying that if the Forestry Commission leased areas for 75 years it would suddenly be the case that those areas would not be harvested each year and that there would be a complete drop-off, but there is a concern that there could be some loss of activity, which would impact on confidence. At this time, we would prefer to explore alternatives that maintain confidence. We think that we can do that, although it does not mean that we have to stick with the status quo.

The Deputy Convener: So any leasing agreement would need to reassure downstream industries.

Angus Yarwood: Stuart Goodall has raised several points. In response to the deputy convener, I say that, if the leases go ahead, we would like a number of things to be built in. As has been highlighted, one of our concerns is that a reduction in the Forestry Commission’s income might have a negative effect on its ability to provide the multiple benefits that it has been mentioned are provided in the rest of its estate. To pick up on Lisa Duggan’s point, there is a big difference between having the right to access land and its being accessible to the general public. If we proceed with leases, we would like a range of conditions to be built into them.

However, as I have said, we want a longer consultation on how the process would work. In principle, we do not object to the private sector managing the most commercial parts of the national forest estate. We acknowledge that the private sector already meets high standards, as Stuart Goodall has said, and that that would continue, but it is unlikely that any lease would include only the most commercial parts of the estate. It would cover other areas of the estate that currently deliver multiple benefits, which private industry would not necessarily have the same interest in protecting, as Stuart Goodall highlighted. A specific example is the historic environment benefits. We are extremely keen that a proper strategic environmental assessment be carried out on any proposals to lease the estate.

Alasdair Morgan: I have a few questions, one of which occurred to me earlier. The private estate accounts for about two thirds of the forestry in Scotland. We have heard about access and the historical aspects of Scotland’s forestry. Have we magically arrived at the right balance between private and public ownership, or are people arguing that the balance is wrong and that the public percentage should go up? If private forests have many disadvantages—leaving aside what the industry has told us—should we be trying to nationalise some of the private forests?

Angus Yarwood: As I have said, we strongly support the Scottish forestry strategy and its aims. We would expect any land manager, whether public or private, to do their best to achieve environmental benefits and multiple public benefits. Scottish Environment LINK does not have a principled objection to the management of the forest estate being in private hands. Everyone’s long-term objective is to see the land managed properly. That is why we advocate the production of a sustainable land use strategy that will bring all those issues together.

The Deputy Convener: Provided that there is sufficient regulation to determine how the forest estate is managed, and that guarantees are in place, you do not care who owns it.

Angus Yarwood: We are not saying that the private sector—

The Deputy Convener: You are not indifferent; the public/private issue is just not relevant.

Angus Yarwood: Exactly—as long as the multiple benefits, including environmental benefits, access, the historic environment and so on are catered for in an holistic package.

11:00

The Deputy Convener: Does that answer your questions, Alasdair?

Alasdair Morgan: I would like to follow up my questions and ask about regulation. I do not think that people will mind my doing so. Galloway Fisheries Trust has a particular interest in the acidification of fishing rivers as a result of planting too close to them. It has said about the planting guidelines:

“The suggestion that the present guidelines and legislation is adequate to protect watercourses from acidification is simply not true. FCS have been excellent at using the guidelines very much as a minimum standard and putting in far wider buffer strips etc and being steered by the data we produce to show where there is the greatest risk of acidification—we have never had similar support in an area run by private interests.”

Does anybody want to comment on that?

The Deputy Convener: Certainly not me. I welcome your raising constituency interests, but that might be a matter—

Alasdair Morgan: Basically, the question is whether the standards are inadequate. It has been suggested that the Forestry Commission goes beyond the current standards. Are the current standards inadequate? Do we need to include in the package the aim of building up the standards?
The Deputy Convener: Alasdair Morgan has asked about acidification. Go for it, Lisa.

Lisa Duggan: The standards are minimum standards. We can look beyond acidification at designs for forest roads. The national park authority is very landscape focused. The minimum standard is okay, but it is not acceptable to us in the national park, so we work hard with the Forestry Commission and the Woodland Trust so that their roads are of a much higher standard. We simply would not get that from the private sector, because of its lack of revenue at the moment. Asking that of the private sector would be unfair and unrealistic, as significant extra costs would be involved. As I say, there are minimum standards, but we look for better.

Stuart Goodall: The issue is important and picks up on a point that I tried to make before. If somebody is asked to do something that involves costs or the loss of a benefit opportunity, and future income is therefore reduced, that must ultimately be paid for. We need to be clear that if the Forestry Commission reduces its income and increases its costs, the taxpayer, essentially, will have to pay for that.

There are plenty of examples of the private sector being prepared to go a little bit beyond the minimum that is required, but it should be funded in the same way as the Forestry Commission if it is to ensure water quality. It should be given the same opportunity because it is, ultimately, still a forestry owner that delivers benefits, and its funding should come from the same source. We should not think that the Forestry Commission somehow provides free goods, because it does not.

The Deputy Convener: Everybody should bear it in mind that we are aiming to finish this session by about 20 past 11 and that we want to discuss one or two other topics. Gavin Ellis has been trying to get in for a while.

Gavin Ellis: I am a bit of a layman. Is the system broken? Is the balance about right? As an outsider, I think that it is about right. If there is privatisation, public money will have to be made available to ensure that the private sector can deliver the things that tourism is looking for.

The Deputy Convener: That is a good point. Thank you very much.

Peter Peacock: We have focused mainly on commercial leasing, but there are other leasing possibilities—for example, to local communities that wish to have a greater stake in potential revenue streams from their local forests and in recreation and access opportunities. Do those who have concerns about large tracts of commercial forest land being leased have similar concerns about forest land being leased to local community groups in the spirit of the land ownership changes that we are seeing throughout Scotland?

The Deputy Convener: We also need to deal with the availability of Scottish rural development programme funding. Elaine Murray may want to talk about that.

Elaine Murray: Janice Cassidy is perhaps the most appropriate person to answer my question. In answer to a written question, ministers confirmed that, should the commercial leasing proposal go forward, the lessee would be entitled to apply for funding under the Scottish rural development programme. Are landowners who might be eligible for such funding concerned that a large company with a lot of expertise might come in and compete with them?

Janice Cassidy: That was one of the key points that we raised in response to the consultation. The consultation paper does not specify how many leases there would be, but it seems that the proposal is to have one, or possibly two. All our members were opposed to that because it would mean that one company would own a large proportion of the forestry in Scotland and could outcompete other, smaller growers. That is definitely a key concern. One large lessee would have a better chance to get SRDP funding than many of our growers, who would be small in comparison.

The Deputy Convener: So you feel that the current level of SRDP funding would be inadequate to sustain the potential extra demand.

Janice Cassidy: Yes, definitely.

Liam McArthur: This point goes back to an earlier one about commercial leasing as opposed to joint ventures. In his response to the committee and in the recent forestry debate in Parliament, the minister seemed to suggest that commercial leasing was a necessary evil to enable the level of planting that is required to meet the targets. My understanding of what you said is that properly structured joint ventures would enable the targets to be met and that leasing is therefore not required.

Stuart Goodall: Could we achieve the new planting targets by hypothecating the total of the joint venture income? Based on the calculations that we have seen, the answer is yes.

The Deputy Convener: Therefore, the leasing becomes unnecessary.

Stuart Goodall: The discussion about whether to lease forestry land is part of the broader issue, which is whether the Forestry Commission and its activities can become more efficient through partnership—or increased partnership—with the private sector. That would provide mixed public-private sector delivery of Government forestry
policy. Leasing is not necessarily the route to be followed for that; the principle could be explored in a different way.

**Liam McArthur:** We will hear from the minister later, but his view in the debate was that it is incumbent on those who oppose leasing to come up with an alternative. Your argument is that, while there might be a genuine debate to be had about leasing in order to incentivise other things, leasing is not required alongside joint ventures to achieve the planting targets.

**The Deputy Convener:** Do other people have views on the viability of the proposal that sufficient money could be raised from joint ventures to obviate the need to go down the leasing route?

**Janice Cassidy:** Our members’ view is that joint ventures would generate enough money without having to introduce leases, which would be complex and very long term. Our members felt that they did not receive sufficient information about the leases to back them as they stand. They thought that joint ventures would produce sufficient benefits.

**Lisa Duggan:** We had a question about whether anyone has done the maths. We did not see, during the consultation, hard and fast figures for how much could be brought in by joint ventures and leases, versus how much would go out in SRDP money that would then not be available to others for tree planting. So the question was whether we were putting an unnecessary spoke in the wheel. That was where we wanted the consultation to continue.

**Angus Yarwood:** We support that. We cannot give a full opinion either way until we have fully costed figures for all the options and have strategically assessed the proposals for their environmental worth.

**The Deputy Convener:** I ask Calum MacDonald to express a view on the proposal.

**Dr MacDonald:** I cannot comment on the leasing proposal because the national committee has discussed the matter only once—in December, after the consultation paper was published—and we decided not to come to a view on it until the consultation had concluded. That is what we will do. We are meeting tomorrow, so if it had been Friday I might have been able to give you more of a reply.

We have been considering the option of joint ventures since I joined the Forestry Commission. There are already wind farm developments on the national estate, so the income that is generated by those wind farms, albeit for private sector developers, provides us with a good basis from which to estimate the kind of income that is available. We therefore have a lot of confidence in the estimate of achieving £10 million by 2012 and £30 million by 2020.

We do not see the joint ventures as only a dash for cash; other benefits are to be gained from the joint venture approach. One such benefit is that the approach gives us a more strategic overview and control of the development of wind farms on the national estate. That is important, because we deliver many other public benefits, such as environmental benefits, biodiversity and so on. By developing a joint venture approach we can better protect those other elements of the estate, instead of taking what has been, up to now, an ad hoc approach whereby we respond to approaches made by various developers. If we take more of an active role ourselves, we will have better strategic oversight. The other big benefit is that we can better involve communities in the benefits of developing wind farms.

**The Deputy Convener:** People have, perhaps uncharitably, asked whether the Forestry Commission has the capability to develop joint ventures. Some have said, “Of course it does,” and others have questioned that. I seek your reassurance that the Forestry Commission has the capability to develop joint ventures. From my limited experience, joint ventures also imply that you have cash to put up. Given that this is about raising cash, would you raise the money from within your own organisation? Do you have the funds available to develop joint ventures?

**Dr MacDonald:** In respect of its capacity, as you know, the Forestry Commission is already involved in the commercial world. As Stuart Goodall said, it supplies timber on the basis of long-term investment programmes and long-term thinking, which is the approach that is required for renewables development. The commission’s staff also have many relevant skills, including environmental awareness and biodiversity awareness. The commission has, for example, a large database on modelling the effect of wind in forests. There is significant capacity within the commission but you are right that, depending on how far we want to go down the joint venture route, we will have to consider issues about developing further capacity, the revenue that is available and where we can access borrowing, as well as the legal right to do so, which is the whole point of the bill.

**The Deputy Convener:** Although you cannot yet commit yourself on the Forestry Commission’s view on the leasing proposal, could you let us know those views following the meeting tomorrow?
Dr MacDonald: The commission is conducting an options review, which has taken place in parallel with the consultation and which will report by the end of the month. I imagine that we could provide the committee with a summary of that review when it is ready.

Alasdair Morgan: I want to clarify whether we are all talking about the same joint ventures. Calum MacDonald talked about joint ventures such as wind farms and potential hydro schemes. Were Janice Cassidy and Stuart Goodall talking about the same developments, or did they also mean joint ventures that would involve planting and felling?

Janice Cassidy: I was talking about wind, hydro and any renewable energy developments.

The Deputy Convener: I gained the impression that joint ventures would raise cash through other means than forestry.

Alasdair Morgan: I just wanted to be clear about that.

Stuart Goodall: Like Janice Cassidy, we understand that the joint venture income and the sums that are discussed in the financial memorandum relate to hydro schemes, wind farms and—potentially—biomass developments. My additional point is that the joint venture principle could be taken further—that relates to the idea of the wider delivery of Forestry Commission activities. However, that would be additional to and separate from the joint ventures.

Angus Yarwood: I will follow up Calum MacDonald's point. We support the Forestry Commission having a more strategic role in deciding where joint ventures take place. We expect such developments to follow the full planning process, to ensure that they are not located in the wrong places.

The Deputy Convener: That was an excellent session. On the face of it, we appear to have found an alternative to leasing. Allan Mackenzie might be the happiest man of all in that regard.

We will now briefly discuss the muirburn proposals, on which various pieces of work have been done. I think that the witnesses have been primed for questions about muirburn. If anybody has anything to say about the muirburn dates, wildlife and birds nesting, we would like to hear your views. I appreciate that that is not everybody's expertise, but since you are here, we would like your views. I am looking round the room for speakers—I thank Angus Yarwood for responding.

Angus Yarwood: I am afraid that I will disappoint you—Scottish Environment LINK does not have a collective view on the muirburn provisions. However, if you have specific questions, we are more than happy to pull together views on them.

The Deputy Convener: We would be grateful if you did that. We are particularly interested in whether the muirburning season should end earlier or whether its start should be extended into September or even August. Should special licences be issued for burning out of season to counteract the danger of heather beetle? Such key questions need to be asked.

Does Janice Cassidy have a view on muirburn?

Janice Cassidy: We responded to the consultation on the muirburn dates. The consultation paper gave no specific details about how the dates would be changed—about whether the period of burning would be longer or shorter or whether it would be lengthened at the start or at the end. For that reason, our members were dubious about allowing the proposed changes. They felt that they were given insufficient information to make an informed decision about any changes to the dates.

The Deputy Convener: We will reflect on those comments.

I thank all the witnesses for giving evidence, for which the committee is grateful. As we always remind witnesses, if you wish on reflection that you had made comments that you did not make, please write to us. The clerks will be pleased to hear from you if you have further information to impart that is germane to the discussion.

Meeting suspended.

On resuming—

The Deputy Convener: Good morning, minister. I guess that this will be one of your last functions as Minister for Environment, but we look forward to hearing your evidence on the bill. In the meantime, we congratulate you on your new appointment and welcome you and your team—David Henderson-Howat, Bob McIntosh, Jo O'Hara and Anne Cairns—to the committee. I understand that you would like to make an opening statement; we would welcome a short one.
The Minister for Environment (Michael Russell): Taking your hint, convener, I shall make a short opening statement. Thank you for your good wishes. I am pleased to be here: it is likely to be my last appearance before the committee, but I have enjoyed the appearances that I have made and look forward to this one.

As the committee knows, consultation on the forestry provisions in the Climate Change (Scotland) Bill came to an end about two weeks ago, and I am pleased to have been able to circulate a preliminary analysis of the responses in advance of today’s meeting. There are no real surprises in that analysis. There appears to be consensus in favour of the proposals to allow forestry commissioners to enter into joint ventures with developers and local communities to accelerate renewable energy development. In addition, a good many useful suggestions have been made about ways to promote woodland expansion, including the urgent need to improve implementation of the Scottish rural development programme in that area.

I am sure that committee members have noted and will quote from what one could describe as considerable opposition to the suggestion of a long-term lease for up to 25 per cent of the national forest estate. Ministers—primarily my successor as Minister for Environment—will obviously need to reflect carefully on what has been said in the consultation, examine the reasons for the opposition and consider how they should respond to the ideas that have been suggested. For example, some of the respondents who opposed large-scale leases welcomed the proposal for small leases to communities—that is a useful distinction—while others made detailed suggestions about lease conditions that would help to address their concerns.

I am sure that, during the consideration of the provisions, the new Minister for Environment will be keen to engage positively in finding ways to fulfil our overarching objective of making better use of Scotland’s forests in the fight against climate change. That fight is an absolute imperative and respond to it.

The Deputy Convener: Thank you for your statement and its brevity. The committee shares your view that there is a need to address climate change urgently. We certainly support you in that.

We had a fruitful discussion this morning on the issues that you raised—leasing in particular. I do not know whether you were able to watch the discussion as it took place, but it was suggested that joint ventures in themselves might provide adequate funding—indeed, almost replacement funding. That was an interesting perspective.

Michael Russell: I recognise that perspective and realise that people have made the point for the best reasons, but there is an issue of timescale. It is extremely unlikely that the required income could be achieved from joint ventures in anything less than five or 10 years. By contrast, we are talking about income running from leases within two or three years. That is imperative for our purposes.

I would not want people to think that it is a simple matter of replacing one proposal with another. I would not have offered the proposals for consideration by the Parliament and the wider public if I had thought that there was another easy answer. I recognise—as I am sure members do—that there is none. Trying to find one through joint ventures is not as simple as it seems.

The Deputy Convener: I accept that. We would like to discuss the general welcome for joint ventures.

Alasdair Morgan: Given what the minister has just said, I have a question on joint ventures and, to a lesser extent, leases. It struck us that the consultation document lacked detail on joint ventures—several organisations have commented on that. Does the Government intend to publish any more details of what it is considering before the stage 1 debate or even before the committee considers its stage 1 report?

11:30

Michael Russell: As its chair Calum MacDonald pointed out, Forestry Commission Scotland is involved in an options review, which will provide more information on a range of matters.

The consultation was genuine. I have heard some of the evidence that has been given, and I would like to respond to it. There is no absolute detail on what should be in the proposed leases or on the proposed joint ventures. Joint ventures are a better-known approach, as that model is practised elsewhere, including south of the border. However, the idea was to consult on principles, particularly on the principle of leasing. At every consultation event that has been held, I have been at pains to point out that, if the principle of leases is accepted, the detail of what should be in the leases will require substantial stakeholder involvement at the second stage. Many of the discussions that I have had with representatives of various organisations have been based on that point. To reiterate, the consultation has been a genuine consultation on principles.

Alasdair Morgan: This point is perhaps more relevant to the matter of leases, but we do not have the details, and the provisions in the bill—its enabling powers—are very broad. That might make some people nervous.
Michael Russell: As those powers essentially enable secondary legislation, a great deal of the detail will be in that secondary legislation, which I am sure will be subject to intense scrutiny by this committee. That is not a model that this Government has invented; it was much used by our predecessors—although Mr Peacock looks shocked. I would not want secondary legislation to be made until there had been substantive involvement on the details from stakeholders in the wider community.

The Deputy Convener: Notwithstanding that, you are inviting us to buy a pig in a poke—to use an old-fashioned expression.

Michael Russell: I am sure that it is an old-fashioned expression in your farming communities, but I am not inviting you to do that. I am inviting you to do something that is well understood, in politics as in agriculture: to agree on principles and then to ensure that those principles are converted into detailed action, in this case by the process of consultation and parliamentary scrutiny.

Liam McArthur: The responses as set out in the summary that has been provided and the evidence that we have received this morning and hitherto have been markedly unfavourable to the proposed principle. The comment was made that, without the detail, it was difficult to articulate the suggestions in a more sophisticated fashion. The debate on much of what is covered by the consultation—for which there is widespread support—becomes derailed because of the focus on an issue on which there is a lack of clarity and complete uncertainty.

Michael Russell: I make no apology for bringing forward ideas—we would be living in a far less hospitable Scotland if we were closed to new ideas.

The consultation has been a useful exercise, and it has served a variety of purposes, particularly in the light of climate change but also more generally. As was referred to in the earlier discussion, there is a need constantly to examine the role and function of the Forestry Commission—to scrutinise a body that was established in 1919 for clear and strategic reasons, with the knowledge that times have substantially changed. I make no apology for our approach: the consultation has been a useful exercise and provided a useful way to look at things.

It is always possible to criticise a consultation. I am long enough in the tooth to remember other consultations that have been criticised for a lack of detail but, at every single meeting that I have attended to discuss the bill, we have been able to engage in substantive, detailed discussion about a range of aspects.

One of the really positive things is that I have excluded nothing and ruled nothing out. For example, we have discussed the lengths of leases and the way in which they could incorporate best practice in modern forestry. We have discussed different methods of approaching forestry and different ways in which forests are grown and managed. All those things have been discussed and will continue to be discussed. We have also discussed the guaranteeing of existing contracts and the interesting situation in Scotland, whereby the private sector has become very much dependent on long-term contracts from the Forestry Commission. That is not a common model in other parts of Europe and, although I think that it has been useful in the past, we need to discuss whether that is the best way forward.

All those things have been up for grabs, and there have been interesting debates and discussions. I simply wish that some people had reacted as positively in bringing ideas to the table.

Elaine Murray: The minister is right to point out that other pieces of primary legislation have used secondary powers. For example, the minister's current—and soon to be ex—department is progressing a number of statutory instruments flowing from the Animal Health and Welfare (Scotland) Act 2006 to regulate matters such as the sale of puppies and kittens and the registration of livery yards.

A parallel issue in that legislation is the controversial issue of mutilation and tail docking. The fact that such matters were dealt with in the original bill enabled John Scott's colleague Ted Brocklebank to lodge amendments at stages 2 and 3, which allowed parliamentary debate on issues that were generally considered to be contentious. Given that the leasing arrangements are more contentious than the other proposals, is there a possibility that they could be included in the Climate Change (Scotland) Bill—or a subsequent bill—so that the proposal could be discussed in Parliament?

Michael Russell: Dr Murray makes a fair point that is worthy of serious consideration. I am not happy about the timescale within which we are working. We are dealing not so much with late proposals as with the fact that, in our discussions on the bill and the Forestry Commission's parallel work on climate change, it has become increasingly apparent that the Climate Change (Scotland) Bill is the best—indeed, probably the only—available vehicle for climate change action by the commission. I accept that in the best of all possible worlds, which has existed under neither the previous nor the current Administration, we would have more time and more detail.
The substantive principle of leasing is clear to understand. It is not a new concept: the idea was included in the National Audit Office’s 1998 report and was proposed to the Forestry Commission by UK ministers in 1998, so the proposal has been around for more than a decade. The detail of leasing would be comparatively new, but that is where the detail of the secondary legislation would come in. However, I would not in any sense resolve from Elaine Murray’s point that, in an ideal world, we would have more time and more opportunity.

Peter Peacock: I want to pursue that point further slightly. Reflecting on where we have got to and given the apparent opposition to commercial leasing—I will come back to another variety of leasing in a minute—is the minister saying that he is now prepared to consider dropping from the bill the proposed powers to introduce secondary legislation on leasing?

As the minister will surely concede, the bill seeks to give ministers substantial powers. He will surely also concede that, notwithstanding his point that secondary legislation can receive detailed scrutiny, by definition secondary legislation cannot receive the same scrutiny as primary legislation. Members are not free to lodge amendments to secondary legislation, and there is not the same requirement to provide a financial memorandum and the like, so scrutiny of secondary legislation is truncated by comparison with primary legislation. Is the minister saying or hinting that, in the circumstances, he is prepared to consider withdrawing that proposal from the bill?

Michael Russell: No, I am not saying that. I believe that the leasing proposal is worthy of the committee’s support—in that remark, of course, I cannot bind anyone other than myself—and that the proposal needs to proceed.

It is possible to envisage a process in which the details of the proposal would be subject to substantial scrutiny. I accept Peter Peacock’s fair point about secondary legislation, but it is possible to consult on a draft instrument with the committee and outside interests and to engage fully with stakeholders. I have repeatedly made that commitment to everyone who has been involved in the discussions. Therefore, I will not close up my folder and say that I am now moving on. There are important aspects of the leasing proposal and other proposals—obviously, I do not want to spend all the time discussing leasing—that will move the forestry industry forward substantially in making its contribution to tackling climate change.

Let us just remember that, based on 2006 figures, planting of the nature that we are talking about—10,000 hectares a year—will sequester over time the equivalent of 44 per cent of vehicle emissions in Scotland. In some of the earlier evidence today, I heard doubt being expressed about the contribution that timber sequestration can make. There will always be doubt and debate, but we are in times when we do not need endless speculation on climate change objectives: we need delivery. Timber sequestration is a deliverable, and the Forestry Commission wants to be involved in it. The issue is one of getting on and delivering.

I will ask Bob McIntosh to come in on that.

Bob McIntosh (Forestry Commission Scotland): In the past, we have achieved planting levels of 10,000 hectares a year. For a variety of reasons, those levels have slipped over the past five or six years, and we are keen for them to be raised again to meet the aims of the Government’s forestry strategy. We will need to use a variety of mechanisms to achieve that. Clearly, we will want to look hard at the grants scheme, and ultimately if the Forestry Commission is to provide those extra grants, we will need additional funding. The issue is where the extra funding will come from.

Michael Russell: The Government can neither borrow the money nor change the tax regulations—the latter has traditionally been used as the strongest method of encouraging forestry. In addition, we do not have the resources to inflate artificially the price of timber. Given the timescales and requirements that we are discussing, we have to consider all possibilities.

The Scottish people—I am talking not about me or committee members but the Scottish people—own an asset that is worth £850 million. The question is: can we put part of the asset to work to meet important climate change objectives? The question is a sensible one, although it can be rejected. I have heard all sorts of things about the consultation and proposals, but that question is at the root of the matter. We have to ask ourselves whether we can put the resources that the Scottish people own and will continue to own to work to meet the real problem that we have.

Peter Peacock: I seek clarity on the powers, which I understand to be enabling powers. Your policy option is for commercial leasing of up to 25 per cent of the national estate over a period of 75 years—

Michael Russell: Up to 75 years. All these things are open for discussion.

Peter Peacock: Indeed.

That may be your policy objective, but the bill gives powers to not only your but subsequent Administrations. The bill also appears to set no limit on the figure of 25 per cent. Surely a future minister or subsequent Government could increase the figure to 40, 50 or 100 per cent. Am I technically correct in saying that?
Michael Russell: Technically, that is where we are, but any committee member can lodge an amendment to limit the powers. If that were to happen, I would give it serious consideration, and I am sure that my successor would do, too. The opportunity exists to lodge an amendment to create a ceiling or specify a maximum length of time. It is entirely legitimate for any member to do that. From the outset, I have been keen to engage in the detail of what is possible and desirable.

Peter Peacock: I regret that I do not have to hand the answer to a parliamentary question that I put on the links between the joint ventures and leasing options. In essence, the question was whether leasing could be done under a joint venture. I cannot remember the exact reply, but the gist was that that was a possibility. Notwithstanding the individual merits of the joint ventures powers, it would be unfortunate for them to become a Trojan horse for leasing provisions.

Michael Russell: There is no intention to make that linkage.

Peter Peacock: Is there a way of buttoning that down in the bill?

Michael Russell: I would be happy to find a way of buttoning it down.

Peter Peacock: That is helpful.

You have said that commercial leasing will make a contribution to climate change and accelerate the level of planting and so forth. In a letter to the convener, you said that the recent proposals were not necessarily the best or the only option—a statement that I find slightly curious. You are telling the committee that we should legislate to give you some pretty broad powers but that those powers are not necessarily the best or only option. What are the better and other options by which to reach your objectives?

Michael Russell: The letter has been much quoted throughout Scotland—from my reading of the local papers in Galloway, I see that Mr Hume seems to have given it almost totemic significance—but my point was more philosophical than political. As Mr Peacock knows, and my friends around the table such as Mr Morgan know even better, I am not arrogant enough to assume that I have all the answers. There may well be better options out there. From the outset, I have said constantly that I am looking for all the options.

Indeed, the consultation was unusual in that it included an additional question that said, “If you have any other ideas, will you come and tell us about them?” I am realistic enough to know that the substantial opposition to the leasing option creates a problem for the bill, and I am not in the business of bulldozing things through. What I meant in the letter that I wrote and signed and know entirely by heart is that it is possible that there are other, good proposals. I would like to hear about them, but I must say that I am not convinced that I have heard anything yet that will replace my view that leasing remains a good option.

11:45

Peter Peacock: That is pretty extraordinary, is it not? You said earlier that leasing is just an idea.

Michael Russell: No, I said that it was an idea.

Peter Peacock: But you seek colossal powers for that idea. Now you are saying to us that there might be better ideas but you do not plan to consult on them in the context of the Climate Change (Scotland) Bill.

Michael Russell: Because I have not yet heard them. If you have them, Mr Peacock, do not hold back. Please give me those ideas and I will be happy to say if they are better than this one, but you have not done so yet.

Peter Peacock: We might well have ideas but, with respect, you are in the midst of a consultation on a bill to give you powers to legislate in a profound way on the future of our forest estate, which has generated a lot of concern. You say that there might be better ideas but you do not know what they are and you will not consult in the context of the bill.

Michael Russell: We obviously differ in our political approach. I believe that there are always other options and possibilities. I repeat that the consultation was genuine and open and sought good ideas, some of which have come in, but I make the point in the letter, which I am happy to repeat, that I have not yet seen other ideas. Of course leasing is not the only option; I would be foolish to say that it was.

Peter Peacock: But do you concede that, even if some good, alternative ideas to the proposal in the bill were proposed at this stage, it would not be possible now to consult fully on them and accommodate them in the bill?

Michael Russell: Other people have other opinions, but if I thought that any proposals were better than our proposal, I would say so—I am not hidebound by it in the slightest. However, I go back to the important imperative that you have not yet raised, Mr Peacock, which is that the climate change clock is ticking. We need to plant more trees. We have not met the target, and we need to get on and do it. We can split hairs, talk about the number of conifers you can get on the head of a pin and all that sort of thing, but we need to get on with planting.
The Deputy Convener: Peter, the argument is becoming circular. You can ask a final question.

Peter Peacock: On this part, but we have other things to come back to.

I will put the contention to one side for the moment, if I can. Although we might disagree about the commercial scale of forestry, I am conscious that, given the Forestry Commission's powers, it may be constrained in community leasing. I heard what you said in your opening statement about that and I know that there are administrative provisions for Forestry Commission leasing under its natural forest land scheme, but it may not have the powers to do that. Do you think that, in the context of the bill, it is possible to construct a legal definition that would allow you to have powers over community leasing that would not open up the scope for the wider commercial leasing that people might be concerned about?

Michael Russell: Bob McIntosh wants to make a point on that.

Bob McIntosh: It would be possible to do what Peter Peacock described, but we need to remember that, because the bill is about climate change, the leasing would need a clear link with climate change, which might make it difficult to lease land to communities for any purpose. I think that Anne Cairns can confirm that.

Anne Cairns (Scottish Government Legal Directorate): Yes.

Michael Russell: I have talked to the community forestry sector about leasing and I am keen that it has the opportunity to do that, for two reasons. First, there are communities out there that would like to lease forest land for climate change purposes and to be involved in forestry. Secondly, as you will know, the purchase of forests by communities has dried up because of difficulties with the heritage funding. I deeply regret that and we must try to do something about it, but that is the present situation. However, discussions are taking place with the National Lottery. In those circumstances, I am keen to see community leasing happen. I think that it is necessary to have a section in the bill that permits leasing. Whether that section could be constrained by amendment to cover only community leasing, I will have to leave up to you. My view is that it is best to establish the power of leasing, then constrain it by secondary legislation that will be properly scrutinised. Other routes are, of course, open.

Bill Wilson: Many years ago when I was working as a biologist in another country, I came across an iron age fort that some genius had contrived to plant all over the top of. That experience has always left me rather nervous in discussions of historic monuments and forestry.

I have a few questions for you, minister, and I will bundle them together. Evidence suggests that the Forestry Commission possesses one of the largest collections of ancient monuments. What proportion of those monuments might be transferred to lessees—and if you cannot answer that question now, will you answer it in the near future? Will you reassure me that the level of protection guaranteed by the lessee for those monuments will be the same as that guaranteed by the Forestry Commission?

Evidence—especially that from Jean Balfour—suggests that, if 25 per cent of the forestry estate is leased out, 35 per cent of the income might be lost. If that is the case, I presume that a lower proportion of income would be left for the protection of biodiversity and ancient monuments.

If a not-for-profit trust is set up, it will obviously be planting in new areas. Would that not-for-profit trust have the same duties to protect ancient monuments and the biodiversity in sites of special scientific interest as would the Forestry Commission if it were planting in those new areas?

Michael Russell: Those were good questions. I am about to take on responsibility for ancient monuments, so I had better be careful in what I say. Perhaps it will be a lack of knowledge that drives me.

I will answer your last question first, Dr Wilson. I do not believe that the level of protection offered would be any less. There are statutory protections that the Forestry Commission observes and which a private owner would have to observe too.

An important distinction has to be drawn: what happens on leased land will not be the same as what happens when private forestry companies plant on their own land. Conditions will have to be attached to the lease, and they will refine the planting carried out by the private sector.

My answers to your first two questions, on transfers, are yes and yes. I want to ensure that that is on the record.

Your point about Jean Balfour was interesting. Jean has been an open critic of our proposals since the very first time that I discussed them with her. She is also an open critic of our proposals on crofting. I enjoy my conversations with Jean, but I have to say that, on many issues, they do not lead to much agreement. I disagree with her on the point that has been raised. It is absolutely certain that the resources of the Forestry Commission will not be adversely affected. Indeed, they will be positively affected by our proposals. The Forestry Commission is not being asked to commit suicide, so—with the greatest respect to her—I disagree with Jean. I want to place on record my great
respect for Jean Balfour and for her views on all these issues, which are very important.

I am informed that there is a clear legal definition relating to resources. We will ensure that it is applied.

The Deputy Convener: Elaine, did you have a question on archaeology?

Elaine Murray: No, I want to go back to a previous point.

The Deputy Convener: I would like to move on, but I will let Bill Wilson finish his questions on archaeology.

Bill Wilson: I want to follow up on my last question. Minister, why do you prefer, if you do, a not-for-profit trust doing more planting, as opposed to the Forestry Commission?

Michael Russell: I do not prefer that. Although the proposal for a trust is interesting and would offer certain advantages, I see little overall advantage. It might be overbureaucratic. That is my personal view, although I have not come to a final view on all the submissions on the subject. However, very few submissions were in favour of the trust.

Bill Wilson: So it might simply be the case that the trust does not happen and the Forestry Commission continues with its responsibilities.

Michael Russell: It will be up to the Government minister to make that decision. My view is that, although interesting, the trust proposal does not have a lot of mileage in it.

The Deputy Convener: I will bring in Elaine Murray and then Rhoda Grant.

Elaine Murray: I will preface my question by expressing a concern. We should not be saying that the solution to climate change lies in planting trees, because the solution to climate change will go a lot wider than that. Difficult decisions will have to be taken about how to produce fewer emissions, and we will have to consider microgeneration, energy efficiency and so on. It would be unfortunate if we sent out a message that all that we had to do was plant trees, and that would absolve us all of responsibility for controlling emissions.

You mentioned conditions that might be imposed on the lessee. Are they likely to reduce the amount of income that comes in? Has the fact that the lessee could be eligible for payments under the Scottish rural development programme been factored into the income? Would it result in a deficit over a longer period? Money might come in early, but there would be a deficit in the money available for planting trees as time went on.

Michael Russell: I will make two points before I get Bob McIntosh to address the financial questions, of which he has greater knowledge than I have. First, I have made it clear repeatedly and at every event that clear, substantive and rigorous lease conditions are essential. It would not faze me if it were impossible to undertake leasing because the conditions were too rigorous. I would regret the impact on income, but the priority is to get the conditions right. I do not think that lease conditions would have a great effect on leasing, but it is a point of principle that we must get them right and have a system to enforce them.

I am happy to agree that the solution to climate change is not planting trees. I do not think that I ever said that it was the total solution. However, I differ from you on an important point—or perhaps not; perhaps we can agree on it. It is really important that people understand the imperatives under which we are working and that a range of actions will be required. There is no single solution; there are many solutions. Forestry has its role in tackling climate change. As the minister with responsibility for forestry—at least until tomorrow—I am very keen that it fulfils that role. I must put on record what a great pleasure it has been to work with Bob McIntosh and his entire team. They too know that forestry has a role to play and they want to play their part. They know that they have to get on and do something and that their individual actions will be important. I do not want to hold them back from making a difference, because that is what they need to do.

Bob McIntosh: The estimate of £200 million arises from the assumption that the leasing option would involve perhaps 100,000 hectares—about a quarter of the woodland area of the estate—being leased out. There is a market in purchasing forest property, so we have a good idea what that package would be worth if it were sold freehold on the open market. We also know that a leasehold purchase is likely to be slightly less attractive than a freehold purchase and have used professional agents who are involved in the investment and forestry property market to give us their best estimate of what a 100,000 hectare leasing package would be worth. That is where the £200 million figure comes from.
Elaine Murray: Were the profiling of the income and potential SRDP payments to the lessee factored into the figure?

Bob McIntosh: Yes, they were. We have made an assumption about SRDP payments. It is a broad assumption because we do not know what sort of grants the lessee would apply for. If the new owner, to use that term, of the 100,000 hectares was eligible for grants, they might net something like £2 million a year in grants under the current scheme. That has been factored into the overall financial assessment.

Elaine Murray: You have not spoken yet about profiling. Over how many years do you expect to get the income? Will it come in all at once and, if so, how will you be able to spend it?

Bob McIntosh: That is a choice that the Government can make. Let us assume that £200 million was available. The choice would be to take it in year 1 or tell the purchaser that we would like to take it at £15 million a year over the next six or seven years so that it came in as a steady income stream.

Michael Russell: There are many permutations on that and they are all worthy of consideration.

Liam McArthur: I am interested in that response because Bob McIntosh provided a little more detail than some of the previous witnesses had before them. Lisa Duggan from the Loch Lomond and the Trossachs National Park Authority suggested that nobody appeared to have done the maths and that the money made available by a lease might at least in part be taken up by the lessee through the SRDP. I take the minister’s point about the purpose of a consultation and eliciting views, but it is rather strange that a consultation—albeit a truncated one—has concluded and key stakeholders appear still to be unaware of the basis of the calculations that were done to arrive at the conclusions that the Government has reached.

Michael Russell: I am surprised. The relevant witness has never requested that information from me as far as I know. I have a close relationship with the Loch Lomond and the Trossachs National Park Authority and would be happy to provide the information. Indeed, I would have been happy to talk to them in person about the matter.

At every meeting in which I have taken part and in all the discussions that have taken place, there has been a good opportunity to exchange information. I do not regard it as strange that we are still doing so; I welcome the fact that the opportunity exists to exchange information. I hope that the process has been entirely transparent. Indeed, had you or your colleagues sought any of the information from me face to face at any stage, I would have been delighted to provide it to you.

12:00

Liam McArthur: Clearly Jim Hume is no longer on your Christmas card list, and I would hate to think that the Loch Lomond and the Trossachs National Park—

Michael Russell: There will be no Christmases, according to Mr Hume, but there we are. I shall have to send cards to him at another time.

Liam McArthur: I am sure that seasonal greetings can be mutually communicated.

In relation to the paucity of information, it is fair to say that—

Michael Russell: There is no paucity of information.

Liam McArthur: That is your view.

Michael Russell: It is.

Liam McArthur: It is not the view shared by the witnesses that we had this morning.

Michael Russell: I listened to them quite carefully, and they were exploring ideas. I always welcome that, but there has always been the opportunity to discuss these issues properly and in a consultative way. Were I to have approached the issue by making an ex cathedra pronouncement, full of detail and appendices, I would have been attacked by the Liberal Democrats for every line of that document.

I have given the opportunity for a full and frank discussion, and many people—alas, not all—have availed themselves of that opportunity.

The Deputy Convener: Peter Peacock has a question on this point, and then I want to move on to our other questions.

Peter Peacock: What is your view of the cash flow that comes from joint ventures? You heard evidence this morning that joint ventures could probably provide all the income necessary to meet and fund the planting objectives. If you were to take the leasing route, when would the first payment become available? Would it be in 2012 or 2015?

Michael Russell: That is a key issue for profiling. Bob McIntosh might want to say a word about it; he heard this morning’s evidence too.

Bob McIntosh: If we were asked to push ahead with the leasing scheme, we would expect income to come in within two years. That might be pushing it, but within two years would be the earliest.

We would need legislation to set up joint ventures and it is difficult to see a significant joint venture income stream coming in in less than five to 10 years. It will take that long to build up to the £15 million to £20 million of additional income that we are talking about because of the long lead-in
time needed for big renewable energy projects, such as wind farms, in respect of planning and other issues.

**Peter Peacock:** What do you mean by “significant”?

**Bob McIntosh:** For funding additional planting, we are looking to raise somewhere in the region of an additional £10 million to £12 million per year. Generating that amount from renewable energy projects and joint ventures is at least five to eight years away.

**The Deputy Convener:** On that point, do you have the capacity to borrow for an interim term?

**Bob McIntosh:** We do not have the ability to borrow. If we set up a joint venture company, it would be able to borrow, but the Forestry Commission cannot borrow.

**The Deputy Convener:** Rhoda Grant, I am sorry for not bringing you in earlier; the enthusiasm of your colleagues overwhelmed me.

**Rhoda Grant:** No problem. I have a couple of supplementary questions, and then I will move on to another substantive area.

Given that the 25 per cent of forestry land that could be leased produces approximately 33 per cent of forestry income, how will the funding gap arising from the loss of that income be filled, so that the Forestry Commission can continue to provide the public benefits that it does at the moment?

**Bob McIntosh:** You must recognise that, as the estate is fairly young and a lot of investment is being made in forest roading, the estate does not make a profit at the moment. If we reduce the estate by 25 per cent, we are reducing 30 per cent of our income, but also a significant proportion of our expenditure. If we lost 100,000 hectares of the most commercial part of the estate tomorrow, broadly speaking, the annual cash cost of managing the estate for the next few years would be relatively neutral.

**Rhoda Grant:** But having once had the income, there would be a deficit. You would have had the income in the early years, and you would be facing 65 years of an income gap.

**Bob McIntosh:** That income would be a net loss in 15 to 20 years’ time, once things like our expensive roading programmes are completed. At the moment, however, the estate does not generate a profit or a surplus, so a 25 per cent reduction in the size of the estate would not lead to a 25 per cent reduction in the net income.

**Michael Russell:** Remember that we have been reprofiling the work of the Forestry Commission in the light of this change. We are essentially saying, as I have said from the beginning, that there will be no change. The assertion that there will be no change is not my assertion; it is an assertion based on the figures and on the support that I have been given by the commission. It will have no effect in that way, but it will produce substantive income for planting, which is crucial.

**Rhoda Grant:** It seems to me that it will have an effect on the public purse. You told the committee earlier that £2 million per annum could go out under SRDP. That is £150 million over the period of the lease, which leaves you with an income, over the period of the lease, of about £50 million, which will probably lead, in subsequent years, after the initial input, to a loss to the public purse.

**Michael Russell:** No, I do not see any loss to the public purse—I see only a gain to the public purse, because we will add resource to pay for planting and there will be no loss in respect of the operation of the Forestry Commission. I repeat that the commission is not being asked to commit suicide. The proposal will provide additional resource to the commission and it will provide additional planting; I would not have gone anywhere near it unless that was the case.

**Bob McIntosh:** The financial calculations are complicated, because they depend on whether we consider cash or full-resource accounting. Because we have a large estate with a large capital value, we are charged a non-cash capital charge, as it is called, on having the estate. If that is included, there is clearly a big saving, in a sense, from losing 25 per cent of the estate, because we lose quite a large chunk of that capital charge. The calculations on the financial side depend very much on whether we are looking at cash or full-resource accounting and whether the capital charges continue into the future—there is some doubt over that.

**Rhoda Grant:** But that is a paper exercise rather than hard cash to the taxpayer.

**Bob McIntosh:** It is in a sense but, as far as our budget is concerned, it is treated as cash. We have to set aside money from our budget to pay that charge.

**Michael Russell:** This is a problem for all parts of the public sector and it is a particular problem in forestry; it is an enormous charge, and it is a great disincentive to all sorts of things.

**Rhoda Grant:** I will move on to employment issues. The trade unions have raised concerns about the position of their members if the proposal goes ahead. You have said publicly that you would avoid compulsory redundancies and would look at redeployment. Forestry workers have come to me privately and told me that when they attend workshops they are being told that the position is much starker: either they accept the transfer to the new company or they are deemed to have
resigned and will not even be paid redundancy. On a policy level you are making statements that give people some comfort, although there are no guarantees, but on a practical level individuals are being told to take it or leave it.

Michael Russell: Let me put a public statement about this on the record, so that there can be no dubiety: there will be no compulsory redundancies. That is an absolute; it is the Government’s policy and it is what will happen. Secondly, although it may not be possible in every case, every effort will be made to transfer individuals to other work in the Forestry Commission. Thirdly, the Transfer of Undertakings (Protection of Employment) Regulations will, of course, apply in full.

I will make an additional commitment. I have met the unions to discuss these issues, and I hope to do so again. I cannot guarantee public sector jobs for ever, but I understand the concern about public sector jobs. I have said to people that I do not believe that it is possible to spend this amount of money on expanding tree planting in Scotland without creating new jobs in rural Scotland. I would not be so foolish as to play about with statistics on relative employment in the Forestry Commission — it is wise not to be burned twice on that—but a longer view on these matters, over the past 30 years, shows that there has been a steady decline in public sector employment in forestry. None of us can dispute that; I am not attributing any individual or corporate blame, but it has undoubtedly been the case. It should be possible to stabilise that position, and I think that the wider jobs situation in rural Scotland will be improved by the proposal.

I am conscious that the issue is crucial for individuals, and I said to the unions as recently as last week that I would actively seek ways in which we can make my pledges have real force so that they will not rely just on my word, even as it is reported in the Official Report. I will look for every possible way to do that and I will actively discuss the matter with the trade unions.

Rhoda Grant: I would like to push you slightly further on that. Given that people are not being offered compulsory redundancy if they do not transfer but are being told that they will be deemed to have resigned, which is a different thing and almost falls below your radar, will you give a guarantee that they will not be deemed to have resigned if they do not transfer across under TUPE?

Michael Russell: I guarantee that that is not the message or the fact of what I understand the situation to be. That is not what should happen. I will not go to the stage of saying that there would then be redundancies because, with the greatest respect, I would then be pilloried for saying that there will be redundancies. There will not be, but the message that you mention is certainly not being given with my sanction or authority and is not the Government’s view, which I know the Forestry Commission will listen to.

Rhoda Grant: It would be much more straightforward if you said that people will not be deemed to have resigned and that you will look to redeploy them if they do not transfer across under TUPE.

Michael Russell: I cannot give that commitment because, obviously, if I did, the union would say that that would be a redundancy situation and redundancies would be enforced. I am sorry that what I have said is not good enough for you, but I will repeat it. In my view, there is a guarantee on jobs, which I am seeking to give every possible force to. There is no intention to deprive anybody of their job, particularly those who have worked hard in the Forestry Commission in difficult circumstances. I hope that I stand four-square with them on such issues.

Elaine Murray: I have a supplementary question. As you know, those who work for the Forestry Commission may work in small numbers in remote rural areas. If those areas are transferred to the lessee, it may be difficult to offer employment in the same area to those individuals. Therefore, although you may wish to guarantee alternative employment to people, it might be difficult to do that because of the nature of the forestry industry. If large numbers of people say that they do not want to transfer to the new lessee under TUPE and that they would prefer to stay with the Forestry Commission, would that not add to the commission’s deficit? If it was able to redeploy all those people, a higher concentration of individuals would work in it. Would that put it under pressure, because it would seem to be less efficient? Perhaps there would be pressure on it to find efficiency savings.

Michael Russell: I strongly believe that it is important to be transparent and honest and show good will in such matters. There is no intention of forcing people to lose their jobs. It is always difficult in such circumstances to talk about every individual but, like the Forestry Commission, I have the strongest commitment to the staff who work in that organisation and to their future, and every effort is being expended to ensure that no individual suffers. I appreciate that there are always possibilities of all sorts of difficulties to which each of us can refer, but there is a very strong commitment at every level in the commission that what happens should be positive. The commission has a record as a good employer, which it wants to maintain. I have read and heard a lot of speculation, which I can counter only with my genuine intention, what I believe to be the genuine intention of the Forestry Commission, and
the desire to give that intention as much legislative force as I can. That is the commitment that I make.

Elaine Murray: People might have to move to other areas simply because of the nature of the Forestry Commission’s work.

Michael Russell: That is, regrettably, possible, but I hope that such moves will be very infrequent. I cannot rule that out, but I return to the desire that exists to handle matters in the best possible way, with the strongest commitment to the staff.

Elaine Murray: What about the consequences for the Forestry Commission’s budget if large numbers of employees transferred across? It might be better if Bob McIntosh answered that question.

Bob McIntosh: If we were asked to go ahead with leasing in two years’ time, we would endeavour to ensure that people who operated in the leasing area would get the first opportunity to transfer to vacancies in the rest of the organisation. That is the only thing that we could realistically do to limit the number of people affected. Ultimately, people would have to be transferred under the TUPE regulations which, as the minister said, would require the new employer to employ them under their current terms and conditions of employment. It is clear that people would rather stay with the commission, but if they are transferred, at least they are guaranteed to maintain their current terms and conditions.

Bob McIntosh: Was your question more about the resources available and the capacity to achieve increased planting?

Alasdair Morgan: Yes, and I was thinking about the consequences for employment. I am conscious that, at the moment, partly due to the construction industry cycle, sawmills in my areas are shedding labour.

Bob McIntosh: It is fair to say that the resources to achieve the new planting programme are not immediately available but, given the current economic climate, if an additional new planting programme were available, the contracting base would grow quickly to fill the vacuum and provide the capacity needed.

Michael Russell: It is also a question of the wood-using industries’ need for timber in the coming 20 to 30 years.

Bob McIntosh: There is a big concern in the processing sector about the dip in future production, which is a natural consequence of how the forests were planted originally. If that dip is not filled and we do not have a sustainable supply of timber over that period, there is no doubt that it will cause considerable difficulties for the processing sector. Planting needs to begin quickly to fill that gap and ensure that timber is available at the right time.

Michael Russell: When Alasdair Morgan spoke of redundancies in his area, I know precisely to where he refers. The industry is going through a very difficult time, but we hope that it will not last for ever and that opportunities will arise. Because forestry is a long-term business, it is necessary to plan and make decisions for the long term.

Rhoda Grant: The processors make the point that they have guaranteed supply from the Forestry Commission regardless of what is happening elsewhere, but there would not be the same onus on a commercial operator to provide the same throughput, regardless of the economic situation. They spoke about the security and sustainability of their industry and asked how that would be managed under the leasing agreement.

Michael Russell: I addressed that point slightly in earlier evidence. I understand the situation. We have said that we would regard existing long-term contracts as contracts that had to be honoured, but I also made the point that the arrangement in this country—dependence on state-supplied long-term contracts—is uncommon. A more flexible market might serve the wood processors better, although it would take some time to persuade them of that. However, there is no intention to disrupt supply—quite the reverse. We have made absolute commitments to the continuation of supply, but I regret that the point Stuart Goodall made in evidence is probably correct. We need a
bit more time to have that debate and discussion with the processors to assure them that it is so—but it is so.

**The Deputy Convener:** Does Peter Peacock wish to wind up the discussion?

**Peter Peacock:** No, I want to clarify with the minister two small technical points that arose in answer to an earlier question. Going back to the subject of cash flow from potential joint ventures, although I accept Mr McIntosh’s evidence, we heard firm evidence this morning that if you were to take a long view of the potential income stream from joint ventures, it would be sufficient to meet your planting objectives. Do you accept that that is the case?

**Michael Russell:** I do not dispute it. Both possibilities are desirable, and the short-term imperative makes it necessary to do both. However, the situation is not certain. Much will depend on what happens with the renewables market, and much will depend on the Forestry Commission’s ability to enter into sustainable joint ventures.

I do not dispute what you suggest, and I do not want to fall out with you about it.

**Peter Peacock:** That is very encouraging—

**Michael Russell:** Quite all right.

**Peter Peacock:**—just as you are moving on.

Section 47(1) says that ministers can “modify the functions of the Forestry Commissioners”. That could be a pretty broad power, but it is subsequently slightly modified.

As I understand the legislation on forestry, the commission and the commissioners have obligations on biodiversity. Would the powers that are being sought in section 47, which allows commissioners to delegate and you to modify the functions of commissioners, mean that present ministers or their successors could remove the biodiversity obligation?

**Bob McIntosh:** My understanding is that the Forestry Commission’s biodiversity obligation would transfer to the lessee.

**Michael Russell:** I think that I can see where Mr Peacock is coming from. If the bill does give ministers that power, then it should not. I am happy to make that clear. We may have to consider the drafting. I will ask Anne Cairns. Anne, do you believe that the bill gives ministers that power?

I am sorry to ask a solicitor for a legal opinion in such a way. But, hey ho, let us see what we get.

**Anne Cairns:** The biodiversity duty is on all public bodies in Scotland, including the forestry commissioners. I therefore do not believe that the power could be used as suggested.

**Michael Russell:** I thank Anne Cairns for that. I landed her with that question, but the answer was very good.

**Peter Peacock:** Yes, it was helpful.

You said earlier that an amendment to the bill might make it possible to fetter, in a variety of ways, the discretion that is being sought for ministers. Have you yourself—no, I will rephrase that, because it will not be you yourself who does this. Has the directorate been considering stage 2 amendments to the section on forestry? If so, can you tell us about them? Might they be in the territory of fettering discretion?

**Michael Russell:** I have seen no such proposals, but it is not unreasonable to assume that the idea might be occurring to some people, in light of today’s discussion. That would be quite legitimate.

**Bill Wilson:** You have given us a guarantee—or a legal reassurance—that biodiversity functions will not be affected. However, the Forestry Commission has other functions. Could the bill mean that other functions could be dropped?

**Michael Russell:** I will try my luck again and seek legal opinion. What do you think, Anne? It strikes me that access would be an absolute, because measures are imposed on all landowners in Scotland. I do not think that access could be affected, could it?

**Anne Cairns:** No.

**Michael Russell:** Were you thinking primarily of access?

**Bill Wilson:** Not necessarily. Quite a few organisations have expressed concern to me that the power in the bill is sweeping. Will you reassure us that you will consider what may or may not be lost because of the power?

**Michael Russell:** In seeking this power, we have no intention of doing anything other than what we have been talking about, and I would not be unsympathetic to making that clearer. I think that the section has been drafted as it has because ministers and forestry commissioners are constrained by other legislation.

**The Deputy Convener:** If you prefer, you may wish to reflect on that question and then write to us.

**Michael Russell:** It would be very civil to write to you, and I will ask my successor so to do.
The Deputy Convener: All right. I will bring in Alasdair Morgan and then Rhoda Grant.

Alasdair Morgan: I want to ask about the potential to raise all the money that is required from joint ventures—not immediately, but in the longer term. We have heard that the joint ventures would be mostly wind farms. As we know, and as Bob McIntosh has suggested, wind farms can have their problems when people object to planning permission being given for them. Have you a rough idea how many turbines would have to be built to raise the kind of money that is needed?

Bob McIntosh: No—but we might receive £2 million net income for roughly every 100MW of wind farm generation. It probably takes 40 to 50 turbines to generate 100MW nowadays, so £10 million would be received for five times that number of turbines. That is a broad indication of the scale.

Michael Russell: I would be cautious about the figures being used over time, because technology changes and planning is an issue, so it is difficult to tie things down to exact numbers of turbines.

Alasdair Morgan: We are, however, talking about a substantial number of wind farms over and above those that are already in the planning system.

Bob McIntosh: Hydroelectric schemes must also be considered, of course. There is quite a lot of scope for small-scale hydroelectric schemes on the estate.

Alasdair Morgan: There is, if the Scottish Environment Protection Agency approves them.

Michael Russell: This is not just about wind farms. Smaller-scale hydroelectric power still has potential in Scotland. Hydroelectric power is one of our great untapped resources.

Rhoda Grant: If it is okay to do so, I would like to move on to another subject, which NFU Environment Protection Agency approves them.

Alasdair Morgan: There is, if the Scottish Environment Protection Agency approves them.

Michael Russell: This is not just about wind farms. Smaller-scale hydroelectric power still has potential in Scotland. Hydroelectric power is one of our great untapped resources.

Rhoda Grant: If it is okay to do so, I would like to move on to another subject, which NFU Scotland raised.

The Deputy Convener: I will let Bill Wilson ask a supplementary question before we move on to that.

Bill Wilson: The joint ventures that we are talking about are mainly renewable energy ventures. It is understandable that we are doing so—we are discussing climate change—but I presume that other ventures, such as tourism ventures, could be included.

Michael Russell: No. There is support for the Forestry Commission to enter joint ventures in other areas, but we will have to wait until a public services reform bill is produced before that matter can even be considered. The proposals are targeted on climate change: there might be a grey area in respect of tourism ventures—people might want to visit wind farms, for example—but other ventures are highly unlikely to be included.

Bill Wilson: People might also want to visit hydroelectric plants.

Michael Russell: Some people want to visit such places. It strikes me that you are possibly one such person, Dr Wilson. [Laughter.]

The Deputy Convener: Enough.

Rhoda Grant: Let us move swiftly on.

In written evidence, the NFUS raised concerns about tree planting and where it occurred, and two witnesses this morning—from Scottish Environment LINK and the Confederation of Forest Industries—mentioned a land use strategy. My understanding is that the Government has talked about producing a land use strategy. It seems to me that this is a good time to revisit that and to consider how such a strategy could work.

Michael Russell: Rhoda Grant will no doubt be pleased to know, and will welcome the fact, that work on that is on-going. I am sure that you know about the event at the Macaulay Land Use Research Institute last September, which I think the deputy convener, John Scott, was at.

The Deputy Convener: No.

Michael Russell: That event started the process of research into land use in Scotland. There is no intention to have a five-year plan that tells people what they can do in each part of Scotland, but we need to be aware of the different pressures that exist.

I will give an example—we may get round to talking about muirburn. Since 1945, 25 per cent of heather moorland in Scotland has disappeared, so substantial changes have taken place and forestry has been a key player in the process. It is undoubtedly true that where trees are planted will be a significant issue. The Government’s view is that they must be planted on poorer land; I accept the NFUS’s evidence on there being pressure on better land. It has also been difficult to persuade the agricultural sector to engage fully with short-rotation coppicing, for example, which could have been used. There is undoubtedly an issue to be considered: it will not stop the process, but it will need to be considered.

Rhoda Grant: Witnesses have said that a strategy would manage the process, especially if we want a large increase in planting.

Michael Russell: Things will not all happen in a week. There is a lot of time to debate and discuss the matter, and there are already places that are ready and suitable for planting. That will continue. Of course, the issue that you raise is always an issue. As Mr Morgan will know, there are concerns
about planting of new forest in parts of Galloway and Upper Nithsdale at the moment. There are also concerns in other places. We must be sensitive to those concerns and recognise what communities want to do. Other places in Scotland are crying out for trees to be planted, and for a balance between native and non-native species in particular.

The Deputy Convener: That seems to have exhausted the questioning on that aspect of the Climate Change (Scotland) Bill. Perhaps we should now take up the minister’s entrée and discuss the vital issue of muirburn. A little. I am grateful to him for giving us the time that he has already given us. Minister, do you have anything to say as a brief opening statement on muirburn? We do not want to spend too long on the matter, as you have other commitments.

12:30

Michael Russell: I will be positive. There is nothing sinister in the proposal and I am slightly surprised that people have been taken aback by it, and that they think that it is an attempt to go out and stop people setting fire to hillsides in any way. The proposal in the bill is actually very constrained. The specific wording that is used is:

“necessary or expedient to do so in relation to climate change.”

That is clear. There is no doubt in anyone’s mind, aside from the occasional correspondence that we all get, that climate change is taking place. It is also clear that certain activities that are constrained within a legislative calendar, and which are also tied to the natural seasons, will change. Muirburn is one such activity, so we took the opportunity that the bill presented to ensure that there was flexibility in that respect.

We have been a little taken aback by some of the reaction. The reality is that muirburn will continue; no one is disputing that it is a very important land management tool. The bill offers the opportunity to be much more flexible. There will be a strong debate about exactly when muirburn can take place and how the provisions will apply, but there is no intention to abolish it, limit it or stop it happening. Indeed, the greater flexibility in September, for example, might be desirable. It is an issue on which we need to get everybody around the table and ask, “Can we go ahead with this?”

The Deputy Convener: From my experience of burning heather, I think that extending the season into September would be a good idea, although I would be grateful to hear views from other members. Is that your thinking, minister—given what you have said?

Michael Russell: The extension could be helpful. Many people have said that it will be. It would be equally helpful to ensure that we change the earlier time in the year to take account of, for example, the earlier breeding cycles of birds. Mr Peacock is much more expert on that than I am, but he would acknowledge the need to recognise what is happening in the countryside, and that things are changing.

The Deputy Convener: The view on the breeding cycles of birds does not seem to be unanimous.

Michael Russell: I do not think that it ever will be, but there is some evidence that we should address the subject. There is no imposition in the bill: it says merely that we need flexibility, which we will exercise in close consultation with all the interest groups.

Elaine Murray: I must admit that I, like the minister, was somewhat surprised by the strength of the response to the proposal. I am also surprised that people are saying that the breeding cycles of birds are not changing, because there is a fair amount of evidence that they are changing due to climate change.

Because some people are concerned that there might be a different motivation behind the muirburn proposals, will it be possible to lodge an amendment that might offer them reassurance?

Michael Russell: I would be positive about that. I want to give every reassurance to people that there are no sinister motivations behind the proposal. If anyone feels that it has been made for such reasons, I—or rather my successor—will be open to any suggestions. It is necessary that we move forward on the matter. On environmental issues, as members will know, people often seem to find themselves in opposition. There is no need for opposition on the proposal—we could fairly easily agree on it.

The Deputy Convener: Would anyone else like to say anything on the matter? The minister might like to talk about the special licences that relate to control of the heather beetle. That is another new concept for me. Someone suggested in the consultation that it might be an idea to help to control heather beetle in areas where there were unexpected outbreaks, and that licences might be issued to permit burning out with the normal season.

Michael Russell: Jo O’Hara knows so much more about that than I do, which is not difficult. I ask her to say something.

Jo O’Hara (Scottish Government Rural Directorate): It is clear in the bill that the enabling power on special licences kicks in only if it relates to climate change. We have received quite a lot of
evidence that suggests that people want to explore special licences. We will do that, but probably not within the scope of this bill. A lot of stuff to do with muirburn but which does not directly relate to climate change came out of the consultation. We are keen to explore that further, but it is probably not for the bill.

**The Deputy Convener:** Might such provision be subsequently introduced by secondary legislation if doing so was regarded as worthwhile. Do members have any other comments?

**Rhoda Grant:** Muirburn is not really to do with climate change. The process might need to change because of climate change, but muirburn is nothing to do with stopping climate change. Should the muirburn provisions be in the bill at all?

**Jo O’Hara:** The provisions are an adaptation measure. Muirburn is a weather-dependent activity. If the weather changes, it is likely that we will need to change the dates for muirburn. The situation is as the minister said.

**Rhoda Grant:** Muirburn does not mitigate the effects of climate change.

**Michael Russell:** We agree. Without doubt, the measures on muirburn will not advance or retire climate change, but the bill is a useful place for them because the activity results from climate change. Members might seek to exclude the measures from the bill on the ground that Rhoda Grant mentioned, but many people will not thank them for doing so.

**The Deputy Convener:** Would it not be fair to say that the bill is about mitigating the effects of climate change as well as seeking to avoid it? In that regard, the bill is probably a relevant place for the muirburn provisions.

**Rhoda Grant:** I was merely trying to be helpful. If there are other issues with muirburn that would not fit with the bill, would it not be wise to deal with those under different legislation, given that the muirburn provisions are because of climate change rather than to prevent climate change?

**Michael Russell:** Having consulted on the issue and taken it forward, we would like to get it settled. The issue is raised with us—it is certainly raised with me—regularly, so it is wise to get on with it.

The issue of special licences can be dealt with in a variety of ways, such as through secondary legislation. Indeed, as the countryside agencies are aware, it is possible that at some stage we will introduce legislation on natural heritage, which special licences could fit within. Special licences for tackling heather beetle would probably fit pretty well within secondary legislation.

**The Deputy Convener:** In the absence of further questions, I thank the minister for appearing before us today and on previous occasions. I wish him every success in his perhaps not chosen, but new, career.

**Michael Russell:** It might not quite be that.

**The Deputy Convener:** I also thank the officials for accompanying the minister and for their input into this most interesting of subjects.

**Michael Russell:** I thank the committee for the interesting discussions that we have had over the course of our relationship. I look forward to working with members in different capacities in the future.

**The Deputy Convener:** We look forward to that.

12:37

*Meeting continued in private until 12:56.*
SUPPLEMENTARY SUBMISSION FROM CONFOR

ConFor (Confederation of Forest Industries) has been established to represent forestry and wood using businesses from nurseries and growers to wood-processing end-users. ConFor aims to help build the market for timber and timber products, create a supportive policy environment for the forestry and wood using sector and to help members become more competitive and successful. ConFor has by far the largest membership of any representative body in the sector. This proposed legislation has attracted widespread interest from every part of the wood supply chain.

Thank you for the opportunity to reply to the Committee’s Call for Views. In context of the current consultation on the Climate Change Strategy it is important to recognise that the forestry and wood-using sector is well positioned to help deliver the aims of the Scottish Government to create a low carbon economy. As this is a call for views on the Bill, this response will concentrate on the sections relative to forestry and wood-using industries.

**Question 1**
The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

ConFor recognises the current situation is unsustainable and welcomes the Scottish Government’s aim to make Scotland a low carbon economy. Forestry and timber should be important elements in achieving this goal. The planting of new productive woodland offers a huge opportunity in carbon sequestration, in particular with faster growing softwoods. Utilising more timber and wood products in the construction industry stores carbon and displaces more energy intensive materials. Acknowledging that different tree species will absorb CO₂ at different rates and over different life-times, research by Broadmeadow and Matthews (Forestry Commission, Forest Research 2003) estimate removals over a lifetime for productive softwood crops of an average 3tC/ha/yr, although during high growth this rate may rise to 10tC/ha. New planting provides a relatively cheap and quick method to mitigate carbon emissions and would be good as part of a short to medium strategy, complemented in the long term with a change in practise to utilise more timber and wood products in construction as opposed to energy intensive products such as concrete and steel.

**Question 2**
The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.
What are your views on the setting of targets in batches from 2010 to 2022?

While carbon sequestration is a good short to medium term fix to offset carbon emissions, there must be a fundamental change to incorporate more sustainable processes in our lives. Timber and wood products can offer a far greater role than just energy creation. Using timber in construction can mean that there is less use of more energy intensive products such as concrete or metals, this wood can then be used at the end of its life for energy generation meaning that the fully utilised product will have a longer life and greater impact towards a low carbon economy.

The Bill must take into account the fact that “Scottish removals” are initially going to be coming from the planting of new trees throughout Scotland which the Scottish Government has asked the private sector to lead. The Bill must reflect this and support the industry to achieve the targets set out in the Bill.

Question 11
The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

The sector welcomes the Government’s desire to aid the future growth and development of Scotland’s forestry and wood using businesses, and has debated the current proposal in depth. The Scottish Government released a consultation on the forestry provisions in the Scottish Climate Change Bill which ConFor answered and is summarised below:

This consultation is the first step in what is a two-stage process. First, the Government would take powers to enable part of the forest estate to be leased and also for FC Scotland to enter into joint ventures. In the second stage the detail of how these leases and joint ventures would operate, and how any money raised would be utilised, would be set out. It is important to note that without this detail it is not possible for the business sector to provide a simple yes or no answer to the key questions on whether or not the Government should take powers to enter into joint ventures or lease part of the forest estate. It also makes consideration of alternative mechanisms more difficult.

The Government’s proposal and potential alternative mechanisms need further discussion and elaboration, and therefore the sector has set out below what it sees as key issues that it would have to explore further with the Government before providing a definitive response to the questions posed in the consultation. Key Issues 1 and 2 are of real importance to the sector and these issues would need to be addressed as part of any leasing or alternative option that is taken forward.
KEY ISSUE 1 - RECYCLING OF FUNDS RAISED

It has been estimated by Government that leasing 25% of the commercial element of the public forest estate (perhaps 100,000 ha) for something like 75 years could realise up-front income in the region of £200m. The amount raised may be less given the current economic climate. It could also vary depending on the exact area to be leased, the terms of the lease or on the final agreed length of the lease.

It is expected that there would be a desire on Government’s part to reinvest any money raised immediately and in particular ahead of the next election in 2011. It is important to note that due to limitations on capacity it would not be possible for the forestry sector to deliver tens of thousands of hectares of new planting by 2011. Achieving 15,000 ha per annum over two planting seasons would require perhaps an additional £48.4m, leaving a balance of over £150m.

ConFor would be strongly opposed to any proposal that saw anything more than a minor element of funds raised being spent on activities other than new planting. An effective mechanism would have to be put in place to ensure that the major element, at least, of any money raised would be retained for new productive softwood planting.

If FCS entered into joint ventures involving biomass then there is real potential for conflict of interest as it becomes customer and supplier.

It is estimated in the Financial Memorandum accompanying the Climate Change Bill that annual net income from joint ventures might be expected to reach £10m/yr by 2012 and perhaps £30m/yr by 2020.

ConFor estimates that planting 10,000 ha/yr would require an additional £7-10m/yr in grant and 15,000 ha/yr would require £24-28m/yr extra. This could be achieved by utilising income from joint ventures.

KEY ISSUE 2 – SECURITY OF SUPPLY

Since 2000 the pace of investment in the forestry and wood using sector has accelerated. It has been estimated by Scottish Enterprise that annual investment has risen from £60m a year in the 1980s and ‘90s, to £100m a year now. This has taken place against a backdrop of increasing supplies of wood from Scotland’s forests, and reflects a strong level of confidence amongst wood processing businesses that supplies of timber will be forthcoming in future years. In that context it is worthwhile noting that, unlike other countries in Europe, there is no potential for Scotland to import unprocessed wood.

A major element of that level of confidence is due to a belief amongst the wood processing community that FCS will be a reliable supplier of wood in the
medium to longer term, including providing reliable supplies of timber during times when prices are depressed. From a public sector perspective this helps to secure the long term viability of a customer base which is, for the most part, located in potentially vulnerable rural communities.

At present wood using businesses within ConFor are making, or are considering making, significant investments in excess of £100m. Companies have made clear that the issue of leasing has raised fundamental concerns over their levels of confidence in future wood supply, which in turn could have an impact on current and future levels of investment.

Reducing confidence in security of supply would have an impact along the wood supply chain, affecting forestry contractors, haulage businesses and the wider community in rural areas.

At present it is not possible to estimate the likely impact of any leasing arrangement on supply and confidence given that, for example, there is no information on the areas to be leased, the terms of any lease and how many lease-holders there could be (it is likely there would be a preference in the sector for more than one). It is also not clear how the value of any lease would be affected by TUPE requirements, existing Long Term Contracts, etc. The Government has also confirmed that it is not in a position, at this time, to provide any guarantees to the sector on how confidence in wood supply can be retained.

It is important to note that the leasing proposal has been developed without input from the business sector. An opportunity to input to emerging thinking would have provided a mechanism to explore issues such as overall marketing strategies both on the leased and the retained estate areas and their impact on potential future confidence, and to consider potential alternative mechanisms to raise funding to support new planting.

The issue of security of supply is fundamentally important to businesses along the supply chain. ConFor believes that the Government should work with it to consider, urgently, whether and how confidence could be retained to underpin the continued growth and development of the forestry and wood using sector in any future developments regarding the public forest estate.

**Question 12**

The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

**What are your views on this proposal?**

ConFor welcomes the measures to improve the energy efficiency of buildings. Timber used in construction can displace materials with a higher embedded energy, thereby reducing emissions of CO\textsubscript{2} by 1 tonne for every tonne of wood used. A study by the Edinburgh Centre for Carbon Management on emissions associated with construction materials in different sized domestic buildings
demonstrates that “there could be 86% reduction in GHG emissions associated with the embodied energy of building materials if timber internal and external structural elements and fittings are specified wherever possible.”

It has been shown that average savings of 0.8tCO₂ can be achieved by replacing 1m³ of concrete/block/bricks with 1m³ of sawn timber¹. ConFor calculates that over the period to 2050 the additional productive forest area achieved from planting 9,000 ha/yr of productive softwoods could provide, based on current proportions, an additional 33.5M m³ timber available to the construction market. This then gives the potential for substitution of materials delivering emissions savings of 27mtCO₂. This would be a tremendous resource for Scotland.

Question 14
The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

District heating systems are the apparatus for distributing residential and commercial heating requirements throughout communities, which can include public buildings and private households. District heating plants can provide higher efficiencies and better pollution control than individual household boilers.

ConFor welcomes the development of incentives to the production of heat from renewables, but this must be taken forward in the context of the existing use of wood by businesses that already make a significant contribution to a low-carbon economy.

ConFor is also concerned about the loss of productive forests from renewable energy developments and has pressed for action to minimise forest loss and ensure that compensatory planting takes place. In the context of this proposal, and broader Government policy, there should, as a minimum, be no net loss of productive forestry in Scotland.

There are significant areas of under-utilised woodland, which have the capacity to provide fuel stock for a wood chip supply chain. However, these streams are only beginning to develop. Stakeholders would be reluctant to invest if the security of fuel cannot be guaranteed. Fuel security is a prerequisite in any supply chain and it is most likely to be secured in a joint venture arrangement, which sees all parties in a supply chain making a return on their investment.

CONFOR
27 February 2009

Submission to the Transport, Infrastructure and Climate Change Committee

Responding to question 11 – Forestry.

The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

1. Renewable energy development

1.1. Forestry Commission Scotland (FCS) has developed considerable expertise in working with partners to permit developments on its land, but is currently constrained by the extent to which it can further support such ventures. Planning documentation for new developments has to be prepared by the developer, which usually limits participants to large commercial organisations.

1.2. The option of entering into Joint Ventures (JVs) will allow FCS to use its own expertise to ease project development. The range and scale of businesses which can enter into partnerships will be greater, as FCS will be able to provide its land as part of the venture and perhaps commission some of the planning preparation currently routine in preparing, for example, Forest Design Plans. Economies of scale and the good reputation of the organisation make this worthwhile.

1.3. Forest Holidays is a JV with the Caravanning and Camping Club, set up through UK Government legislation to invest in the cabin and camping venues across the UK and has proved very successful. The investment is expected to be about £20m over 10 years and is already reaping benefits, with increased bookings, additional employment opportunities and three new sites to be opened during 2009. The two parties working together has ensured maximum added value for both sides.

1.4. There is great potential for community renewable energy projects from JVs with FCS. Developments such as Combined Heat and Power (CHP), woodfuel and micro-hydro would be the most efficient way of substituting for oil-based fuels in rural areas away from the gas network, with significant reduction in road miles and increasing employment opportunities. Much of the expertise developed to date has been in facilitating projects, which then benefit other parties. Some of these will improve opportunities for private woodland owners who have still to begin harvesting in plantations, which are generally younger than those of FCS. The Balcas plant at Invergordon, now nearing completion, is an example of a larger scale project facilitated by FCS because of its ability to provide long-term commitments on wood supply and will transform the market in this area of the north Highlands. This 7MW CHP plant will use 300,000 Tonnes of timber to provide 4MW to the Grid and use the
rest to manufacture wood pellets as a value added product, giving around 20 people sustained employment.

1.5. Under the current National Forest Land Scheme, communities can buy smaller areas of NFE to manage for their own benefit. This means they have to raise significant capital for the purchase, as well as the revenue to look after the land thereafter. In most circumstances, it would be better for the community to enter into a JV with FCS to allow them to manage the land without having to raise the capital. This would also provide protection to the community and develop more innovative ventures.

2. Releasing capital for woodland expansion

2.1. The Trade Unions have seen no evidence to support the value of leasing or cutting rights on large areas of FCS land and show here the potential disadvantages for the Scottish Government and FCS.

2.2. Several governments around the world have either leased or sold significant parts of their National Forest Estate (NFE) and some have gained a significant lump sum of money from this. However, evidence accumulating over the last decade or so is showing up many problems with this method.

2.3. New Zealand sold its entire NFE in the 1980s and 90s. Of the woodlands sold, the Kiangaroo Forest was one of the most commercially valuable plantations in the country. The process of negotiation, between government and a single company, lasted approximately 16 years and involved lengthy and expensive litigation. A decision was finally reached and a price agreed, but the company went bankrupt after about six years due to the excessive valuation. As a result, none of the anticipated developments and job creation opportunities materialised. Management during the financial difficulties was inadequate and considerable overcutting took place and local sawmills put in jeopardy, despite the apparently strong regulatory framework of the Government Forestry Department.

2.4. A report prepared for the South African Government to advise on their leasing options in 1998, which drew on experience in New Zealand, Papua New Guinea, Indonesia and Nepal indicated that this had not been successful in the past. In each case where the most commercial areas were leased for maximum income, governments have had major problems in later years as they have tried to implement improved silvicultural or management practices. They did not foresee these changes at the time of drafting the lease so did not include them. Many of these leases throughout the world are now being withdrawn and replaced by Forest Management Agreements, which have more in common with joint ventures. More than five years after this report, the South African government had still suspended leasing due to their reservations about their success and the lack of subsequent methods of control.

2.5. In 1992, the Swedish Government sold a substantial part of its NFE to a single publicly listed company. 10 years later the private business was suffering extreme financial difficulties and was able to raise log prices due to its semi-monopoly. Since then 20-30 sawmills have gone bankrupt, or been sold to Russian or Baltic owners, reducing the capacity within Sweden and the levels of forestry employment. As
concerns with the company continued the Government offered to buy a 30% shareholding in the forests and have subsequently underwritten the remaining 70% should certain conditions prevail.

2.6. The leased area proposed in this Consultation is for about 100,000ha of the most commercial areas with the least social and environmental value. The criteria developed by FCS for measuring the social and environmental value were designed to rank forests, not ascribe an actual value. The removal of 100,000 ha (approx.25% of the NFE’s woodland cover) of the most commercial areas from FCS management is equivalent to removing nearly 35% of the income from FCS. This income is currently used to fund multi-purpose forestry across the whole of the forest estate. There will be some expenditure foregone by entering these leases, but as they are the most commercial areas, this will be <20%. The Scottish Government has made it clear that it will not meet this self-inflicted funding gap with extra revenue, so the amount of money available for the non-commercial benefits elsewhere will reduce significantly. This will impact across all of Scotland and is in line with the experience of other lease schemes around the world.

2.7. Any review of Forest Policy in the UK over the last 25 years will show a massive change in emphasis. The introduction of the broadleaf policy, increasing importance of environmental benefits, recognition of the value of forests for social, health and education activities, Forest Habitat Networks, requirements for public consultation and involvement, community purchase and partnership schemes are just a few of the real developments in forest management. There is no sign of this pace of change lessening and we do not believe FCS or the Scottish Government can foresee the level of changes likely over the next 25 years, let alone the 75 years proposed for these leases. Two options arise from this; regular revision of lease conditions or removal of policy improvements on 100,000 ha of forest land in Scotland. The first would reduce the value of the lease considerably; the second would be unacceptable to the people of Scotland.

2.8. The Unions also believe it is disingenuous to talk of the lease life as 75 years. It is accepted that the true value of a lease to any global investment company is the capital value of the forest. It is also accepted that as the end of a lease nears, the capital value reduces. For any private company, this would increase the risk and is likely to result in renegotiation of the lease at, say, 50 years for a 75 year extension. Any lease will, in reality, remain in perpetuity. The result of this is the same as outright sale, where management practice is regulated by Government authorities. However, as it was leased, the true value of the estate will not be realised.

2.9. A report presented to the Scottish Parliament (Mitigating against Climate Change in Scotland: Identification and Initial Assessment of Policy Options), proposes an option for improved carbon sequestration from forests by lengthening the time between planting and felling (rotation length). Current figures show that the average rotation length in private forests is at least 10 years shorter than on the NFE, because different discount rates are applied according to the priorities of the forest manager. This equates to about 8% reduction in sustainable carbon sequestration.
2.10. The Minister has given three guarantees to FCS staff affected by the lease proposal; no compulsory redundancies, protection under TUPE regulations if transferred to the private sector or transfer to another part of FCS. These would be welcome if they were not significantly devalued by the leasing proposal.

2.11. The likely loss of income to FCS has been set out in paragraph 2.6. An increase in cost base would be made worse by the cost of transferring staff to other parts of FCS. Many staff, particularly those on the lower pay rates are secondary earners within their household, which means the option of transfer is not realistic. Refusal to move in such circumstances could mean the person being classed as resigning, which is unacceptable to staff and their Trade Union representatives.

2.12. Although the Minister has given an assurance that any staff transferred to a private employer would be covered by the TUPE regulations, experience has shown that detrimental changes to terms and conditions can materialise very soon after transfer as a result of the pressure to reduce costs and maximise profits. The staff in FCS are exceptional within the public and private sector for the dedication they show to their employer and their long and continuous service. This is often due to the rural locations of many jobs, but also a demonstration of the high value they place on the public sector ethos of the organisation. This will add to the pressure for staff to transfer to other parts of FCS.

2.12.1. In a written response to the FCTU, the Forestry Commission has confirmed that the Scottish Government’s commitment of ‘no compulsory redundancies’ does not form part of the terms and conditions of employment for Forestry Commission staff and as such would not form part of any ongoing employment commitments should any FC staff be subject to a TUPE related transfer to another employer.

2.13. The effect of no compulsory redundancies on top of the loss of FCS income and cost of transfers will be to cripple the ability of FCS to deliver multi-purpose forestry across the remaining NFE by reducing efficiency and effectiveness. Money will not be available to fund social, environmental and economic improvements rightly demanded of us by Ministers.

Allan MacKenzie
19th February 2009
Next Wednesday I will be attending the Rural Affairs and Environment Committee meeting on behalf of LINK to give evidence on the forestry proposals in the Climate Change (Scotland) Bill.

These proposals have generated a broad range of views across the forestry and environmental sector. We have become aware that there may be a degree of misunderstanding about the joint LINK position on the proposals and I am keen to reiterate it clearly.

LINK is the forum for Scotland’s voluntary environment organisations and provides a network for its member organisations, enabling informed debate, and assisting co-operation within the voluntary environmental sector. When we make comment on matters of policy and legislation we do so after lengthy discussion across the network. We agree to proceed on the issues that unite us and avoid or comment with caution on issues where we differ. Our aim is to give weight to the strongest views that we share.

I would like to summarise our LINK written evidence to the Committee in order to clarify the agreed LINK position. Our written evidence states:

• We are supportive of Ministers’ intention to invest in actions to tackle climate change.

• Specifically, we welcome the measures laid out to allow the Forestry Commission Scotland to enter into joint ventures in renewable energy projects, and their desire to meet the woodland creation targets.

• However we are concerned that specific proposals to lease around 25% of the National Forest Estate have not yet been fully considered, costed and assessed on their environmental merits and drawbacks. We would like to see this addressed before we make a full assessment of their merits.

• In addition we are concerned that actions to tackle climate change will focus too strongly on carbon sequestration. Whilst trees have an important and complex role to play in absorbing carbon and tackling climate change, action to reduce carbon emissions should be focused on diversifying our energy consumption (away from carbon based sources) and reducing our consumption of energy through reducing our heat and energy loss.

• Finally, we believe that enabling wildlife to adapt to the effects of climate change must become a key component of our action on climate change. To this end we would like to see the introduction of a Sustainable Land Use Strategy that will address Scotland’s land use holistically, both for adaptation and the reduction of greenhouse gas emission from land use.

I am keen to meet with you in the Scottish Parliament on Tuesday 10 February 2009 to brief you further on our response. I have also sent this letter to the other members of the Committee.

Angus Yarwood, Scottish Environment LINK Woodland Task Force Convenor
9 February 2009
Dear Roseanna

Climate Change (Scotland) Bill: Forestry Provisions

Thank you for your letter of 18 December about this Bill.

I am sorry that we were unable to complete our consultation on the forestry provisions before the Bill was introduced. I would, therefore, like to take this opportunity to provide you with a short brief on the current progress with the consultation exercise.

As you know, the consultation was launched on 4 November. Since then, there has been considerable media coverage of the proposals and I have personally attended a number of meetings with stakeholders and Forestry Commission staff representatives. These have included, most recently, a meeting of the Scottish Forestry Forum on 18 December. In addition, senior managers in Forestry Commission Scotland are holding Q&A meetings for staff in all parts of Scotland. So far, we have had 35 responses to the consultation paper, and we expect a good many more. I know that a number of stakeholder organisations are engaged in their own internal consultation processes and, for this reason, do not expect to receive their responses before the deadline of 27 January.

My assessment of reaction so far is as follows:

- the proposal to enable Forestry Commission Scotland to enter into joint ventures appears to be uncontroversial and to be generally supported;

- most of the attention is focused on the proposal to enable Forestry Commission Scotland to lease out management, or cutting rights;

- there is general support for the intention to generate new funds for forestry related climate change mitigation activity, although the forestry sector would like to see a guarantee that any funds so generated would be reinvested in forestry;
- staff have concerns about the implications for job security of any who are transferred to a lessee, and concerns about the wider implications for the Forestry Commission. There is more information about this on the Forestry Commission Trade Union website http://www.fctu.org.uk/;

- industry stakeholders have a range of views, reflecting different interests; wood processors (in particular) having concerns about the future marketing arrangements for timber. The Confederation of Forest Industries (Confor) is gathering views on the industry position – their website is http://www.confor.org.uk/Default.aspx?pid=182&id=0;

- more specific questions about the suggestion of a lease relate to the standards of management that would be expected of a lessee, including their approach to access, heritage and community engagement issues; the effect on timber marketing and continuity of supply; the position at the end of the lease; the eligibility of a lessee to receive grants under the Scotland Rural Development Programme; and the impact on the remaining part of the national forest estate;

- the suggestion of a not for profit Trust has led to questions about how such a body would operate and how, in the longer term, it would be possible to guarantee that it continued to reflect the public interest;

- as you know there have also been a significant number of Parliamentary Questions.

When I launched the consultation paper, I stressed that our underlying aim is to make full use of the potential of our forests to help mitigate climate change. The potential role of forests was highlighted in the 2006 Stern Report on the Economics of Climate Change, which also emphasised the benefits of strong, early action. More recently, a report for the Scottish Government by AEA Technology on policy options for mitigating climate change has identified woodland creation (and increased use of wood biomass for fuel) as high priorities.

The consultation paper proposes the option of leasing management rights as one way of releasing capital from the national forest estate for reinvestment in woodland creation. During the consultation process, I have emphasised that the options we have suggested do not necessarily represent the best or only approach to achieving our aim of making better use of forests to help mitigate climate change. We are certainly willing to consider other proposals. In addition, I have asked Forestry Commission Scotland to undertake a wider review of options. To help inform this review, the Commission is examining the implications of a 75 year lease over about 100,000 hectares (or just under 25% of the national forest estate).

I very much sympathise with the uncertainty that a discussion process of this sort creates – and I have assured staff that if the leasing option goes ahead, there will be no compulsory redundancies; and any staff transferred along with the woodlands would have the protection of the TUPE regulations. Furthermore, I would want the Forestry Commission to make the strongest efforts to ensure that any individual who did not want to transfer to any new management company would be able to stay with the Commission.
I hope that this is helpful. We will also do our best to let you have a preliminary summary of the consultation responses by 11 February. In the meantime, Forestry Commission Scotland would be happy to make an arrangement with your Committee clerks for copying individual consultation responses to them.

Yours sincerely

Michael Russell MSP
Minister for Environment
29th January 2009

Dear Roseanna

Thank you for your letter of 16 January about the prioritisation of the waste provisions in the Climate Change (Scotland) Bill.

I recognise, and welcome, your Committee’s interest in the proper scrutiny of the provisions. Fundamentally the reason we proposed that nearly all regulations which might be made under the powers set out in the Bill should be made by affirmative resolution was to ensure proper scrutiny took place. At present, of course, we are considering only the enabling powers for such regulations to be made.

Now is an appropriate time to consider taking these enabling powers. As you will appreciate, the provisions in the Bill represent only a small part of the Scottish Government’s work on waste. Since May 2007 we have set new targets for recycling and recovery of household waste, and put a cap on the use of energy from waste to meet these targets. As Scotland’s household waste recycling rate has improved, the need to focus on the larger quantities of commercial and industrial waste has come into focus. The European governing legislation, the Waste Framework Directive, has been revised. For all these reasons it is an opportune time to consider the whole range of policies relating to waste. Accordingly, we are reviewing the National Waste Plan for Scotland in its entirety. We shall be consulting publicly on this revision in the course of 2009.

Some of the things we might wish to do, such as ban from landfill further materials which should instead be recycled, can be done under powers the Government has already. The provisions in front of you relate to work which needs new primary legislation to underpin it. Detailed work is needed in all cases to work up schemes, but when we want to put these schemes into effect we will need the ability to do so.
The Climate Change (Scotland) Bill provides an ideal vehicle, in view of the close relationship between climate change, and waste and resource use. Conversely, if we do not put these powers into primary legislation now we will have missed an opportunity to improve our approach to resource use, which is an essential part of work to address climate change. Moreover, it is difficult to see when a slot for a separate Bill might be arranged. Incidentally, you will note that the UK Climate Change Act provides a power to set carrier bag charges in England, Wales and Northern Ireland: it would be odd if a similar power were not set out in our equivalent Bill.

As to prioritisation, I have said that we have detailed work to do in the case of all the powers before you. This work will naturally take longer for some of the proposals than for others: we currently consider, for example, that a deposit and return scheme will take longer to put into effect than the other proposals, in view of the need for thorough consultation and, indeed, potential infrastructure provision. Other provisions are likely to take less time to put into effect, but still require a great deal of work to ensure the maximum benefit for the least burden. Indeed the timescale we consider for putting measures into force will have to take account of the current difficult economic situation, and prioritisation will have to take account of the position at the time.

In these circumstances I think it unlikely that regulations exercising any of these powers, should the Parliament agree to give them to us, a few if any, would be laid in the current Parliamentary session. Naturally, we would keep your Committee in touch with developments, should this prove otherwise.

I am copying this to Stewart Stevenson MSP, Minister for Transport, Infrastructure & Climate Change.

RICHARD LOCHHEAD
Thank you for your letter of 28 January about the definition of “recycling” used in the Bill, and how this may differ from the definition of recycling used in the revised Waste Framework Directive (98/2008/EC). I hope in the interim you have received my letter replying to yours of 16 January, which I sent on 29 January.

The definition of recycling used in the Bill includes recovery and re-use (whether or not the waste is subjected to any process). Mr Hazell, of the Scottish Environmental Services Association, appeared to consider that this was a way of avoiding discussing energy recovery in the context of the Bill. Similarly, your colleague Elaine Murray MSP made the point that recovery is placed below recycling in the waste hierarchy. She also asked about the Bill’s definition of recycling in Parliamentary Question S3W-19259. The concerns Dr Murray and Mr Hazell have derive ultimately from the explicit statement of the waste hierarchy in Article 4(1) of the revised Directive. This prioritises re-use above recycling, and recovery below it.

As I stated in my response to that question, the definition of recycling in Section 52(4) is merely a matter of drafting convenience. It is simply easier to talk of “recycling” than to set out “recycling, recovery and re-use (whether or not the waste is subjected to any process)” every time the Bill mentions this concept. As I went on to say in my answer, defining recycling in this way implies no preference either in favour of recycling over re-use and recovery, or to the contrary. It is, I repeat, a mere drafting convenience.

I can assure you that the Scottish Government certainly will be giving effect to the waste hierarchy as set out in the Directive. The policy on waste, to be set out in the revised National Waste Plan for Scotland, will make this clear. In the narrower context of the issues addressed by the Bill, the definition of recycling adopted in the Bill will not prevent us taking account of the hierarchy. As you know, the Bill’s waste provisions are enabling powers only. Should Parliament agree to give them to us, they will be given actual effect only by subsequent regulations. These regulations would have to take appropriate account of the waste hierarchy.

I hope this clarifies that the definition of recycling in the Bill is for simplicity only, and will not detract from our application of the waste hierarchy.

RICHARD LOCHHEAD
2 FEBRUARY 2009

cc: Minister for Transport, Infrastructure & Climate Change
CLIMATE CHANGE (SCOTLAND) BILL – WASTE PROVISIONS
STAGE 2 AMENDMENTS

When I gave evidence to your Committee on 4 February I said I would write to you giving notice of the Stage 2 amendments to the waste provisions we had under consideration. As I indicated at the time, these all relate to the deposit and return provisions in Section 58 of the Bill. Your Committee, however, may wish to have more detail.

As we discussed on 4 February, we are some way from presenting detailed proposals on deposit and return schemes and, should we wish to proceed, we would need to have detailed discussions with interested parties to prepare a scheme that is right for Scotland. It is clear, however, that some currently-operating models of deposit and return scheme depend on a “clearing house” function, in which a central body levies the deposits, ensures that they are returned to those returning the relevant materials, and ensures that the returned materials are re-used, recycled or recovered. Should we wish to replicate such a scheme we will need to have the powers to do so.

In addition to the powers in respect of such a body currently set out in Section 58(5), we shall be proposing amendments to:

- Allow us to establish a new body, if necessary, rather than use an existing one;
- Establish and amend the functions of that body;
- Direct that body in the performance of its duties, for example on the use of any surplus;
- Give public monies to that body, whether in the form of loans or grants;
- Keep a proportion of the deposits collected to defray costs; and
- Put the running of that body out to tender.
There is another matter relating to deposit and return schemes which arises from the evidence to the Committee on 4 February. It was noted that the powers in Section 58 relate explicitly to packaging, whereas items other than packaging might usefully be addressed by a scheme under these powers. On reflection, I think this is correct, and we are considering whether appropriate amendments may be made.

I hope this is of interest to your Committee. I would like to take this opportunity to repeat my assurance that, if we intend to proceed with regulations in the term of this Parliament (assuming, of course, that the Parliament gives us the powers to make them) I shall inform your Committee as early, and as fully, as possible.

RICHARD LOCHHEAD

cc: Minister for Transport, Infrastructure and Climate Change
When Michael Russell gave evidence to the Committee about the forestry provisions in this Bill on 11 February, he agreed that we would write further about the use of the powers in section 47.

The Policy Memorandum to the Bill explains that these powers are needed to allow the Forestry Commissioners to enter into joint ventures with developers and local communities to accelerate renewable energy development, and to release capital from the national forest estate. It identifies leasing as one option for releasing capital. As you know, the leasing option has been controversial and we have said that we would carefully consider the outcome of recent consultation, together with Forestry Commission Scotland’s options review, before coming to a decision on this.

During the discussion on 11 February, Committee members asked about the broad nature of these powers in section 47 of the Bill. The power to modify the functions of the Forestry Commissioners in or as regards Scotland is, however, limited by section 47(2). Scottish Ministers may only make such an order where they consider it necessary or expedient in order to comply with their duty under sections 1, 2 or 3(1)(b) to meet the targets set out in those provisions, or otherwise in relation to climate change. Thus, any modifications to the functions of the Forestry Commissioners in or as regards Scotland contained in an order under section 47 may only be made for purposes demonstrably related to the mitigation of the effects of climate change.
The power in section 47 to modify the Forestry Commissioners’ functions could not be used to remove over-arching duties imposed upon the Forestry Commissioners in legislation such as the duty to further the conservation of biodiversity in the exercise of their functions, which is imposed by the Nature Conservation (Scotland) Act 2004.

The Committee will also be aware of the fact that, in terms of section 64(4), an order to be made under section 47 will be subject to affirmative resolution procedure. This will ensure that any such order will have to be debated, and approved by, the Parliament, before it can be made.

ROSEANNA CUNNINGHAM MSP
MINISTER FOR ENVIRONMENT
Subordinate Legislation Committee

Climate Change (Scotland) Bill

The Committee reports to the lead committee as follows—

Introduction

1. At its meetings on 27 January\textsuperscript{1} and 24 February 2009\textsuperscript{2} the Subordinate Legislation Committee considered the delegated powers provisions in the Climate Change (Scotland) Bill at Stage 1. The Committee submits this report to the Transport, Infrastructure and Climate Change Committee as the lead committee for the Bill under Rule 9.6.2 of Standing Orders.

2. The Scottish Government provided the Parliament with a memorandum on the delegated powers provisions in the Bill (DPM).\textsuperscript{3}

3. The Committee’s correspondence with the Scottish Government is reproduced in the Annex.

Delegated Powers Provisions

4. The Committee considered each of the delegated powers provisions in the Bill.

5. The Committee determined that it did not need to draw the attention of the Parliament to the delegated powers in the following sections: 9, 11, 15, 17, 20, Schedule 1, paragraphs 2(2), 6(1), 7(5), 8(2) and 9(3), sections 23, 24, 35, 38, 39, 40(2), 42(1) and (2), 43, 44(1), 50, 52(3), 53(4), 54(3), 55(1), (2), (3) and (4), 56(4) and (5), 57(3), 58, 59 and 67.

Section 4 - Setting annual targets

6. Section 4 imposes a requirement on the Scottish Ministers to set annual targets for the maximum amount of the net Scottish emissions account, by order. Subsection (2) states for which years the targets must be set. The Scottish Ministers intend to set targets in batches; the first batch will be for 13 years (2010-2022), with subsequent targets set in batches of 5 years until the last batch, which will be 3 years in length (2048-2050). The dates in advance, by which each batch

\textsuperscript{1} Official Report 27 January 2009
\textsuperscript{2} Official Report 24 February 2009
\textsuperscript{3} Delegated Powers Memorandum
of targets must be set are also given. The annual targets must be set in accordance with provisions in section 3.

7. The Committee queried (given that there was no explanation of this in the DPM) whether there should be any requirements for consultation on the face of the Bill, on setting the annual targets by order, with specified bodies or persons who may have interest in the proposals.

8. The response from the Scottish Government noted (amongst other matters, as set out in the Annex to this Report) that annual targets shall be set for the whole of Scotland, and so far as there are no targets for specific industries or sectors, that does not indicate that specific persons or bodies should be prescribed to be consulted on an order before it is made. The Government shall also require to take into account the advice of the relevant advisory body, prior to setting the annual targets by order.

9. Following this further explanation given by the Scottish Government, the Committee concluded that there was a sufficient explanation of why there are no further consultation requirements prescribed on the face of the Bill.

10. The Committee was therefore content with the delegated power in section 4, and that it is subject to affirmative procedure.

Section 6 - Modifying annual targets

11. Section 6 allows the Scottish Ministers to modify certain parts of sections 3 and 4 by order. Subsection (1) (c) enables the Scottish Ministers to modify any of the dates set out in section 4 (the dates of the batches of annual targets, and/or the advance date by which the target must be set) and subsection (1)(d) allows modification of the criteria to which Ministers must have regard when setting the annual targets. Subsection (4) sets out that the Scottish Ministers may only exercise these powers if they consider it appropriate to do so.

12. The DPM offered no explanation as to why this flexibility to change these matters is needed, and the approach contrasts with sub-section (2) and (3), where Ministers require to show it is no longer necessary for the annual targets to be set by reference to the 3% reduction, or require to show there have been significant changes to the basis on which the annual target was set. The Committee therefore asked for further explanation.

13. The Committee considers that the Government’s response on section 6 offers a proper explanation; that it has considered how section 6(4) might possibly have been restricted by reference, for example, to changes reflecting changes in the UK, European or international position/criteria, but it was considered this would not be appropriate.

14. The response also highlighted that Parliament shall be asked to approve any changes by affirmative procedure, and that a sufficient degree of flexibility is required because the annual targets require to be set up to 2050.
15. The Committee, being satisfied with the response in relation to section 6, is content with the delegated powers in that section, and that they are subject to affirmative procedure.

Section 12 - The net Scottish emissions account

16. Section 12(2) enables the Scottish Ministers to make provision by regulations about how and in what circumstances carbon units are credited to and debited from the net Scottish emissions account, and the manner in which this is to be done.

17. Section 64(7)(a) of the Bill proposes that the first regulations under section 12(2) shall be by affirmative procedure, but the second or subsequent regulations shall be by negative procedure. However, affirmative procedure is retained where the regulations shall make provision altering the amount by which a carbon unit credited or debited to the net emissions account for a period either reduces or increases the account for that period. The DPM explains that this is because of the significant effect this could have on the account.

18. The DPM also explained that the initial regulations will set out how and in what circumstances carbon units are credited to and debited from the net emissions account, which will be a key component of the operation of that account. Affirmative resolution procedure was therefore considered appropriate for the initial regulations.

19. The Committee notified the Scottish Government that it does not generally favour the use of the lesser degree of scrutiny of negative procedure for second or subsequent regulations, as is provided for in section 64(7)(a) in relation to section 12(2), while the first set of regulations are subject to affirmative procedure. The Committee sought further explanation on this matter from the Scottish Government, on why this is appropriate for this particular Bill.

20. The Committee considered that the Scottish Government’s response gave persuasive argument for the specific reasons why the procedures for regulations under sections 12 and 18 of the Bill were chosen. The Committee considered that there is sufficient explanation that the choice of procedure is appropriate for these particular sections of this Bill. In particular, the Committee noted that it appears from the Government response that further regulations after the first regulations under these sections are likely to be highly technical in subject matter, and any changes that increase or decrease the net Scottish emissions account shall be by affirmative procedure.

21. The Committee was content with the delegated powers in section 12, and that they are subject to affirmative procedure on the first occasion, but the second and subsequent Regulations will be subject to negative resolution, other than regulations making provision to alter the amount by which a carbon unit credited or debited to the net Scottish emissions account for a period reduces or increases the account for that period. (This is provided for in section 64(7)(a)).
22. The Committee also reports that generally it does not favour the use of affirmative procedure for a first set of regulations and negative procedure for second and subsequent regulations. However, in the instance of section 12 of this Bill, it was satisfied that the Scottish Government has provided sufficient reasons why this choice of procedure appears to be suitable.

Section 14 - Scottish share of emissions from international aviation and international shipping

23. International aviation and international shipping emissions are generally not directly emitted in a specific country. Section 14(1) and (2) allow the Scottish Ministers to specify by order how certain emissions from international aviation and shipping are to be attributable as “Scottish emissions”. Section 14(3) requires the Scottish Ministers to seek advice from the relevant body defined in section 5(5) prior to making an order. Section 14(4) requires the Scottish Ministers to publish a statement if the advice of the relevant body is not followed.

24. The DPM explained in justification for this delegated power that, as international aviation and international shipping emissions are generally not directly emitted in a specific country, it is necessary to specify how certain amounts of these emissions will be allocated to the net Scottish emissions account. This allocation may also need to change over time, particularly if a European or international agreement makes such a change necessary in the future. There is no current international agreement on how to allocate these emissions to States.

25. Given the significance of this power within the Bill, the DPM contained no explanation in relation to appropriate consultation before making an order under section 14, or why it was considered appropriate that there should be no particular prescribed consultation requirements on the face of the Bill. The Committee therefore asked for further explanation on this aspect.

26. The Committee accepted the further explanation offered by the Scottish Government, as to why there are no specific requirements for Scottish Ministers to consult with specified persons or bodies on the terms of an order under section 14, within the Bill.

27. The Committee therefore reports that it is content with the delegated power in section 14, and that it is subject to affirmative procedure.

Section 18 - Carbon units and carbon accounting

28. Section 18(1) allows the Scottish Ministers to create a scheme for the purpose of monitoring the use of carbon units, including registering them and keeping track of them. The scheme may establish and maintain accounts in which carbon units may be held, and between which they can be transferred. Section 18(2) allows existing schemes, which might be established in future by Ministers, to be adapted for the purposes set out in subsection (1).

29. The DPM explains that it may be necessary (in future) to create a scheme to monitor the use of carbon units. "The trading of units across borders can be
complicated and it is not yet known whether such a scheme is necessary. However, if it does become necessary, these provisions allow for such a scheme to be created.”

30. The Committee notified the Scottish Government that it does not generally favour the use of the lesser degree of scrutiny of negative procedure for second or subsequent regulations, as provided for in section 64(7)(b) in relation to section 18(1), while the first regulations shall be subject to affirmative procedure. The Committee sought further explanation on this matter from the Scottish Government. (The issue here is similar to that in relation to section 12 of the Bill).

31. The Committee considered that the Scottish Government’s response gave persuasive argument for the specific reasons why the procedures for regulations under sections 12 and 18 of the Bill were chosen. The Committee considered that there is sufficient explanation that the choice of procedures is appropriate for these particular sections of this Bill. In particular, the Committee noted that it appears from the Government response that further regulations after the first regulations under these sections are likely to be highly technical in subject matter. Also, any changes which increase or decrease the net Scottish emissions account, or which specify a new type of carbon unit which may have an effect that account, shall be by affirmative procedure.

32. The Committee was content with the delegated powers in section 18, and that they are subject to affirmative procedure on the first occasion, but the second and subsequent Regulations will be subject to negative resolution, other than regulations making provision specifying a carbon unit of a kind not previously specified in regulations which shall be subject to affirmative procedure (as provided for in section 64(7)(b)).

The Committee also reports that generally it does not favour the use of affirmative procedure for a first set of regulations and negative procedure for second and subsequent regulations. However, in the instance of section 18 of this Bill, the Scottish Government has provided sufficient reasons why this choice of procedures appears to be suitable.

Section 19 – Meaning of advisory body

Section 20 and Schedule 1- Scottish Committee on Climate Change

33. Section 19(1) enables the Scottish Ministers to designate by order, a body or person to carry out the advisory functions as set out in the Bill. In the absence of an order made under section 19(1), the Scottish Ministers will seek advice from the UK Committee on Climate Change established by the UK Climate Change Act 2008 (as set out in section 5(5) of this Bill). An order under section 19 shall be subject to affirmative resolution procedure. Such an order may in future specify the Scottish Committee on Climate Change as the advisory body.

34. By section 20, the Scottish Ministers may by order establish the Scottish Committee.
35. Schedule 1 of the Bill makes further provision for the constitution and membership of the Scottish Committee on Climate Change. By paragraph 2(3) of Schedule 1, the members of that Committee shall be appointed by the Scottish Ministers.

36. The Committee considers the delegated powers in sections 19, 20 and Schedule 1 to be acceptable. The Committee draws to the attention of the lead and secondary committees for the Bill (in relation to the effect of the delegated powers contained in sections 19, 20 and Schedule 1) that the Explanatory Notes with the Bill (paragraph 33) and the Policy Memorandum (paragraph 31) indicate that Ministers will require to seek expert, independent advice from the advisory body, but the Bill provides –

(a) in section 19(1) and (5), that a designated advisory body may be any public body as Ministers consider appropriate, which may be a person or body with functions of a public nature (not necessarily independent of the Scottish Ministers or Government), and

(b) in Schedule 1, paragraph 2, that the members of the Scottish Committee on Climate Change shall be appointed by the Scottish Ministers.

37. The Committee acknowledges, however, that in relation to those statements in the Policy Memorandum and Explanatory Notes, “independent” is capable of having different meanings and does not necessarily refer to a body which is wholly independent of the Scottish Ministers.

Section 26 – Guidance to advisory body
Section 27 – Power to give directions to the advisory body

38. Section 26 provides that the advisory body (to the Scottish Ministers) must have regard to any guidance given by the Scottish Ministers to it in relation to the exercise of its functions under the Act. However, Ministers may not give guidance as to the content of any advice or report. This includes power to vary or revoke the guidance.

39. Section 27 provides that the Scottish Ministers may, if they consider it appropriate, give the advisory body directions as to the exercise of its functions under the Act. However, Ministers may not give directions as to the content of any advice or report. This includes the power to vary or revoke the directions. Unlike guidance, directions issued in relation to the functions of the advisory body shall be binding on the body.

40. The Committee considers that the delegated powers contained in sections 26 and 27 are acceptable to be in the form of guidance and directions (respectively) issued by the Scottish Ministers, and those powers would not be more appropriately expressed in the form of subordinate legislation. The remit of the Committee in regard to these sections is to so
consider whether the powers would be more appropriate to be expressed in that form.

41. The Committee draws to the attention of the lead and secondary committees for the Bill the delegated powers conferred on the Scottish Ministers in sections 26 and 27 to issue directions and guidance to the advisory body given that the Explanatory Notes (at paragraph 33) and the Policy Memorandum (at paragraph 31) indicate that the advisory body shall provide independent advice to the Scottish Ministers.

Section 36 - Duties of public bodies relating to climate change

42. Section 36 empowers the Scottish Ministers to impose ‘climate change duties’ by order, on public bodies. A public body, as defined in sections 19(5) and 65, is a person or body with functions of a public nature. ‘Climate change’ is not defined in the Bill. ‘Climate change duties’ are neither listed nor defined in section 36. Section 36(3) provides that an order under this section may, in particular, impose climate change duties on all public bodies, public bodies of a particular description, or individual public bodies. Different climate change duties may be imposed on different public bodies or descriptions of public body. Section 36(4) provides that before laying a statutory instrument containing an order before the Scottish Parliament, the Scottish Ministers must consult, in so far as reasonably practicable, with such associations of local authorities and such other persons as the Scottish Ministers consider appropriate. Section 36(6) requires the Scottish Ministers to co-operate with a relevant public body to help that body comply with its climate change duties.

43. Given the width of these powers and the lack of definition with respect to public bodies and climate change duties, the Committee asked the Scottish Government about the meaning and scope of ‘public bodies’ and ‘climate change duties’, and whether consideration had been given to the type of ‘public bodies’ which could be subject to climate change duties. It was apparent from the Scottish Government response that Ministers did give consideration to the types of bodies to be subject to the duties, but ‘felt that it was not appropriate to list the bodies to which the duties might be applied’. A public body as defined in the Bill is a person or body with functions of a public nature. ‘Functions of a public nature’ are not defined. The definition of ‘public body’ is therefore ambiguous and potentially very wide. This is in effect acknowledged in the third paragraph of the Scottish Government response, in which it is stated that ‘It is not possible to know exactly which public bodies may need to become subject to statutory climate change duties at various points over the course of the forty years which the framework is designed to cover.’ In the response, the Scottish Government stated that it was never the intention to define ‘climate change duties’ more specifically elsewhere in the Bill. The response commented on the need for flexibility to be able to respond to or in anticipation of circumstances which cannot be foreseen at the present time.

44. The Committee considered that it would be possible to provide a list of bodies in the Bill so that Parliament (in approving the Bill) could assess whether these are the bodies to which the powers should apply. A power to add bodies to
the list or modify the list subject to affirmative procedure would allow Parliament to remain in control of the definition of ‘public bodies

45. The Committee reports to the lead committee that the power under section 36(1) to impose climate change duties on public bodies is extremely wide in its scope, in particular as neither the public bodies which may be subject to climate change duties nor climate change duties themselves are adequately and clearly defined.

46. The Committee also recommends that this could be mitigated to some extent by provision of a list of public bodies to whom the power is to apply along with a power to add to the list subject to affirmative procedure. This would be in line with the approach adopted to other regimes regulating public bodies such as freedom of information.

Section 37 – Guidance to relevant public bodies

47. Section 37(1) provides that ‘relevant public bodies’ are required to have regard to any guidance given to them by the Scottish Ministers in relation to climate change duties. A ‘relevant public body’ is a body which has climate change duties by virtue of section 36(1). Before issuing guidance the Scottish Ministers have a duty to consult the same bodies as those specified in section 36(5) with respect to the imposition of climate change duties. Guidance issued under this section has to be published by Scottish Ministers.

48. The guidance which the Scottish Ministers can issue and which public bodies will have to have regard to will not be subject to any form of parliamentary procedure or scrutiny. Section 37 does not give any indication of, nor does it provide any limitation on, the nature or scope of the guidance which the Scottish Ministers can give.

49. The Committee therefore asked the Scottish Government for more information as to the function and likely content of such guidance.

50. The response from the Scottish Government stated that guidance will indicate how specific climate change duties should be discharged and that it is intended to assist in developing consistency of approach across those public bodies to which climate duties apply.

51. The Committee considered that the response did not aid its consideration of this power. The Committee concluded that it would be appropriate for the Parliament to have a role in scrutinising the guidance produced under section 37 because of its potential impact, and recommends that guidance under this section should be laid before Parliament for a period prior to implementation, and any resolutions of the Parliament made in respect of the draft guidance during that period taken into account.

Section 46 - Variation of permitted times for making muirburn

52. Section 46 inserts a new section 23A into the Hill Farming Act 1946 (“the 1946 Act”). Section 23 of that Act currently prohibits muirburn between certain
dates. Subsection (1) of new section 23A of the 1946 Act provides the Scottish Ministers with an order-making power to specify different dates before which, and after which, it is lawful to make muirburn in any year. Subsection (3) stipulates that the Scottish Ministers may make an order under subsection (1) only if they consider it necessary or expedient to do so in relation to climate change. The effect of this power is therefore to allow the Scottish Ministers to change the dates between which muirburn may be conducted so as to have regard to the impact of this activity on climate change. The section does not contain a requirement for consultation of affected landowners or others prior to the making of an order.

53. The committee asked the Government why it does not consider that provision for consultation is necessary or appropriate in order to take into account the impact on landowners that any changes might cause.

54. The Scottish Government acknowledges that it would be appropriate to consult with parties likely to be affected by changes to the times at which muirburn may be made. They point to their perceived difficulties in identifying a specific body or specific bodies whom they might be obliged to consult. However, they do refer to what is stated to be their standard practice of consulting on a non-statutory basis with potentially interested parties and consider that this would be appropriate and reasonable in the circumstances.

55. The Committee was content with the response in respect that it may be taken to confirm that informal consultation with potentially interested parties will take place in advance of any instrument.

Section 47 - Power to modify functions of Forestry Commissioners

56. The Forestry Commissioners were established by the Forestry Act 1967. Section 47 confers on the Scottish Ministers the power to modify the functions of the Forestry Commissioners in or as regards Scotland. The Committee was concerned about the potential scope of the proposed power to modify the functions of the Forestry Commissioners in or as regards Scotland. The Committee was concerned about the potential scope of the proposed power to modify the functions of the Forestry Commissioners in or as regards Scotland. The Committee was concerned about the potential scope of the proposed power to modify the functions of the Forestry Commissioners in or as regards Scotland. Section 47(2) imposes limitations on the circumstances in which Scottish Ministers may exercise the power to modify under section 47(1) but the section does not impose any restrictions or limitations on the nature, scope or extent of any modification of the Forestry Commissioners’ functions. The power could have the potential to alter, quite radically, the Forestry Commissioner’s functions, either by the addition of new functions or by the removal of existing functions.

57. The Committee asked the Scottish Government if consideration had been given to the imposition of a restriction on the power. The Scottish Government response did not address the committee’s concerns. The response refers to the limitation on the circumstances in which the power may be exercised, namely to comply with Scottish Ministers duties under sections 1, 2 and 3 of the Bill (namely the 2050 target, the interim target and annual targets) or otherwise in relation to climate change. However, it was the Committee’s view that the limitation on the circumstances in which the power may be exercised does not place any limitation on the nature, scope or extent of any modification of the Forestry Commissioners’ functions which may arise in consequence of the exercise of that power beyond that it must be for a climate change purpose. It is the absence of limitations on
what may be done in consequence of the exercise of the power which was of concern, not the circumstances in which the power may be exercised, which circumstances are subject to limitations.

58. Section 47(3) gives examples of what an order may in particular enable the Forestry Commissioners to do. They indicate how wide-ranging the consequences and impact of the exercise of the power may be. The question is whether the climate change purpose should be allowed to overrule any other considerations as to what should properly be the functions of the Forestry Commissioners.

59. The Committee draws to the attention of the lead committee that the power under section 47(1) to modify the functions of the Forestry Commissioners in or as regards Scotland is, in the opinion of the Committee, very wide in its scope as there is no limitation within the power on what may be done in exercise of the power beyond that it must deliver a climate change purpose.

Section 52(1), (2) and (4) - Waste prevention and management plans
Section 53(1), (2), (3) and (5) - Information on waste
Section 54(1), (2), (4) and (5) - Recyclable waste: facilities for deposit etc.
Section 56(1), (2), (3) and (6) - Procurement of recyclate - regulations

Section 52 empowers the Scottish Ministers, by regulations, to place a duty on specified persons to prepare waste prevention and management plans. Section 53 enables the Scottish Ministers, by regulations, to require specified persons to provide information to SEPA about the waste that they produce. Section 54 enables the Scottish Ministers to make regulations which may require receptacles to be provided by persons of the kinds specified for a broad range of types of waste. Section 56 gives the Scottish Ministers powers to require specified persons to ensure that particular things procured or constructed by or on behalf of them contain or include a certain proportion of recyclate, which is waste that has been recycled.

60. The Committee’s concerns with respect to these 4 sections related to the lack of specification in the provisions with respect to the kinds or classes of persons who would be (or whom it was anticipated would be) subject to duties under the various sets of regulations. In particular, the regulations could apply to domestic activities or individuals in the absence of any express restriction.

61. In its response to questions posed by legal advisers on these sections, the Scottish Government state that it is not possible at present to be specific as to the classes of persons on whom duties may fall. They explain their reasons for this response. No firm proposals have as yet been drawn up. The Scottish Government have admitted that they are not yet clear how these powers will be used. It is not clear what restrictions if any will be applied to the exercise of these powers. There is nothing on the face of these powers to restrict their application and in particular to exclude non-commercial activity.

62. The Committee took the view that whether or not duties could be applied to domestic activities is a policy matter to be decided by the lead committee and
Parliament, but that if the lead committee or Parliament considers that the powers should have no application to non-commercial activity then this should be made express on the face of the Bill.

63. The Committee therefore reports to the lead committee and to Parliament that these powers are expressed in very broad terms and that there is nothing on the face of the Bill to restrict their application to purely commercial activity.

Section 57(1), (2) and (4) – Targets for reduction of packaging etc.

64. Section 57 enables the Scottish Ministers, by regulations, to set targets to reduce the amount of packaging used and to require specified persons to comply with those targets. Targets may also be set for the reduction of greenhouse gas emissions produced by packaging.

65. Given the lack of information offered in the DPM in relation to the scope or extent of these powers, the committee sought clarity with respect to the scope of the powers and whether the powers were drawn no more widely than required.

66. In its response, the Scottish Government point out that producers of packaging are already subject to a producer responsibility regime and that in terms of waste in general producer responsibility is a requirement of community law. This is why retailers and not producers were specifically mentioned in the Delegated Powers Memorandum.

67. Section 57 places no limits on the persons who may be subject to regulations under this section. The Committee was concerned about the potential scope of the application of these regulations and to the fact that there are no restrictions within the provisions themselves on the persons who may be subject to duties under the regulations. In particular the committee was concerned that duties imposed by regulations may be extended to non-commercial applications.

68. The Committee took the view that whether or not duties could be applied to domestic activities is a policy matter to be decided by the lead committee and Parliament but that if the lead committee or Parliament considers that the powers should have no application to non-commercial activity then this should be made express on the face of the Bill.

69. The Committee reports that Parliament should be made aware that these powers are expressed in very broad terms and that there is nothing on the face of the Bill to restrict their application to commercial activity.

Section 64 – Subordinate legislation

70. This section contains the general subordinate legislation provisions, including the specification of the affirmative or negative procedures applying to the order or regulation-making powers in the Act.

71. The power to modify enactments in section 64(3) is framed at its widest. There is no express limitation placed on that power, with reference to the provisions or purposes of the Bill. This is a “Henry VIII power” which does not
contain a limit on the purposes of the power and which can be attached to any other power to make subordinate legislation under the Act. The Committee considers however that it should be implied within section 64(3) as drafted that any modification shall be for the purposes of the provisions of the Act, at least. However, this is still a very wide proposed power to modify enactments.

72. Generally, the Committee would take as a starting point that such a “Henry VIII” power, framed in this way, is unacceptable, unless sufficient justification is provided for the width of the power required, which should be in exceptional circumstances. Accordingly, the Committee requested further explanation, to establish why this power may be justifiable for this particular Bill.

73. The response from the Government explains that this is a wide-ranging Bill, and “it is difficult to know in advance which powers might need to modify enactments. That is why section 64(3) is expressed as applying generally”. The response also highlights that certain powers proposed in the Bill are potentially wide in effect, for example the powers in section 36 and 47 in relation to the imposition of duties on public authorities in relation to climate change, and the power to modify the functions of the Forestry Commissioners in or as regards Scotland. The modification of, for example, the Forestry Act 1967 would be the “main method by which the power would be used, rather than being merely ancillary.”

74. In essence therefore, the response from the Government indicates that it considers that such a wide power to modify enactments (by way of affirmative procedure regulations or orders in future) is required for this particular Bill, given the potential width, or uncertain future effects, of some of the other delegated powers proposed in the Bill, and so that a general power to modify for the purposes of this particular Bill is required. The Committee accepted this explanation as sufficient, while noting that the effect of this power to modify enactments (including this Act) may be potentially very wide in effect. The Committee also noted that modifications of enactments by future subordinate legislation under the Bill shall require to be affirmed by Parliament.

75. Accordingly, the Committee considered that in the instance of this particular Bill, the proposed general power contained in section 64(3), which enables orders or regulations to modify any enactment (including the Act) by affirmative procedure is acceptable.
Response from Scottish Government

Climate Change (Scotland) Bill at stage 1

1. Thank you for your letter of 28 January 2009 to Paul Johnston regarding the Subordinate Legislation Committee’s consideration of the Climate Change (Scotland) Bill at Stage 1.

For ease of reference I have set out each of the points raised, followed by the Scottish Government response.

Section 4 - Setting annual targets

2. The Committee asked the Scottish Government——

   in relation to sections 4 and 6, on what basis it has considered that there should be no requirements on the face of the Bill to the effect that Ministers shall consult on the terms of an order under those sections (setting or modifying annual targets) with specified persons or bodies who may have particular interest in the proposals?

3. Scottish Government response——

   i. When setting annual targets (section 4) and modifying them (section 6), Ministers must first seek the advice of the relevant body (sections 5 and 7 respectively). Section 5(5) provides that the relevant body is the UK Committee on Climate Change or a person or body designated under section 19(1), in practice an existing body or a Scottish Committee on Climate Change.

   ii. The Scottish Government has committed to utilising the UK Committee on Climate Change in the short to medium term before reviewing the situation. The UK Committee comprises leading experts on the subject of climate change. Paragraph 1(3) of Schedule 1 to the UK Climate Change Act 2008 sets out the areas of experience and knowledge that the national authorities, which include the Scottish Ministers, must have regard to securing for the Committee as a whole when appointing its members. This includes an understanding of the differences in circumstances between England, Wales, Scotland and Northern Ireland.

   iii. If Ministers decide to lay an instrument which makes provision different from that recommended by the Committee, section 5(3) of the Bill requires that they publish a statement explaining why. This is intended to enhance transparency and scrutiny.

   iv. The annual targets in the Climate Change (Scotland) Bill apply to the entire Scottish economy. The Bill contains no targets for individual sectors of the economy in order to allow sufficient flexibility for policies to be put in place to reduce emissions in the most cost effective ways possible, without disproportionately disadvantaging any particular industry in Scotland. This is
reinforced by the fact that the duty to ensure that the net Scottish emissions account is reduced in line with the annual and longer-term targets in the Bill is placed upon the Scottish Ministers alone.

v. These factors, combined with the provisions requiring the advice of the relevant body, means that it is not felt necessary to require additional consultation on the proposed levels of the annual targets, or on proposed modification of these levels, both of which will be set by orders subject to affirmative resolution.

Section 6 - Modifying annual targets

4. The Committee asked the Scottish Government—

(a) to explain and justify why it is considered, in relation to the power in section 6(4), that this may be exercised in any circumstances where the Scottish Ministers consider it appropriate to do so; and

(b) whether more defined circumstances in which it would be appropriate to exercise the power (in a similar manner to section 6(2) and (3)) could be prescribed, for instance where it becomes necessary for the achievement of targets?

5. Scottish Government response—

i. The power in section 6(1)(c) enables the Scottish Ministers to amend the dates for which batches of annual targets must be set. The power in section 6(1)(d) enables the Scottish Ministers to amend the criteria which Ministers must have regard to when setting annual targets. Section 6(4) stipulates that Scottish Ministers may make orders under sections 6(1)(c) and (d) only if they consider it appropriate to do so. Consideration was given to whether it would be desirable to limit the exercise of these powers by reference to particular conditions which must be met but this was rejected because of the factors outlined below.

ii. The dates set out in section 4(2) mirror the dates for which carbon budgets will be set by the UK Government under the Climate Change Act 2008. This recognises that total emissions reductions in Scotland depend in part upon policies which are reserved and therefore that the batches of annual targets should take account of the levels at which UK carbon budgets are set. It also provides greater certainty for the many organisations which operate both in Scotland and other parts of the UK. It is necessary for Scottish Ministers to be able to amend the annual target dates should the Secretary of State ever exercise the power in section 23(1) of the UK Act to change the length or timing of the UK carbon budgets.

iii. Consideration was given to drafting this section so that the power could only be exercised in order to keep Scottish annual target batch dates in line with the UK carbon budgets or other relevant European or other international agreements. However, it was felt that this was unnecessarily restrictive given the differences between the Scottish annual target model and other emissions reduction models in place elsewhere. Any amendments made under the section
6(1)(c) provision would be subject to affirmative resolution and therefore open to considerable Parliamentary scrutiny.

iv. The target setting criteria in section 4(4) represent the areas and issues which the Scottish Ministers believe are relevant and appropriate to have regard to when setting annual targets. The framework established by the Climate Change (Scotland) Bill is designed to last until at least 2050. It may become appropriate to amend these criteria at some point in the coming four decades. Given this lengthy timescale, it is felt that there needs to be considerable flexibility to adapt these criteria to best fit current thinking and therefore it would not be desirable to attempt to try to restrict the use of the section 6(1)(d) power in a specific way. Once again, any such amendment will be subject to the level of Parliamentary scrutiny afforded by affirmative resolution procedure.

v. With regard to the Committee’s suggestion that the exercise of the power in section 6(4) be restricted so that it is used only, for example, where it becomes necessary for the achievement of targets, we consider that this would be difficult to achieve satisfactorily. It would be difficult to argue that changing the dates for which batches of targets are set affects the ability to achieve those targets because it is the level at which any particular target is set which is the key factor in whether or not it is achievable. Similarly, it would be difficult to draw a direct link between changing the target setting criteria and the achievability of targets themselves.

vi. Finally, it is worth noting the duty in section 7 of the Bill which requires that Ministers seek the advice of the relevant body before making an order under section 6. If the order makes provision different from that recommended by the relevant body, Ministers must publish a statement explaining why. This provides another safeguard as to the use of the section 6 powers.

Section 12 - The net Scottish emissions account

6. The Committee notified the Scottish Government that it does not favour the use of the lesser degree of scrutiny of negative procedure for second or subsequent regulations, as provided for in section 64(7)(a) in relation to section 12(2), rather than affirmative procedure.

7. The Committee asked the Scottish Government—

(a) whether it could re-consider if all regulations under section 12(2) could be by affirmative procedure, and

(b) if it does not take this view, if it could fully explain to the Committee what types of “technical” provisions would be subject to second and subsequent negative procedure regulations under section 12(2) (but would not be provisions that would attract affirmative procedure under section 64(7)(a)); could a description of these provisions be put in the Bill; and why it is considered appropriate those provisions should be subject to negative procedure, while the other provisions should be subject to affirmative procedure?
8. **Scottish Government response**—

i. The Scottish Government does not take the view that affirmative resolution is necessary for all regulations made under section 12(2). The first regulations made under this section will be used to establish the circumstances in which carbon units will be credited to or debited from the net Scottish emissions account and the manner in which this is to be done. This first set of regulations will be subject to affirmative resolution, as will any amendment to them or to subsequent regulations which would have a fundamental impact on the operation of the net Scottish emissions account by altering the amount by which carbon units increase or decrease that account.

ii. It is envisioned that second and subsequent regulations which would attract negative procedure would be instruments designed to align emissions trading schemes operating in Scotland, such as the EU Emissions Trading Scheme (EU ETS), with the net Scottish emissions account. These regulations are likely to be very technical and detailed in nature but would be unlikely to change the fundamental operation of the net Scottish emissions account.

iii. For example, in Phase II of the EU ETS (up to and including the year 2012) nearly all emissions allowances are allocated to industry free of charge. Participants only have to pay for extra allowances necessary to offset emissions over and above their allocation. However, in Phase III of the EU ETS (2013-2020), auctioning will become the default method of distributing allowances, rather than free allocation. In sectors of industry not subject to specific exemptions, 20% of allowances to be distributed will be auctioned in 2013, gradually increasing to 70% in 2020. Additionally the electricity generation sector in most Member States will not receive any free allowances from 2013 onwards. The proportion they would have received will also be auctioned. Work is underway within the Scottish Government to develop section 12 regulations covering the operation of the EU ETS up to and including 2012. However, although the principles of Phase III of the EU ETS are known, there are currently a great number of uncertainties about how it will actually operate in practice. It is almost certain that the first set of section 12 regulations, put in place to enable the net Scottish emissions account to operate appropriately in 2010-2012, will need to be amended to take account of the changes to the EU ETS from 2013. The aim of these amendments will simply be to enable the EU ETS allowances used by installations in Scotland to continue to be properly accounted for. The amended regulations will not change the amounts by which individual EU ETS allowances increase or decrease the net Scottish emissions account. The Scottish Government therefore considers that negative resolution is appropriate in such circumstances. This follows the approach taken in the equivalent sections of the UK Climate Change Act (sections 27 and 28).

9. **The Committee asked the Scottish Government**—

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**Section 14 - Scottish share of emissions from international aviation and international shipping**

9. **The Committee asked the Scottish Government**—
in relation to section 14, on what basis it has considered that there should be no requirements on the face of the Bill to the effect that Ministers shall consult on the terms of an order with specified persons or bodies who may have particular interest in these proposals?

10. **Scottish Government response—**

i. Emissions from domestic aviation and domestic shipping are considered to have been emitted from sources in Scotland and therefore fall within the scope of the Bill’s targets by virtue of section 13(a). An order made under section 14(1) of the Bill would designate a share of emissions from international aviation and international shipping as being attributable to Scotland. The effect of such an order would be to include these emissions within those which count towards the reduction targets set in the Bill. This does not amount to specific targets for either the aviation or the shipping industries because the Bill’s targets apply to Scotland’s emissions taken as a whole, not to individual sectors. This, combined with the requirement in section 14(3) that Scottish Ministers request advice from the relevant body (the expert Committee on Climate Change or Scottish equivalent), and the related requirement to publish a statement setting out any reasons for not following that advice should that be the case, meant that it was not felt necessary to require consultation on the terms on any order made under section 14(1).

Section 18 - Carbon units and carbon accounting

11. The Committee notified the Scottish Government that it does not favour the use of the lesser degree of scrutiny of negative procedure for second or subsequent regulations, as provided for in section 64(7)(b) in relation to section 18(1), rather than affirmative procedure.

12. The Committee asked the Scottish Government—

   (a) whether it could re-consider if all regulations under section 18 could be by affirmative procedure, and

   (b) if it does not take this view, if it could fully explain and justify to the Committee why it is considered appropriate that the first use of the regulation-making power under section 18 together with any regulations making provision specifying a carbon unit of a kind not previously specified) should be subject to affirmative procedure, whereas all other second or subsequent regulations under section 18 should be subject to negative procedure?

13. **Scottish Government response—**

i. The Scottish Government does not take the view that affirmative resolution is necessary for all regulations made under section 18. Once a scheme is established under section 18(1) for registering or otherwise keeping track of carbon units, including the establishment and maintenance of accounts for holding such units, and the designation or establishment of a person or body to administer
the scheme, it is considered that any further regulations made under section 18(1) would be used simply to vary the operation of this scheme.

ii. For example, a second or subsequent set of section 18(1) regulations might be necessary at some point in the future to create an additional account within which carbon units may be held because of changes to the way in which carbon units are traded at a UK or international level. This is considered to be an administrative procedure. Similarly, it may become necessary to change the level of the charges that users of the scheme are required to pay, to cover the reasonable operating costs of the scheme. Changes of these types would not fundamentally alter the carbon accounting scheme established in the first set of regulations made under section 18(1) and negative resolution is therefore considered sufficient for second and subsequent regulations which seek to make such amendments.

iii. By comparison, specifying a new type of carbon unit would have a significant effect because of the direct relevance to the net Scottish emissions account. Regulations making such a specification would therefore be subject to affirmative resolution.

iv. This follows the approach taken in the equivalent sections of the UK Climate Change Act (sections 26 and 28).

Section 36 - Duties of public bodies relating to climate change

14. The Committee asked the Scottish Government—

- Whether consideration was given to the type of ‘public bodies’ which could be subject to climate change duties and, if so, whether ‘public bodies’ for purposes of this section could be better defined;

- Whether consideration was given to providing a definition of ‘climate change duties’ which did not refer back to section 36(1) and, if so, whether ‘climate change duties’ for purposes of this section could be more specifically defined; and

- Given that climate change duties are not precisely defined and given that any order under section 36 could potentially affect a very wide range and large number of public bodies, whether consideration was given to providing for a broader range of persons whom the Scottish Ministers are obliged to consult under section 36(4) and (5)?

15. Scottish Government response—

i. In response to part (a) of the question, section 19(5) of the Bill provides that the term ‘public body’ means any body with a function of a public nature. This definition applies to section 36 by virtue of section 65 of the Bill. When drafting the Bill, consideration was given to the lists of public bodies in both the Freedom of Information (Scotland) Act 2002 and the Public Appointments and Public Bodies etc. (Scotland) Act 2003. However, given that the policy intention is only to use
the powers in section 36 when it is considered necessary in the future (about which more detail is given below) it was not felt appropriate to list the bodies to which the duties might be applied. It was considered more appropriate to use the general term ‘public bodies’.

ii. Apart from the set of specific provisions in Part 5, the Climate Change (Scotland) Bill is principally designed to set long-term statutory emissions reduction targets for Scotland and to establish the framework of annual targets, reporting and scrutiny to drive the policies for delivering the emissions reductions necessary for meeting these targets. The public sector can act as an exemplar by reducing its own emissions in line with the Bill’s targets. The Scottish Ministers wish to work in partnership with public bodies to achieve this but recognise that as emissions reductions become more difficult and more expensive to achieve it may become necessary to place duties on certain public bodies to take specific action. If this does become necessary, section 36(6) of the Bill specifically requires Scottish Ministers to co-operate with relevant public bodies to help them comply with their climate change duties.

iii. It is not possible to know exactly which public bodies may need to become subject to statutory climate change duties at various points over the course of the forty years that the Bill’s framework is designed to cover. If the Bill were to include a list of the public bodies relevant to section 36 it would be highly likely that bodies would need to be included in the list for the sake of completeness but upon which climate change duties may never need to be applied. This approach could also limit the Bill in terms of future application to any new bodies which are created between now and 2050. It was therefore considered appropriate to retain flexibility as to which public bodies climate change duties might be applied to.

iv. Section 36(5) of the Bill contains the safeguard that Scottish Ministers must consult with associations of local authorities or other persons (it is intended that this should be the representative bodies for the part of the public sector in question or, if there are none, the specific public bodies themselves) before laying a draft of a statutory instrument containing an order under section 36(1). Scrutiny is further strengthened by the requirement that such orders be subject to affirmative resolution.

v. In response to part (b) of the question, it was never the intention to define ‘climate change duties’ more specifically elsewhere in the Bill. Given the complex nature of climate change and the long-term nature of the emissions reduction framework established by the Bill, it was felt that this power should be flexible enough to be used in reaction to or anticipation of circumstances which cannot be foreseen at the present time.

vi. It is intended that the term ‘climate change duties’ be sufficiently broad to encompass measures designed to mitigate specific public bodies’ contribution to climate change, ways in which the bodies may adapt to the effects of climate change, or ways in which they may carry out their functions with regard to the objectives of mitigation and adaptation.
vii. In response to part (c) of the question, the Scottish Ministers are required to consult with associations of local authorities or other persons as the Scottish Ministers consider appropriate. As explained above, the term ‘other persons’ is intended to cover representative bodies for the part of the public sector in question (other than local authorities) should they exist, or, if they do not, the specific public bodies themselves. However, because the specific public bodies to which duties might be applied are not listed in the Bill in order to retain the flexibility sought for this power, it was not considered appropriate to set out a more specific or broader list of persons whom the Scottish Ministers would be obliged to consult.

Section 37 – Guidance to relevant public bodies

16. The Committee asked the Scottish Government for more information as to the function and likely content of this guidance.

17. Scottish Government response—

i. Guidance issued under section 37(1) will indicate how specific climate change duties should be discharged. This is intended to assist in developing consistency of approach across those public bodies to which specific section 36 duties apply. For example, and for illustrative purposes only, a duty might be applied requiring certain public bodies to take account of greenhouse emissions in new procurement contracts. Associated guidance issued under section 37 might set out examples of best practice as to how this might be achieved.

Section 46 - Variation of permitted times for making muirburn

18. The Committee asked the Scottish Government—

whether or not it considers it would be appropriate to consult the hill farming community, landowners and others who may be affected on the dates which may be appropriate for muirburn, in advance of making an instrument.

19. Scottish Government response—

i. The Scottish Government agrees that it would be appropriate to consult with parties likely to be affected by any proposed change to the times at which muirburn may be made. However, the Scottish Government considers that the introduction by section 46 of the Bill of provision in a new section 23A of the Hill Farming Act 1946 to create a statutory duty to consult would be impractical. Unlike sections 36(4) and 37(2) of the Bill, which require the Scottish Ministers to consult with, among other persons, associations of local authorities prior to placing climate change duties on public bodies and giving guidance about those duties, there is no one organised body or group of individuals that specifically or particularly represent the interests of those who are involved in the practice of making muirburn. In addition, the Scottish Government is not aware of any existing statutory body or agency with any particular role or statutory function in relation to muirburn.
ii. Muirburn may be made by any person, both a landowner or a tenant, anywhere in Scotland. The Scottish Government considers that in the absence of any organised persons or bodies representing those who may make muirburn, its standard practice of consulting on a non-statutory basis with potentially interested parties is appropriate and reasonable in the circumstances. Such a means of consultation will help to ensure that the views of those generally with an interest in muirburn are obtained and taken into account, as opposed to obtaining views from persons or groups whose remit or experience does not in particular concern the activity of muirburn.

Section 47 - Power to modify functions of Forestry Commissioners

20. The Committee asked the Scottish Government—

Given that the proposed power under section 47(1) to modify, by order, the functions of the Forestry Commissioners in or as regards Scotland does not contain any limitation with respect to the nature, scope or extent of any such modification, has the Scottish Government given consideration to the imposition of a restriction, within the power, on the nature, scope and extent of any modification which may be made; and, whether or not any such consideration has been given, does the Scottish Government not consider that such a limitation would be both feasible and appropriate?

21. Scottish Government response—

i. The Scottish Government considers that the power in draft section 47(1) to modify the functions of the Forestry Commissioners in or as regards Scotland is limited by section 47(2) to the effect that the Scottish Ministers may only make such an order where they consider it necessary or expedient to do so in order to comply with their duty under sections 1, 2 or 3(1)(b) to meet the targets set out in those provisions, or otherwise in relation to climate change.

ii. Any modifications to the functions of the Forestry Commissioners in or as regards Scotland contained in an order under section 47(1) may therefore only be made for purposes demonstrably related to the mitigation of the effects of climate change. The Scottish Government’s position is that consideration has been given to limiting the power in section 47(1), and that it is both feasible and appropriate that the power should be limited in such a way that it requires to relate to climate change purposes.

iii. The Committee will also have noted that, in terms of section 64(4), an order to be made under section 47(1) will be subject to affirmative resolution procedure, thereby ensuring that any such order will require to be debated and approved by the Parliament before it can be made.

Section 52(1), (2) and (4) - Waste prevention and management plans

22. The Committee asked the Scottish Government—
(a) What kinds or classes of persons does the Scottish Government intend or anticipate will be subject to duties under the regulations? In particular is there any intention to apply the power to domestic activities or individuals?

(b) Would it not be possible for the Scottish Government to specify, in the section, the classes of persons to be subject to the regulations and, if so, why has this not been done?

Section 53(1), (2), (3) and (5) - Information on waste

23. The Committee asked the Scottish Government—

(a) What kinds or classes of persons does the Scottish Government intend or anticipate will be subject to duties under the regulations? In particular is there any intention to apply the power to domestic activities or individuals?

(b) Would it not be possible for the Scottish Government to specify, in the section, the classes of persons to be subject to the regulations and, if so, why has this not been done?

Section 54(1), (2), (4) and (5) - Recyclable waste: facilities for deposit etc.

24. The Committee asked the Scottish Government—

(a) What kinds or classes of persons does the Scottish Government intend or anticipate will be subject to duties under the regulations? In particular is there any intention to apply the power to domestic activities or individuals?

(b) Would it not be possible for the Scottish Government to specify, in the section, the classes of persons to be subject to the regulations and, if so, why has this not been done?

Section 56(1), (2), (3) and (6) - Procurement of recyclate - regulations

25. The Committee asked the Scottish Government—

(a) What kinds or classes of persons does the Scottish Government intend or anticipate will be subject to duties under the regulations? In particular is there any intention to apply the power to domestic activities or individuals?

(b) Would it not be possible for the Scottish Government to specify, in the section, the classes of persons to be subject to the regulations and, if so, why has this not been done?
Scottish Government response—

i. In respect of sections 52, 53, 54, and 56 the Committee asks about the classes of persons on whom the Scottish Government believes duties under eventual regulations may fall. It is not at present possible to be specific, since in none of these cases has the Scottish Government yet drawn up firm proposals for regulation. In addition to policy considerations (which might, for example, mean exemptions for small businesses or particular sectors), actual regulations, which are not foreseen in the current economic circumstances, will have to be drawn up according to the economic, market and environmental position at the time. There is, however, no intention to apply regulations made in terms of any of these sections to private individuals acting in a non-business capacity.

Section 57(1), (2) and (4) – Targets for reduction of packaging etc.

26. The Committee asked the Scottish Government to fully explain and justify (given that no such explanation is given in the Delegated Powers Memorandum) why—

(a) unlike the approach taken in Part 1 of the Bill, the Government requires to take the powers in section 57(1) and (2), in so far as they propose that any targets without limit (set by any method) may be set for the reduction of packaging or the reduction of emissions produced by packaging, or requirements on persons to comply with those targets;

(b) given that the Memorandum refers to the possibility of targets being imposed on retailers, the Government requires to impose those targets or requirements on any types of persons (individuals or legal persons) who might be specified in the Regulations, and

(c) On what basis it has considered that there should be no requirements on the face of the Bill to the effect that Ministers shall consult on the terms of the regulations with specified persons or bodies that may have particular interest in the proposals?

27. Scottish Government response—

i. With regard to part (a) of the question, concerning the power in section 57(1) to set targets, the Bill requires that this power be exercised through regulations. A different approach from that taken in Part 1 is required since producers of packaging are already subject to a producer responsibility regime. In Scotland, this is set out in the Producer Responsibility Obligations (Packaging Waste) Regulations 2007 (SI 2007/871). These, in turn, implement the requirement in Article 7 of the Packaging and Packaging Waste Directive (94/62/EC) that return, collection and recovery systems be established. The Scottish Government does not consider it appropriate to transfer responsibilities to itself for meeting packaging targets when a statutory scheme placing considerable responsibilities on producers is already in place.
ii. Furthermore, in terms of waste in general, producer responsibility is a requirement of Community law - see, for example, Article 8 of the recently revised Waste Framework Directive (2008/98/EC). The power to set targets in respect of packaging is obviously less far-reaching in its effects on life in Scotland than the targets in Part 1 may potentially be. It is not limited because very different targets may be appropriate for different forms of packaging on different kinds of product - and indeed the appropriate targets will vary widely according to the state of the market.

iii. Part (b) of the Committee's question on Section 57 asks why the Bill refers to the imposition of targets on persons other than retailers. A great deal of the packaging in circulation does not pass through the hands of retailers, so requirements to reduce these forms of packaging would need to be set for other categories of person. Even where packaging does pass through the hands of retailers, it may well be appropriate to place reduction requirements on producers instead. (As indicated above, these persons are the object of existing producer responsibility legislation in any case.) This does not mean that the Delegated Powers Memorandum's reference to retailers was necessarily wrong. Measures to reduce the amount of packaging reaching consumers in particular, for example, would be likely to be addressed at retailers.

iv. Part (c) of the Committee's question on Section 57 concerns the lack of a specific provision on consultation. The Scottish Government's usual practice is to consult with interested parties when making secondary legislation. It seemed, therefore, unnecessary to require this on the face of the Bill.

Section 64 – Subordinate legislation

28. The Committee asked the Scottish Government—

Why (in contrast for example to the approach taken in sections 74 and 75 of the Judiciary and Courts (Scotland) Act 2008))—

(a) it is considered that section 64(3) requires to contain a power for orders or regulations to modify any enactment (including the Act) by affirmative procedure (a “Henry VIII power”), without any reference to the purposes of such modification, for example, for the purposes of making consequential, incidental, transitional, transitory, or savings provisions; and

(b) if the Government could re-consider whether the power to make supplementary, incidental or consequential provision could be limited to the purposes of giving full effect to, any provision of the Act, and the power to make transitory, transitional or saving provisions could be limited to being in connection with the coming into force of any provision of the Act?

29. Scottish Government response—
i. With regard to part (a) of the question, the Scottish Government considers that it is necessary for the power in section 64(3) to be available for use in wider circumstances than those prescribed in section 64(2)(b) for making consequential, incidental, transitional, transitory, or savings provision.

ii. For example, the power in section 47 enables the Scottish Ministers to modify the functions of the Forestry Commissioners in or as regards Scotland. It is likely that doing so will necessitate the modification of enactments, because the existing functions of the Forestry Commission are mainly set out in the Forestry Act 1967. The modification of that Act would be the main method by which the power would be used, rather than being merely ancillary. Section 36(1) provides a similar case because it might be necessary to modify enactments applying to local authorities, for example, to reflect the new climate change duties.

iii. This is a wide-ranging Bill and it is difficult to know in advance which powers might need to modify enactments. That is why section 64(3) is expressed as applying generally.

iv. Turning to part (b) of the question, the Scottish Government considers that dividing the section 64(3) powers in the way described would result in some of the ancillary powers being subject to the ‘full effect’ test and others subject to the ‘in connection with the coming into force’ test. As previously stated, it is difficult in advance to know which of the ancillary powers will be needed in practice. The Bill contains such a wide range of different powers that a particular set of subordinate legislation in a particular subject area might, for example, need to ‘mix and match’ a consequential provision with a saving. It was not felt that having to use different tests in this manner would add to the level of scrutiny which will have to be applied.

v. The Judiciary and Courts (Scotland) Act 2008, contains separate standalone “ancillary” and “transitional provision etc.” powers in sections 74 and 75, but it also contains a full list of incidental etc. powers within section 71. Section 64(2) (b) of the Climate Change (Scotland) Bill takes a similar approach to section 71(2) (a) in that Act.

I hope this information is helpful to the Committee.
Present:

Malcolm Chisholm
Tom McCabe
Jamie Stone (Convener)

Bob Doris
Ian McKee (Deputy Convener)

Apologies were received from Jackson Carlaw.

The meeting opened at 2.15 pm.

**Climate Change (Scotland) Bill:** The Committee considered the delegated powers provisions in this Bill at Stage 1, and agreed to seek further clarification from the Scottish Government.
Climate Change (Scotland) Bill: Stage 1

14:22

The Convener: This is the big one today. We have seen the bill, and read the long and detailed legal briefing. On behalf of all of us, I thank the legal team. It was no mean undertaking to put that brief together.

The delegated powers in the bill are lengthy and complex, and there is a large number of recommendations for us to consider. When I can, I will refer to the summary of recommendations rather than read the proposed decisions out in full. That said, we will still have to go into some detail. We will take it section by section.

On section 4, "Setting annual targets", and in relation to section 6, "Modifying annual targets etc.", are we content to ask the Scottish Government on what basis it considers that there should be no requirements in the bill for ministers to consult on the terms of an order made under those sections with specified persons or bodies that might have particular interest in the proposals?

Malcolm Chisholm: The Climate Change (Scotland) Bill is different from other bills. Normally I would support consultation, but there is a specific advisory body—presumably of experts on climate change—that will be consulted on this and other proposals. That is what makes me uncertain whether there is a need to consult other bodies; presumably it is the experts who matter as far as climate change is concerned. I assume that the advisory committee will be constructed in such as way as to contain the relevant experts.

Ian McKee: Convener, I seek your guidance on how much we might be straying into lead committee territory by saying that certain people should be consulted. Rather than making a point, I am asking for guidance. Is that this committee's duty or should we pass it on to the lead committee for a decision?

The Convener: I am fairly content that we are asking a relevant question. Of course, the Scottish Government could come back and say that it does not agree. I am in the committee's hands, but I think that the question is reasonable, given our role as custodians of the Parliament's interests. We do not assume that there will be any particular response from the Government.

Ian McKee: I thought that leaving the provision out would not impair the bill and that is what we are looking at. Perhaps who should and who should not be consulted is more to do with policy.

The Convener: I would be concerned if we never asked questions—I would rather err on the side of asking questions, not for the sake of it, but because I never want us not to fulfil our duty. Also, in asking questions, we do not impair the progress of the bill; we will revisit it in due course.

Ian McKee: If the rest of the committee is happy with that, so am I.

The Convener: Both your point and Malcolm Chisholm's are on the record.

Malcolm Chisholm: A further point to that is in the next section of the bill, section 5. The assumption is that the ministers will follow the advice of the advisory body. If they do not, they have to set out the reasons why. That is a completely different situation from what we are used to in other legislation.

The Convener: Let us move on to section 6, "Modifying annual targets etc.". There are two questions for the Scottish Government. The first is to explain and justify why it is considered that the power in section 6(4) may be exercised in any circumstances where the Scottish ministers consider it appropriate to do so. The second question is whether more defined circumstances in which it would be appropriate to exercise the power—in a similar manner to sections 6(2) and 6(3)—could be prescribed, for instance, where it becomes necessary for the achievement of targets.

Members indicated agreement.

The Convener: We come to section 9, "Greenhouse gases". I had not expected this—I thought that we knew what all the greenhouse gases were, but it appears that we do not.

Are we content that the proposed power is acceptable in principle and that its exercise will be subject to affirmative procedure—as they discover new gases, although hopefully they will not?

Members indicated agreement.

The Convener: On section 11, "Baselines for additional greenhouse gases", are we content that the proposed power is acceptable in principle and that it is subject to affirmative procedure?

Members indicated agreement.

The Convener: On section 12, "The net Scottish emissions account", are we content to notify the Scottish Government that we do not favour the use of the lesser degree of scrutiny of negative procedure for second or subsequent regulations, as provided for in section 64(7)(a) in relation to section 12(2), rather than affirmative procedure? It is an old point, and it is one that we have stuck to in the past.

Members indicated agreement.
The Convener: Also on section 12, are members content to ask the Scottish Government the questions set out in the summary of recommendations?

Members indicated agreement.

The Convener: That takes us to section 14, “Scottish share of emissions from international aviation and international shipping”, which seemed tricky to me when I read it.

Are members content to ask the Scottish Government on what basis it has considered that there should be no requirements in the bill to the effect that ministers shall consult on the terms of an order with specified persons or bodies who may have particular interest in the proposals?

Members indicated agreement.

Malcolm Chisholm: That relates to our comments on section 4.

The Convener: That is on the record.

On section 15, “Scottish emissions and removals”, are we content that the proposed power is acceptable in principle and that it is subject to affirmative procedure?

Members indicated agreement.

The Convener: On section 17, “International carbon reporting practice”, are we agreed that the proposed power is acceptable in principle and that it is subject to negative procedure?

Members indicated agreement.

The Convener: On section 18, “Carbon units and carbon accounting”, are we content to notify the Scottish Government that we do not favour the use of the lesser degree of scrutiny of negative procedure for second or subsequent regulations, as provided for in section 64(7)(b) in relation to section 18(1), rather than our preferred affirmative procedure?

Members indicated agreement.

The Convener: Are we also content to ask the Scottish Government the questions on section 18 that are set out in the summary of recommendations?

Members indicated agreement.

The Convener: On section 19, “Meaning of advisory body”, are we content that the proposed power is acceptable in principle and that it is subject to affirmative procedure?

Members indicated agreement.

The Convener: Also on section 19, are we content to draw to the attention of the lead and secondary committees for the bill, in relation to the effect of the delegated powers contained in sections 19 and 20 and schedule 1, that paragraph 33 of the explanatory notes and paragraph 31 of the policy memorandum indicate that ministers will require to seek expert and—in this is the important word—Independent advice from the advisory body, but that the bill provides, first, in sections 19(1) and 19(5) that a designated advisory body may be any public body that ministers consider appropriate, which may be a person or body with functions of a public nature, not necessarily independent of the Scottish ministers or Government; and secondly, in paragraph 2 of schedule 1, that the members of the Scottish committee on climate change shall be appointed by the Scottish ministers?

In pointing that out, however, we acknowledge that, in relation to the statements in the policy memorandum and explanatory notes, “independent” is capable of having different meanings and does not necessarily refer to a body that is wholly independent of the Scottish ministers.

14:30

Ian McKee: Is that last bit not the Scottish Government’s answer to us, rather than our answer to the Scottish Government?

The Convener: No. I think that we are seeking clarification of the meaning of “independent”. It may be very clear to you, as a member of the Scottish National Party—

Ian McKee: That is not my point. My point is that the last paragraph of the recommendation is saying that all that the Government needs to say is that “independent” has different meanings and does not necessarily refer to a body that is wholly independent of the Scottish ministers. We should leave it to the Scottish Government to decide what the response should be, rather than telling it what we think would be a good response to keep us happy.

The Convener: We are not doing that—perish the thought. Ministers are not such shrinking violets that they would not come back and tell us exactly what they thought.

Ian McKee: I am sure that the ministers are perfectly capable of looking after themselves, but it is the function of the committee to ask the questions and it is the function of the Government to reply.

The Convener: That is a thought that I shall bear in mind in future. Is the committee content to proceed on those lines, with that admonition from Dr McKee’s good self in the meantime?

Members indicated agreement.
The Convener: On section 20, “Scottish Committee on Climate Change”, are we content that the proposed power is acceptable in principle, and that it is subject to affirmative procedure?

Members indicated agreement.

The Convener: Schedule 1 to the bill is on the Scottish committee on climate change that is introduced by section 20. Paragraph 2(2) of the schedule is on the membership of the committee. Are we content that the proposed power is acceptable in principle and that it is subject to negative procedure?

Members indicated agreement.

The Convener: The next question is on the delegated powers in schedule 1 that are in the form of directions or determinations. Are we content that the proposed delegated powers are acceptable in the form of directions or determinations, as the case may be, and that they are not more appropriately expressed in the form of subordinate legislation? The delegated powers in schedule 1 to which I refer are in paragraphs 6(1), 7(5), 8(2) and 9(3).

I, too, found the wording of that question slightly confusing—it is almost a double negative. However, I promise that that is no criticism of the legal team; it is a reflection of my brain power.

Is that okay?

Members indicated agreement.

The Convener: That takes us to section 23, “Reporting on progress towards targets”. Are we content that the proposed powers are acceptable in principle and that they are subject to affirmative procedure?

Members indicated agreement.

The Convener: On section 24, “Scottish Ministers’ response to reports on progress”, are we content that the proposed powers are acceptable in principle and that they are subject to affirmative procedure?

Members indicated agreement.

The Convener: Section 26 is “Guidance to advisory body”. I point out that, unfortunately, the proposal in the summary of recommendations is somewhat misleading. For the avoidance of doubt, we are invited to agree that it is appropriate for the delegated power to be in the form of guidance, rather than subordinate legislation. Are members clear about that? It is a little confusing.

The question is, is the committee content that the proposed delegated power is acceptable in the form of the issue of guidance and is not more appropriately expressed in the form of subordinate legislation?

Members indicated agreement.

The Convener: On section 27, “Power to give directions to advisory body”, is the committee content that it is acceptable that the proposed delegated power is exercised by issuing directions and is not more appropriately expressed in the form of subordinate legislation?

Members indicated agreement.

The Convener: Are members content to draw to the attention of the lead and secondary committees for the bill the delegated powers that are conferred on the Scottish ministers in sections 26 and 27 to issue directions and guidance to the advisory body, given that paragraph 33 of the explanatory notes and paragraph 31 of the policy memorandum indicate that the advisory body will provide independent advice to ministers?

Members indicated agreement.

The Convener: On section 35, “Further provision about reporting duties”, are members content that that power is acceptable in principle, and that it is subject to affirmative procedure?

Members indicated agreement.

The Convener: On section 36, “Duties of public bodies relating to climate change”, there are three questions to ask the Scottish Government.

The first question is whether consideration was given to the type of public bodies that could be subject to climate change duties and, if so, whether “public bodies”, for the purposes of this section, could be more narrowly defined.

The second question is whether consideration was given by the Scottish Government to providing a definition of “climate change duties” that did not refer back to section 36(1) and, if so, whether “climate change duties”, for the purposes of this section, could be more specifically and more narrowly defined.

The third question is whether, given that climate change duties are not precisely defined and given that any order under section 36 could potentially affect a very wide range and large number of public bodies, consideration was given to providing for a broader range of persons whom Scottish ministers are obliged to consult under section 36(4) and (5).

That is quite an important section in terms of the powers that ministers propose to take to themselves. Do members have any comments?
Malcolm Chisholm: Section 36(3) distinguishes between
“all public bodies; ... public bodies of a particular description”
and
“individual public bodies”.
With regard to the first question, it seems to be clear that consideration has been given to the type of bodies that may be subject to an order. It is clear that, in certain cases, it covers all public bodies. I do not think that the point is valid.

With regard to the second question, I suppose that one could ask for a more precise definition, although a narrower definition is not necessarily desirable. At the same time, it is quite clear what climate change duties are. The third question is another point about consultation.

The Convener: So you are clear on what public bodies are? It includes everyone, really.

Malcolm Chisholm: I think that they are referred to in several pieces of legislation.

The Convener: Do you propose that we do not ask the three questions that I read out, or are you content to make your point on the record?

Malcolm Chisholm: I have made the point on the record. My concern about the first question, in particular, is that it might imply the subtext that we want to limit the number of public bodies to which section 36 applies, whereas the legislation quite clearly says that, in some cases, it is appropriate that the order should apply to all public bodies.

The Convener: Perish the thought that the Subordinate Legislation Committee should stand in the way of stopping climate change—we would be vilified in no uncertain terms. Do members have any more comments on that point?

Tom McCabe (Hamilton South) (Lab): With regard to the second question, I understand the concern about a lack of definition. A minister or ministers could decide to do lots of things under the guise of climate change. For instance, they could say that people will get their bins emptied only once every month, which would be controversial. That is just one example, but there are many others, so there might be a case for a bit more definition.

The Convener: Okay. I thought that you were going to take us back to the realm of trees.

Tom McCabe: No—I have no interest in high trees.

The Convener: That would indeed be for a subject committee rather than for our committee. Given that Malcolm Chisholm’s caveats are on the record, will we proceed to ask the three questions and wait to see what comes back? I have to say, on the record, that there is no way that we want to stand in way of the progress of a bill that is as important as this one. Nevertheless, we have to balance that consideration against our duties to Parliament.

Ian McKee: Would a compromise be to take out the word “narrowly” in the first question, which implies that it is trying to be restrictive?

Malcolm Chisholm: And indeed, the same word in the second question.

Ian McKee: Indeed—it is also in the second question.

The Convener: That would be acceptable. There is enough on the record to cover ourselves and to show that we are not trying to prevent efforts to stop the world from heating up.

Ian McKee: One is judged by one’s public utterances in writing as well.

The Convener: With that amendment, we will proceed. I see that the legal team is content with that.

On section 37, “Guidance to relevant public bodies”, are we content that the proposed delegated power is acceptable in the form of the issue of guidance and that it is not more appropriately expressed as a power to make subordinate legislation? If we seek further justification from the Scottish Government as to the nature and scope of the power that is sought under section 36, however, we may wish to ask for more information as to the function and likely content of the guidance.

That is not expressing opposition to guidance as such, but simply asking for a little more information. Are members happy with that?

Members indicated agreement.

The Convener: On section 38, “Reporting on climate change duties”, are members content, subject to considering section 36—and depending on what we get back—to find the power acceptable in principle and that it is subject to negative procedure?

Members indicated agreement.

The Convener: On section 39, “Appointment of monitoring body”, are members content that the proposed power is acceptable in principle and that it is subject to affirmative procedure?

Members indicated agreement.

The Convener: On sections 40 to 44 inclusive, are members content that the proposed powers to direct in sections 40(2), 42(1), 42(2) and 44(1) are acceptable in principle and are not more
appropriately expressed in the form of subordinate legislation?

Members indicated agreement.

The Convener: Are members also content that the proposed delegated power in section 43 is acceptable in the form of the issue of guidance, and that it is not more appropriately expressed in the form of subordinate legislation?

Members indicated agreement.

The Convener: On section 46, “Variation of permitted times for making muirburn”—I do not know how to pronounce that, but I know what it means—are members content to ask the Scottish Government whether or not it considers that it would be appropriate to consult the hill farming community, landowners and others who may be affected on the dates that may be appropriate for muirburn, in advance of making an instrument? Do we talk to the farmers and the lairds about that one?

Members indicated agreement.

The Convener: Indeed—we are open with everyone.

On section 47, “Power to modify functions of Forestry Commissioners”, are we content to ask the Scottish Government the questions as set out in the summary of recommendations? It is fairly far-reaching stuff, but rather than read it out I ask whether members are happy to go with the summary of recommendations?

Members indicated agreement.

The Convener: On section 50, “Non-domestic buildings: assessment of energy performance and emissions”, are members content that the proposed power to make regulations with respect to the assessment of energy performance and emissions is acceptable in principle; and that, subject to the following exception, the affirmative procedure is appropriate, the exception being that negative procedure is appropriate in respect of regulations with respect to the levy of charges to enable the enforcement authority to recover reasonable costs incurred by it in exercising its functions under the regulations?

Malcolm Chisholm: I have a question—you read out that recommendation, but you did not read out the recommendation for section 47. Will the section 47 recommendation still appear in the Official Report?


The Convener: I am sorry—have I failed to read out the recommendation for section 47?

Malcolm Chisholm: Yes. It is a particularly important recommendation.

The Convener: Okay—I offer my apologies for that. On section 47, “Power to modify functions of Forestry Commissioners”,

“The Committee may wish to consider asking the Scottish Government, given that the proposed power under section 47(1) to modify, by order, the functions of the Forestry Commissioners in or as regards Scotland does not contain any limitation with respect to the nature, scope or extent of any such modification, whether it has given consideration to the imposition of a restriction, within the power, on the nature, scope and extent of any modification which may be made; and, whether or not any such consideration has been given, does it not consider that such a limitation would be both feasible and appropriate.”

That is now a matter of record.

Malcolm Chisholm: It is important that that modification should be in primary legislation. The functions are in the Forestry Act 1967, which was amended by primary legislation, so that is important.

The Convener: That is a fair point. It is now on the record in full—thank you for that.

Where are we? We have done section 50, so we move on to section 52, “Waste prevention and management plans”. Sections 52(1), 52(2) and 52(4) are on waste management plans and section 52(3) provides that the enforcement authority must have regard to any guidance given to it by the Scottish ministers in relation to the functions conferred on it by the regulations.

Are we content to ask the Scottish Government what classes of person it intends or anticipates will be subject to duties under the regulations, and whether there is any particular intention to apply the power to domestic activities or individuals? That could mean you or me. Secondly, would it not be possible for the Scottish Government to specify, in the section, the classes of persons to be subject to the regulations and, if it is, why has that not been done? We are looking for a bit of clarity on that point. Are we happy with those questions? They seem to be quite logical.

Members indicated agreement.

14:45

The Convener: Are we also content that the proposed delegated power to issue guidance under section 52(3) is acceptable, and that it would not be more appropriately expressed in the form of subordinate legislation?

Members indicated agreement.

The Convener: I suppose that we have to phrase it that way for legal accuracy.
Sections 53(1), (2), (3) and (5) are on information on waste, and section 53(4) provides that the Scottish Environment Protection Agency may give guidance to persons to whom the regulations apply on how to comply with the regulatory requirements.

Are we content to ask the Scottish Government the questions as set out in the summary of recommendations? Are we content that the proposed delegated power to issue guidance in section 53(4) is acceptable and that it would not be more appropriately expressed in the form of subordinate legislation?

Members indicated agreement.

The Convener: Sections 54(1), (2), (4) and (5) are on facilities for the deposit of recyclable waste, and section 54(3) provides that the enforcement authority must have regard to any guidance given to it by the Scottish ministers in relation to the functions that are conferred on it by the regulations. Are we content to ask the Scottish Government the questions as set out in the summary of recommendations? Are we also content that the proposed delegated power to issue guidance is acceptable and that it would not be more appropriately expressed in the form of subordinate legislation?

Members indicated agreement.

The Convener: Sections 55(1) and 55(2) contain provisions for facilities for the deposit of recyclable waste at events, and sections 55(3) and 55(4) provide that local authorities and enforcement authorities must have regard to any guidance that has been given to them by the Scottish ministers in relation to the functions that will be conferred on them by the regulations. Are we content that the delegated powers in sections 55(1) and 55(2) are acceptable in principle and that they are subject to affirmative procedure, with specified exceptions where negative procedure applies?

Members indicated agreement.

The Convener: Are we also content that the proposed delegated powers under sections 55(3) and 55(4) are acceptable in the form of guidance and that they would not be more appropriately expressed in the form of subordinate legislation?

Members indicated agreement.

The Convener: Sections 56(1), 56(2), 56(3) and 56(6) are on the procurement of recyclate regulations, and section 56(4) provides that the enforcement authority must have regard to any guidance given to it by the Scottish ministers in relation to the functions that the regulations will confer on it. Section 56(5) provides that persons to whom the regulations apply must have regard to any guidance that has been given by the Scottish ministers or the enforcement authority in relation to the requirements that are imposed by the regulations.

Are we content to ask the Scottish Government the questions as set out in the summary of recommendations? Are we content that the proposed delegated powers to issue guidance under sections 56(4) and 56(6) are acceptable and that they would not be more appropriately expressed in the form of subordinate legislation?

Members indicated agreement.

The Convener: Sections 57(1), 57(2) and 57(4) are on the targets for the reduction of packaging, and section 57(3) provides that the enforcement authority must have regard to any guidance issued to it by the Scottish ministers in relation to the functions that the regulations will confer on it. Are we content that the particular power to issue guidance that is contained in section 57(3) would not be more appropriately expressed as a power to make subordinate legislation?

Members indicated agreement.

The Convener: In relation to sections 57(1), 57(2) and 57(4), are members content that we should ask the Scottish Government to fully explain and justify why, unlike the approach taken in part 1 of the bill, the Scottish Government requires to take the powers in sections 57(1) and 57(2), in so far as they propose that any targets without limit—set by any method—may be set for the reduction of packaging or the reduction of emissions produced by packaging, or requirements on persons to comply with those targets?

Given that the memorandum refers to the possibility of targets being imposed on retailers, why does the Scottish Government require to impose those targets or requirements on any types of persons—individuals or legal persons—who might be specified in the regulations?

On what basis has the Government considered that there should be no requirements on the face of the bill to the effect that ministers shall consult on the terms of the regulations with specified persons or bodies that may have particular interest in the proposals?

Is the committee content to ask those three questions?

Members indicated agreement.

The Convener: On section 58, "Deposit and return schemes", are we content that that power is acceptable in principle and—with specified exceptions where negative procedure applies—subject to affirmative procedure?

Members indicated agreement.
The Convener: Section 59 is “Charges for supply of carrier bags”. Mike Pringle, where are you?

Section 59(3) says that the enforcement authority must have regard to guidance issued by the Scottish ministers in relation to the functions conferred on it by the regulations.

Are we content that the powers are acceptable in principle and are subject to affirmative procedure, with the exception of negative procedure for regulations dealing only with charging by the enforcement authority, under section 64(7)(e)?

Are we content that the power to issue guidance contained in section 59(3) is not more appropriately expressed as a power to make subordinate legislation?

Are we content?

Members indicated agreement.

The Convener: Thank you. I would take silence as assent—I have probably bowed you all into complete silence.

Now we look at ourselves, as in a mirror. On section 64, “Subordinate legislation”, are we content to ask the Scottish Government why, in contrast to the approach taken in sections 74 and 75 of the Judiciary and Courts (Scotland) Act 2008, it is considered that section 64(3) requires to contain a power for orders or regulations to modify any enactment, including the act, by affirmative procedure—a Henry VIII power—without any reference to the purposes of such modification, for example for the purposes of making consequential, incidental, transitional, transitory, or savings provisions?

Members indicated agreement.

The Convener: Are we content to ask the Scottish Government whether it would reconsider whether the power to make supplementary, incidental or consequential provision could be limited to the purposes of giving full effect to any provision of the act, and whether the power to make transitory, transitional or savings provisions could be limited to being in connection with the coming into force of any provision of the act?

Members indicated agreement.

The Convener: On section 67, “Short title and commencement”, are we content that the power is acceptable, and that the provisions—being commencement provisions—are subject to no procedure?

Members indicated agreement.
SUBORDINATE LEGISLATION COMMITTEE

MINUTES

7th Meeting, 2009 (Session 3)

Tuesday 24 February 2009

Present:

Jackson Carlaw
Bob Doris
Tom McCabe
Jamie Stone (Convener)

Malcolm Chisholm
Helen Eadie
Ian McKee (Deputy Convener)

The meeting opened at 2.15 pm.

**Climate Change (Scotland) Bill:** The Committee considered the Scottish Government's response to points raised on the delegated powers provisions in this Bill at Stage 1, and agreed the terms of its report.
Climate Change (Scotland) Bill:
Stage 1

14:15

The Convener: The next item concerns consideration of the Scottish Government’s response to points raised by the committee on the delegated powers in the Climate Change (Scotland) Bill at Stage 1.

Are we content with the delegated power in section 4, “Setting annual targets”, and that it is subject to affirmative procedure?

Members indicated agreement.

The Convener: Are we content with the delegated powers in section 6, “Modifying annual targets etc”, and that they are subject to affirmative procedure?

Members indicated agreement.

The Convener: Are we content with the delegated powers in section 12, “The net Scottish emissions account”, and that they are subject to affirmative procedure on the first occasion, but that the second and subsequent regulations will be subject to negative resolution, other than regulations making provision to alter the amount by which a carbon unit credited or debited to the net Scottish emissions account for a period reduces or increases the account for that period?

Members indicated agreement.

Ian McKee (Lothians) (SNP): The Scottish Government’s response talks about emissions from domestic aviation being considered to have been emitted from sources in Scotland. Do we have a definition of “domestic aviation” in the Scottish context?

The Convener: I certainly do not.

Judith Morrison (Legal Adviser): Section 14 of the bill contains a power to make provision regarding what emissions are to be attributable to Scotland. The Government will use delegated powers to define what emissions are attributable to Scotland for the purposes of the account.

Ian McKee: Do you mean the Scottish Government or the United Kingdom Government?

Judith Morrison: The Scottish ministers define the emissions for the purposes of the bill.

The Convener: Are you content with that? It is not an easy subject.

Ian McKee: It seems to give the Scottish ministers a welcome degree of freedom.

The Convener: Indeed. Are we content to report that, generally, we do not favour the use of
affirmative procedure for a first set of regulations and negative procedure for second and subsequent regulations, but that we believe that, in the instance of section 12 of this bill, the Scottish Government has provided sufficient reasons why that choice of procedure appears to be suitable.

Members indicated agreement.

The Convener: Are we content with the delegated power in section 14, “Scottish share of emissions from international aviation and international shipping”, and that it is subject to affirmative procedure?

Members indicated agreement.

The Convener: Are we content with the delegated powers in section 18, “Carbon units and carbon accounting”, and that they are subject to affirmative procedure on the first occasion, but that the second and subsequent regulations will be subject to negative resolution, other than regulations making provision specifying a carbon unit of a kind not previously specified in regulations?

Members indicated agreement.

The Convener: On section 36, “Duties of public bodies relating to climate change”, are we content to report that, generally, we do not favour the use of affirmative procedure for a first set of regulations and negative procedure for second and subsequent regulations, but that we believe that, in the instance of section 18 of this bill, the Scottish Government has provided sufficient reasons why that choice of procedure appears to be suitable?

Members indicated agreement.

The Convener: Are we content to recommend that that could be mitigated to some extent by the provision of a list of public bodies to which the power is to apply, along with a power, subject to affirmative procedure, to add to the list? That would be in line with the approach that has been adopted with regard to other regimes regulating public bodies in relation to matters such as freedom of information.

We do not have to go down that route, but we could think about having some kind of list.

Ian McKee: I do not think that that suggestion is necessary. We are reporting our view—that the power is extremely wide in its scope—to the lead committee, which is a group of informed individuals. We should leave it to the lead committee to decide how that might be mitigated.

Helen Eadie (Dunfermline East) (Lab): I take a different view. Given that the approach has been adopted with regard to matters such as freedom of information, we should consider adopting it in relation to this bill. I recommend strongly that we take a different view to that which is proposed by Ian McKee.

Malcolm Chisholm (Edinburgh North and Leith) (Lab): I am fairly sceptical about the need to make that recommendation to the lead committee, but I accept that an argument can be made for having a list. It is better to have a detailed suggestion as that gets around the obvious objection that the bill is for the next 40 years, in which time there will be new public bodies. If we really want to deal with the problem, it is better to propose a solution.

The Convener: At the moment, the committee is inclining towards recommending that there be a list. Can you live with that, Dr McKee?

Ian McKee: I simply feel that it is up to the lead committee to decide how the problem should be solved. There are benefits to providing a list but there are also problems with providing a list.

The Convener: We could tell the lead committee that we have thought about the matter but that, ultimately, it is up to its members to decide. That might incorporate our thinking on the matter. Would that be a way forward?

Helen Eadie: The only problem with that is that it raises the question of why we meet. We, too, have a responsibility; it is not just down to the lead committee. We provide knowledge and expertise. We want to avoid a situation in which people get involved in litigation because they cannot decide on the definition of certain elements of legislation. It would be unfortunate for the people of Scotland if we were to leave them in that position.

Bob Doris (Glasgow) (SNP): I can see why a list might be desirable. However, I have not spoken up until now because I can see problems with it as well. Although the list can be added to via affirmative instruments, that takes time and if by some error a body is not on the list, the minister cannot set targets for it at the point when he or she would want to. Leaving those points to one side, however, I have to say that I do not know whether it should be this committee or the lead committee that decides whether there should be a list.
Helen Eadie: I agree that it would take time to add bodies to the list, but only a couple of months, which is not an inordinate amount of time. We have to take this committee seriously. We either do our job or we may as well not be here.

Jackson Carlaw (West of Scotland) (Con): I am inclined towards Helen Eadie's point of view on this matter.

Tom McCabe (Hamilton South) (Lab): So am I.

The Convener: I think that we have a majority view. Can you live with that, Ian?

Ian McKee: Yes.

The Convener: That is very considerate of you.

We ask our clerks to outline to the lead committee the nature of what we have in mind, and, of course, the record of our discussion can be read in the Official Report.

Moving on, are we agreed that it would be appropriate for the Parliament to have a role in scrutinising the guidance that is produced under section 37, "Guidance to relevant public bodies", because of its potential impact?

Members indicated agreement.

The Convener: That being the case, are we content to recommend that guidance under this section should be laid before Parliament for a period prior to implementation and that any resolutions of the Parliament that are made in respect of the draft guidance during that period should be implemented?

Members indicated agreement.

The Convener: On section 46, "Variation of permitted times for making muirburn", are we content with the Government’s response in the respect that it may be taken to confirm that informal consultation with potentially interested parties will take place in advance of any instrument being made?

Members indicated agreement.

Tom McCabe: Convener, could I take us back to section 37? The final part of the recommendation says:

"and any resolutions of the Parliament made in respect of the draft guidance during that period implemented".

What exactly does that mean? Is it saying that if the Parliament passes a resolution on the guidance, the Government must take account of it?

Judith Morrison: The Government should take account of it in producing revised guidance.

Tom McCabe: Yes, but the Government is not obliged to do so.

Judith Morrison: It is for members to decide how they would like the Government to take account of the resolution.

Tom McCabe: My firm understanding is that Parliament cannot instruct Government. It can make its view known, but there is never an obligation on the Government to take up every dot and comma of that view, is there?

Judith Morrison: As I recall, there is a similar issue in relation to the national planning framework, whereby the planning framework must be laid in draft before the Parliament for a certain period of time, and if the Parliament makes a resolution in relation to that draft, the Government is required to take it into account. I do not have the legislation in front of me to give you chapter and verse, but I can certainly come back to you on it.

Malcolm Chisholm: The word "implemented" should probably be changed to "taken into account", or something like that.

Tom McCabe: Yes.

The Convener: Okay. Is that form of words acceptable?

Tom McCabe: Yes; it is softer.

Members indicated agreement.

The Convener: Let us go back to where we were. I am sure that we have all read the legal brief on section 47, "Power to modify functions of Forestry Commissioners", quite closely.

[Interrupt.] I call for just a touch of order from my Labour colleagues, please.

Are we content to draw it to the attention of the lead committee that the power under section 47(1), to modify the functions of the forestry commissioners in or as regards Scotland, is very wide in its scope as there is no limitation within the power, beyond that it must deliver a climate change purpose?

Helen Eadie: We agree with that.

The Convener: That was certainly quite a big issue; it leaped out of the legal brief.

Ian McKee: Could you give me an example of the misuse of the power?

The Convener: I would not use the word "misuse" but the powers are quite wide. The legal brief gives a couple of examples. In a way, we have a duty to report something like that. What the lead committee or Parliament does with it is another matter.

Ian McKee: I think that there are occasions when the climate change tail should wag the dog.
The Convener: Ah, you have read your legal brief. That was the test phrase.

Ian McKee: Did you doubt it, convener?

The Convener: Sections 52(1), (2) and (4) are on waste prevention and management plans, sections 53(1), (2), (3) and (5) are on information on waste, sections 54(1), (2), (4) and (5) are on facilities for the deposit of recyclable waste, and sections 56(1), (2), (3) and (6) are on regulations for the procurement of recyclate.

Are we content to report to the lead committee and to Parliament that the powers are expressed in very broad terms and that there is nothing in the bill to restrict their application to purely commercial activity?

Members indicated agreement.

The Convener: Sections 57(1), (2) and (4) are on the targets for reduction of packaging. Are we agreed that the Parliament should be made aware that the powers are expressed in very broad terms and that there is nothing in the bill to restrict their application to commercial activity?

Members indicated agreement.

The Convener: On section 64, “Subordinate legislation”—our good selves—can we agree that the general power contained in section 64(3), which enables orders or regulations to modify any enactment, including the act, is, in the case of the bill, acceptable?

Members indicated agreement.

The Convener: That completes item 2. I thank you.
ANNEXE C: ORAL EVIDENCE AND ASSOCIATED WRITTEN EVIDENCE TO THE TRANSPORT, INFRASTRUCTURE AND CLIMATE CHANGE COMMITTEE

20 January (3rd Meeting, 2009 (Session 3))

Oral Evidence
Philip Wright, Deputy Director Climate Change, Fiona Page, Head of Scottish Climate Change Bill Team, Andrew Henderson, Policy Officer Scottish Climate Change Bill Team, and Cameron Maxwell, Climate Change Policy Team, Scottish Government.

Written Evidence
Scottish Climate Change Bill Team

Supplementary Written Evidence
Scottish Climate Change Bill Team

27 January (4th Meeting, 2009 (Session 3))

Oral Evidence
Professor John Mitchell, Director of Climate Science, Met Office; Professor Peter Smith, Professor of Soils and Global Change, University of Aberdeen; Phil Matthews, Senior Policy Advisor, Sustainable Development Commission Scotland; Dr Andy Kerr, Assistant Director of Scottish Alliance for Geoscience, Environment and Society, University of Edinburgh; David Kennedy, Chief Executive, and Katherine White, Economic Adviser, Committee on Climate Change.

Supplementary Written Evidence
Met Office

3 February (5th Meeting, 2009 (Session 3))

Oral Evidence
Richard Dixon, Director, WWF Scotland; Duncan McLaren, Chief Executive, Friends of the Earth Scotland; Dave Watson, Scottish Organiser, UNISON; Chris Hegarty, Advocacy Manager, SCIAF; Gavin McLellan, Head of Christian Aid Scotland, Christian Aid Scotland; Judith Robertson, Head of Oxfam in Scotland, Oxfam.

Written Evidence
Friends of the Earth Scotland

Supplementary Written Evidence
Stop Climate Chaos Scotland

10 February (6th Meeting, 2009 (Session 3))
Oral Evidence
Chris Austin, Head of Public Affairs, Association of Train Operating Companies;
Marjory Rodger, Director of Government Relations in Scotland, Confederation of Passenger Transport UK;
Derek Halden, Director, DH Consultancy;
Gordon Dewar, Managing Director, Edinburgh Airport, BAA Scotland;
Robert Ashdown, Head of Technical Division, Chamber of Shipping;
Gordon Wilmsmeier, Senior Research Fellow, Transport Research Institute, Napier University;
Dr Alice Bows, Core Researcher, Tyndall Centre Manchester;
Paul Tetlaw, Chair, Transform Scotland;
Jeff Gazzard, Coordinator, GreenSkies Campaign;
John Lauder, National Director for Scotland, Sustrans.

Written Evidence
Association of Train Operating Companies
BAA Scotland
Confederation of Passenger Transport
Chamber of Shipping
Transform Scotland

Supplementary Written Evidence
BAA Scotland:
Covering letter
Sustainable aviation CO2 roadmap
Non CO2 climate change effects of aviation emissions
Car parking additional information
Public transport additional information
GreenSkies Campaign
Derek Halden

24 February (7th Meeting, 2009 (Session 3))

Oral Evidence
Ken Gibb, Chair, Sustainable Scotland Network;
Councillor Alison Hay, Spokesperson for Regeneration and Sustainable Development, and Anil Gupta, Team Leader for Environment and Regeneration, COSLA;
John Stocks, Manager, Scotland, Carbon Trust;
Mike Thornton, Director, Scotland, Energy Saving Trust;
Chas Booth, Senior Press and Parliamentary Officer, Association for the Conservation of Energy;
Stephen Boyd, Assistant Secretary, STUC;
Anne Douglas, National Secretary, Prospect.

Written Evidence
COSLA and Sustainable Scotland Network
STUC
3 March (8th Meeting, 2009 (Session 3))

**Oral Evidence**

Matthew Farrow, Head of Environment Group, CBI;
Brendan Dick, and Grant Hodges, Climate Change Business Delivery Group;
Jason Ormiston, Chief Executive, Scottish Renewables;
Colin Galbraith, Director, Policy and Advice, and Clive Mitchell, Strategy and Communications Manager, Scottish Natural Heritage;
Dr Chris Spray, Director of Environmental Science, and David Gorman, Head of Environmental Strategy, SEPA;
Geoff Aitkenhead, Asset Management Director, and Mark Williams, Business Strategy and Climate Change Manager, Scottish Water.

Written Evidence/Submissions to call for views
- Climate Change Business Delivery Group
- Scottish Renewables
- Scottish Natural Heritage
- SEPA
- Scottish Water

10 March (9th Meeting, 2009 (Session 3))

**Oral Evidence**

Stewart Stevenson MSP, Minister for Transport, Infrastructure, and Climate Change, Philip Wright, Deputy Director, Climate Change, Fiona Page, Head of Scottish Climate Change Bill Team, Cameron Maxwell, Climate Change Policy Team, Madeleine Cusack, Climate Change Policy Team, and Kevin Philpott, Waste Regulation Senior Policy Officer, Scottish Government; David Henderson-Howat, Policy Adviser, Forestry Commission Scotland.

Supplementary Written Evidence
- Minister for Transport, Infrastructure and Climate Change
14:00

The Convener: Item 2 is an evidence session on the Climate Change (Scotland) Bill. This is the first of many evidence sessions. We will be hearing today from Scottish Government officials and the bill team. It is expected that we will continue to take evidence until some time in March, at which point we will hear from the minister. In addition, we have issued a call for written evidence. The deadline for submissions is 27 February.

I welcome the officials: Philip Wright, the deputy director on climate change; Fiona Page, head of the Scottish climate change bill team; Andrew Henderson, policy officer for the Scottish climate change bill team; and Cameron Maxwell, from the climate change policy team. I am sure that committee members are familiar with the documentation, so we will go straight to questions.

I will lead off by asking whether any topics are still in development—either being consulted on or awaiting analysis within Government—and what the timescale is for the completion of that work.

Fiona Page (Scottish Government Climate Change and Water Industry Directorate): The bill contains all the significant topics that are coming forward, but some topics, especially in part 5, will be subject to amendment at stage 2. Would you like a bit more detail?

The Convener: That would be helpful.

Fiona Page: There was a recent consultation on muirburn, in respect of which it is possible that, at stage 2, officials will seek to amend the bill slightly. As members will be aware, the forestry consultation ends next week. At the moment, the Government does not intend to introduce any significant amendments, but it is being informed by the results of the consultation, so it is possible that something will come forward from that.

It is possible that we will further develop the promotion of energy efficiency provision at stage 2. The committee will be aware that the non-domestic building provisions consultation ended recently, final analysis of which is on-going, and we are certain that it will result in some amendments at stage 2.

It is also possible that, subject to ministers’ approval, we will introduce an amendment to oblige the Scottish ministers to prepare and publish a plan for the promotion of renewable heat, similar to the plan for the promotion of energy efficiency.
There are plans to introduce an amendment on the waste provisions’ deposit and return schemes, particularly in relation to clearing houses.

We do not have any plans to introduce significant amendments to parts 1 to 4 of the bill, but we will be informed by the stage 1 debate.

The Convener: Thank you. It is helpful to have a sense of the amendments that are being contemplated. Can we expect material on new topics or additional policy areas to be introduced into the bill?

Fiona Page: No.

The Convener: The consultation stated that one of the reasons for legislating in Scotland was “to create and enable new means of reducing emissions”.

Which of the bill’s means of achieving emissions reductions are new?

Fiona Page: The forestry provisions in part 5 are new. There is the energy efficiency action plan provision in chapter 3 of part 5—the policy is not new, but the provision of primary legislation is new. The renewable heat provision is new. I have to be honest and say that I do not know whether the energy performance for non-domestic buildings provision is new: I am not completely familiar with the primary legislation in that area.

Philip Wright (Scottish Government Climate Change and Water Industry Directorate): It is an extension of the regime that is currently in place.

Fiona Page: You will be aware that there is currently a lot of legislation on waste management, but the provisions that we are looking to implement, such as the extra enabling powers, are new.

The Convener: New powers will enable ministers to begin to take action in particular areas. I have asked this question repeatedly, and I will ask it once more. We have been told that the policy intention of securing average 3 per cent annual reductions in Scotland’s emissions need not wait for a bill. Given that you did not specify that as a new area in the bill, is there still a policy intention to secure such a reduction in emissions?

Fiona Page: It is reasonable to say that ministers’ ambition to deliver 3 per cent annual emissions reductions remains absolutely unchanged. To deliver an overall 80 per cent reduction target by 2050, we will have to have delivered, on average, at least 3 per cent reductions each year, according to the 1990 baseline.

The Convener: This is perhaps a question to ask ministers later, but is it the Government’s position that work can begin now to put us on that trajectory before the bill is in place?

Philip Wright: Ministers’ commitment was also to take early action and not to await the outcome of the bill process. There is a multitude of policy measures at European Union, United Kingdom and Scotland levels to try to accelerate progress along the trajectory towards an 80 per cent reduction. We will probably touch on the shape of that trajectory later, but there is no let-up in the effort to come forward with measures to facilitate the reduction in emissions.

Cathy Peattie (Falkirk East) (Lab): I am interested in how we know that we are achieving the targets. Are any monitoring systems in place to allow us to examine what is happening and when and how we can build on it?

Philip Wright: The main means of monitoring is the greenhouse gas inventory, which, as you probably know, is prepared at UK level and is disaggregated to the four country levels. Scotland’s emissions are, in effect, monitored through the disaggregated inventory of greenhouse gas emissions. The main issue is the delay in the production of that inventory, because it is produced about 20 months after the year in which the emissions occurred.

Shirley-Anne Somerville (Lothians) (SNP): The policy memorandum and the Scottish Government statements that have supported the bill have said that the bill should be consistent with the principles of sustainable development. Could that be made clear in the bill as well as in the policy memorandum and in other statements on the policy behind the bill?

Fiona Page: That was considered when the bill was being drafted. An awful lot of primary legislation has sustainable development as one of the main provisions, which is one reason why we did not put it in the bill. I am sure that ministers would be happy to have a dialogue about that if committee members want it to be in the bill.

Philip Wright: In seeking advice from the Committee on Climate Change or other bodies, we have criteria that require to be taken into account, which include economic and social issues, as well as environmental issues. The principle of sustainable development is implicit, if not explicit, in the documentation.

Des McNulty (Clydebank and Milngavie) (Lab): Why did the technical note on emissions, which was promised to the committee in early December, not appear until January?

Fiona Page: We sent the note to the committee on 18 December, but we found out after Christmas that the e-mail that was sent from the private office contained the letter from the minister, the technical note and the factual briefing document as one file. Your clerk found that the file size was 12Mb, and therefore completely undeliverable to members.
We did not find out about that until after Christmas, otherwise we could have rectified the problem. That is the reason for the delay. We were intent on your having the information before Christmas, so that you had time to look at it over the Christmas recess, had you wished to do so. I apologise for that.

Des McNulty: The greenhouse gas emissions track that is shown in chart 1 in the technical note seems to run counter to the view of the Tyndall centre for climate change research, which is that larger cuts must happen more quickly if cumulative emissions are to be kept to a level at which dangerous climate change will be avoided. Chart 1 shows a rapid increase in control over emissions from 2019, so you seem to be end-loading the changes that are needed. The Tyndall centre says that action is needed now if we are to avoid reaching a tipping point. Will you expand on that? You admit that cumulative emissions in the atmosphere are the important factor, so why does the bill provide for point-in-time targets?

Fiona Page: We acknowledge that there is quite a body of scientific evidence and thought on climate change. We are conscious that around 50 per cent of Scottish emissions are likely to be covered by emissions trading schemes. Emissions reductions will be driven by the rules of schemes—initially, in particular.

You are probably aware that the UK Committee on Climate Change recently indicated that during the first three UK carbon budgets, more than 70 per cent of emissions reductions will come from the traded sector. With that in mind, it is more challenging to envisage how we could put initial targets in the bill. We will be informed by the advice of the Committee on Climate Change. It is encouraging that in its initial advice it recommended challenging targets to the UK Government. We await the UK Government's response, into which our comments will, of course, be fed. The ambition that the Committee on Climate Change is expressing is encouraging, as is its view that the targets are deliverable if enough work is done.

Des McNulty: However, on cumulative emissions, I am considering the area below the curve, which shows that you will achieve much less than you would achieve if you opted for early delivery of reductions. Do you accept that there are genuine concerns about that and, if so, will you review the situation?

Philip Wright: A balance must be struck between deliverability, ambition and the science. The science acknowledges that early action is better than action in the longer term—Nicholas Stern made that point. However, as Fiona Page said, Scotland is reliant on EU action on some issues. For example, Scotland has only so many levers that it can pull to reduce transport emissions. You might respond that we should focus on areas in which the Scottish Government has policy levers, but doing so would probably put even greater pressure on the sectors concerned.

The issue is deliverability. The Committee on Climate Change has considered the potential for abatement, and its advice is challenging and ambitious but deliverable. The UK Government, in concert with the Scottish Government, will come to a view on that during the next few weeks and will respond. If we accept that the Committee on Climate Change's advice is ambitious and stretching for Governments, we can see that the proposed approach is better than an approach that would be too stretching in the early years and would lead to failure in years 1, 2 and so on.

Des McNulty: What plans are there to measure and report on cumulative emissions and emissions that are generated anywhere as a result of goods and services being used in Scotland, as well as on the statutory targets?

Philip Wright: I assume that you are referring to the consumption-based approach.

One of the Scottish Government's indicators is the ecological footprint, part of which is the carbon footprint, which will enable us to reflect and report on Scotland's carbon footprint. That information will be available in parallel with the range of information that we will get from the disaggregated greenhouse gas inventory. When the information is put together, we will have a reasonably comprehensive picture of the carbon that is associated with Scotland.

Des McNulty: Are you saying that the carbon footprint will be considered as a cumulative measure or as a point-in-time measure?

14:15

Philip Wright: It will be considered on an annual basis. If we have the annual figures, I think that it will be relatively straightforward to establish the cumulative emissions.

The Convener: Does that imply that the footprint measure will have the same time lag as the measure of Scotland's carbon emissions?

Philip Wright: It has been suggested to me that the lag may be greater, but we can come back to the committee on that. A different methodology is used, and I am not sure when the information will become available, relative to the disaggregated inventory.

The Convener: It might be helpful to explore that in writing.

Rob Gibson (Highlands and Islands) (SNP): Has the Government considered using the UK
Committee on Climate Change to help us to achieve a suitable curve? The levers, for example for transport, are not really in our hands—they are in Britain’s or Europe’s hands. Has any thought been given to increasing the number of miles to the gallon that vehicles achieve? That could be part of the approach, and would be a practical example of the value of having the UK CCC.

**Philip Wright:** There are EU measures, UK measures and Scottish measures. At UK level, there is general advice from the Committee on Climate Change, which contains a devolved Administrations chapter that says a bit more about what the advice means for Scotland. In relation to the bill, we will seek that committee’s advice specifically on Scottish issues.

In an area such as transport, product and technology standards will stem from Europe—fact—but there is an opportunity through UK fiscal measures to encourage the take-up of new technology, for example electric vehicles. There is also an opportunity for the Scottish Government to encourage and facilitate the take-up of that new technology through its procurement arrangements or through the public sector in Scotland more generally. Packages of measures will come into play to deliver emissions reductions in particular sectors—in this case, the transport sector.

**Rob Gibson:** I recognise the complexities. Procurement is an area that Scotland could take action on. We will be looking for practical examples as we go through the bill.

**Alison McInnes** (North East Scotland) (LD): I want to go back to the issue of targets. In the absence of the promised annual targets, an interim target may be a useful milestone, but the 2030 target is not on the trajectory that would be achieved with at least 3 per cent annual emissions reductions from the start. You said that we really need to achieve 3 per cent year on year. Why is the trajectory much less ambitious than the original manifesto commitment? Why is the target for 2030 instead of 2020, which would be more in line with international, European and UK commitments?

**Fiona Page:** I will take your second question first, because that might set the scene. An overwhelming number of responses to ministers in the 2008 consultation on the bill asked for an interim target. You are right—we considered quite a few permutations. Indeed, 2020 was one of my starting points. Obviously, we have a lot of synergies with EU targets and other targets around the world. I felt that if we had only 2020 as the interim target, we would still have 30 years left to deliver the end target, which is a long time for identifying certainty in primary legislation. I did not feel that having only 2020 as an interim target—in the true spirit of an interim target—would be enough. That automatically led me to wonder whether we should have two interim targets—2020 and perhaps 2030. In some ways, that is the next logical step. However, I felt that by having annual targets, 2020 and 2030, we would probably be obliged to have a 2040 target, because it would be as if we were having decade targets as well as the end target. If we had a model with three interim targets, a 2050 target, and annual targets on top of that, it would be a little top heavy for targets. As a result, I went back to the original idea of having just one interim target and felt that, as the bill had to cover 41 years, 2030 struck a better balance. Of course, there will be a target in 2020, but it will be an annual target.

**Des McNulty:** It is obviously up to the committee to make recommendations on what the interim target should be. If we decided that 2020 should be the interim target, at what level would your current projection suggest that the target would have to be set?

**Fiona Page:** On which scenario? We have outlined a number of them. We would also have to consider further advice from the UK Committee on Climate Change before we could say what a 2020 target would be. The bill identifies constraints. We and ministers want the target from 2020 onwards to be 3 per cent less than the previous year’s target, which is the reason for its inclusion in the first set of annual targets.

**Des McNulty:** My understanding is that, if you calculate the 2020 target using the assumptions on which the 2030 target has been based, only the 2019-20 target will be 3 per cent, with different targets up to 2019. I suppose that I am asking you to revise your projections. What are you projecting for, say, 2020 and is it the best that we can do?

**Philip Wright:** Perhaps I should address that question in a slightly more general way by referring to the UK Climate Change Act 2008—which, I point out, is also our act. The original UK bill set out a range of targets: the reduction was to be not less than 26 per cent by 2020, with an upper limit of 32 per cent. The upper limit, however, was removed. In any case, it was seen not as a limit but as a range. Although the 2008 act specifies a reduction of 26 per cent, the UK Committee on Climate Change has said that if the European Union stays with a 20 per cent emissions reduction, the recommended target for the UK will be 34 per cent, which is 8 per cent more than is set out in the 2008 act. If the EU moves to a 30 per cent emissions reduction, our target will have to be 42 per cent.

As a result, the 26 per cent target in the UK act has in no way constrained the Committee on Climate Change in being more ambitious or making a very clear link with the EU-level target. Given that the EU’s proposals for a 20 per cent or
a 30 per cent world are a lot more challenging, the committee’s recommendations in that respect take us into the very complex area of buying allowances and so on. It would be really difficult for Scotland to set its own interim target for 2020. The figures in the bill do not limit the Scottish Government’s ambition: they are not less than what has been proposed elsewhere.

The Convener: Just to wrap up this section—

Alison McInnes: Convener, Ms Page has answered only the second part of my question. She has not dealt with the suggestion that the 2030 target does not put us on the right trajectory for a 3 per cent year-on-year reduction.

Fiona Page: The target is definitely in the right region. When we did the numbers, the initial number that I was given was 51.5 per cent. However, I was uncomfortable with putting that figure into primary legislation, which is why we decided that the aim in the bill should be “at least 50%”. When the annual targets are set, it will be up to ministers to decide the actual target for a particular year. However, it will have to be set relative to a reduction of at least 50 per cent in carbon dioxide equivalent—it could very well be higher.

The Convener: Just to tie up the question of the interim target, I believe that you said that there was a process for considering whether there should be a 2020 target, a 2030 target, a 2020 and a 2030 target, a decade target, three decade targets, and so on. Given that you have agreed—and that the Government has acknowledged—that the trajectory is most clearly defined by early action, I am still slightly unclear why the 2020 target was ruled out. I understand the policy reasons for arguing that 2030 is closer to the midpoint, but the trajectory is important, and the fact is that the early target defines that more clearly.

Fiona Page: Yes, but from June 2010—in 18 months’ time—we will set the first batches of annual targets. From then on, we will establish annual targets, covering the period up to and beyond 2020. We will have a set of targets then.

The Convener: However, the bill that the Parliament is being asked to pass does not specify those targets. The Parliament is being asked to agree to an interim target being placed at a point that will be less capable of defining the trajectory.

Fiona Page: The annual targets will be set in regulations, which will be subject to the affirmative resolution procedure, so the Parliament will have a chance to scrutinise them as they come forward.

Des McNulty: Would meeting a 30 per cent target by 2020 be significantly more challenging than meeting a 50 per cent target by 2030?

Philip Wright: Delivering such a target would be more challenging—even if we set the numbers to one side—because we would have less time in which to do so. Short-term targets are more challenging, simply because they are so much closer. A 2030 target gives us that bit longer to move energy and transport systems in the direction of a low-carbon economy.

Des McNulty: Would 25 per cent by 2020 be a more challenging target?

Philip Wright: Probably not, given that the UK’s target is a 26 per cent reduction in emissions by 2020.

Des McNulty: That is interesting. If we are to make a success of the policy we must involve the public in various ways. The bill contains provisions that acknowledge that reality and move in that direction, but there is no target on public engagement, and public engagement is not explicitly made a priority. Did you consider including such a target when the bill was being drafted? If an amendment was lodged to introduce process targets on public engagement on climate change, to sit alongside the scientific targets on emissions reduction, would you regard it as a positive addition to the bill?

Philip Wright: Are you talking about the framework that will be set by the bill or the delivery of emissions reduction?

Des McNulty: I think that I am talking about the framework, but I suppose that implementation mechanisms might be part of the delivery process. I am thinking about the issue in the context of section 1, in relation to the framework—

Philip Wright: Fiona Page can talk about the framework and Cameron Maxwell can talk about delivery. Andrew Henderson wants to comment, too.

Andrew Henderson (Scottish Government Climate Change and Water Industry Directorate): I think that all members have had a chance to consider the consultation, which ran at the beginning of last year and garnered more than 21,000 responses. Many responses were the result of campaigns by several non-governmental organisations, which was helpful to us in our policy considerations. We received more substantive, weightier and longer responses from more than 300 organisations and individuals, who addressed the questions in the consultation paper. The process very much informed policy making and we tried to reflect that in the analysis report and the Scottish Government response to the consultation, which was published in October.
14:30

**Des McNulty:** Your answer highlights the problem that I see with the bill, which is not necessarily anybody’s fault. The Smoking, Health and Social Care (Scotland) Act 2005 had a profound impact on people’s behaviour. Perhaps that is the most significant example of legislation having a direct effect. My concern is that climate change is taken extremely seriously by members of environmental organisations, who are interested in the issues, but not necessarily by the broader population, whose interest is necessary if the bill is to be effective. Could we add targets for public engagement and buy-in to the process? That is every bit as much a task for ministers as achieving the scientifically set targets.

**Fiona Page:** If you have any specific ideas of the kind of things that you are after, we would be interested in exploring them with you. I am sure that ministers would be happy to enter into dialogue about that.

**Philip Wright:** I ask Cameron Maxwell to cover delivery, which will involve public engagement.

**Cameron Maxwell (Scottish Government Climate Change and Water Industry Directorate):** Public engagement would be useful on climate change because emissions cover so many things. A huge section of Scotland’s emissions comes from domestic households, so there is value in considering what is being done on energy efficiency advice, such as the advice that the Energy Saving Trust provides through energy efficiency centres. A lot of new stuff has come in this year. There is also value in considering transport, transport planning and the measures that go out to citizens in relation to that.

There might be value in breaking things down in that way and asking how we want to engage with the public, because I suspect that what we want to do will be different in different circumstances. For instance, large-scale energy generation will involve different stakeholders. It will be important to address domestic and business consumers, but it will be useful to break engagement down into particular areas.

**Des McNulty:** That is helpful.

**Alex Johnstone (North East Scotland) (Con):** We have already covered some of what I want to cover, but I will try to take a slightly different angle. Why does the Government not have more ambitious targets for reductions before 2019?

**Philip Wright:** I feel like a record stuck in a groove. This is about deliverability. Many things have come together over the past year or so: the passage of the 2008 act through Westminster; the EU climate change and energy package, which was agreed only in December; and the establishment, initially in shadow form a year ago, of the Committee on Climate Change, which reported only in December. Many things were going on outside the Scottish Government but we were party and privy to much of the information that was part of that work.

The first really definitive advice that we got was from the Committee on Climate Change in December. As I have said, it has mapped out an ambitious agenda. If we had had that information a year ago, we might have done a bit more analysis and ministers might have come to a different view on the level of ambition in the interim target. We now have the information for the UK, although it is still a bit iffy at the individual country level. We need that level of information so that we are properly informed and can ensure that we put into statute a credible and deliverable trajectory.

I can almost categorically say that, if we put in a 3 per cent emissions reduction target for year 1, we would fail unless we purchased allowances to offset that failure. That is pretty close to being a fact. Any shortfall in year 1 would follow into year 2, so a 1 or 2 per cent failure in year 1 would realise a 4 or 5 per cent target in year 2—we would be playing catch-up for the first few years. However, the advice of the Committee on Climate Change means that we can design a trajectory with which we can look ahead to what will come on stream.

We must also take account of the EU emission trading scheme, which will increase its level of ambition by 1.74 per cent each year from 2013 onwards. That is a key part of our arsenal in addressing climate change, so we must have an eye on it, too.

We will need to have an eye on that whole package when we consider, or possibly revise, any trajectory or definition of interim targets.

**Alex Johnstone:** Is it fair to say that the controlling logic behind that decision is to do with achievability?

**Philip Wright:** That is certainly in there, but it is matched by ambition. We need ambition to stretch what we are prepared to try to achieve.

**Alex Johnstone:** Is that the reason why the 3 per cent annual targets do not appear in the bill?

**Philip Wright:** Those will apply in the period after 2019.

**Alex Johnstone:** But not prior to that.

**Philip Wright:** No—not in the first period.

**Alex Johnstone:** We talked about interim targets. The UK Climate Change Act 2008 has an interim target for 2020. Given that other aspects of the bill are designed to be in step with the UK act,
did the Government ever consider the logic of being in step with the UK act on the interim target?

Philip Wright: No. We have moved significantly away from the UK act by adopting annual targets. The five-year carbon budget approach in the UK act gives the UK Government—and us, as part of the process—a great deal more flexibility. Annual targets are a lot more demanding than a carbon budget. With a carbon budget, if you fail in one year for whatever reason, you can make that up in subsequent years. With annual targets, if you fail, you fail, and there is little flexibility. However, the annual targets will, in effect, be a subdivision of the five-year carbon budgets. We are reliant on UK policy measures. Reports will come out at the UK level that will say how the UK Government plans to address or deliver carbon reductions in the coming three sets of five years. We will take that information into consideration in designing—and offering to the Parliament through instruments under the affirmative procedure—the annual target trajectory through to 2019.

Alex Johnstone: It might be more appropriate for me to put my next question to the minister, but I will ask it carefully and for no purpose other than that it might allow the minister to be prepared when I put it to him. Is the bill in step with the UK act on the interim target? The five-year carbon budget approach in the UK act and the 2050 target was made at least 50% lower than the baseline.

Philip Wright: As officials, we can probably answer that to an extent. I do not immediately see a political dimension to the question, but one might be there.

As I said, EU, UK and Scottish measures will all play a part in achieving the Scottish target. We will be informed by the evidence base that the Committee on Climate Change uses at the UK level. We will try to disaggregate that as far as possible down to the Scotland level but, inevitably, certain things will be almost a pro rata reflection of what is happening at the UK level. There will definitely be linkages between the implementation of the UK act and the way in which we envisage the Scottish bill being implemented. For example, a similar evidence base will be used and high-level UK modelling will go on. Over time, we will look to do a lot more in Scotland, but at present we are linked to much of the UK modelling, which is a key part of the process in defining trajectories and the way ahead. So there are links between the bill and the UK act.

Alex Johnstone: My final question, which is on general targets, looks well into the future. Given that scientific analysis and knowledge tend to change, might the Scottish Government consider a more ambitious 2050 target?

Fiona Page: The targets in the bill are expressed intentionally as reductions of “at least” a certain amount. For example, when ministers set the annual targets to reach the 2030 and 2050 targets, they will definitely be able to make the targets go above the level in the bill if they want to. We might reduce emissions at a higher rate than anticipated, so the level at which the targets are set might be found subsequently to be no longer meaningful—I am optimistic that that may happen at some stage. In those circumstances, there is provision to allow the annual targets that have been set to be revisited. The provision will be available to ministers to go back and change the targets.

I am sorry that that was a long response, but the simple answer to your question is yes—ministers are ambitious to deliver reductions in greenhouse gas emissions and to help combat climate change. They want the bill to be the tool that does that. They want the demanding targets to be there, and they want to be held fully accountable by the Parliament for delivering them. They would certainly be willing to consider higher targets in the future on the basis of the expert advice that they will seek at the time. At the moment, the bill provides a good framework to aim for. It is ambitious, and we hope that the Parliament agrees with us in that respect.

Alex Johnstone: So the bill gives us scope to aim higher if we are doing well.

Fiona Page: Potentially. That is why, in setting the annual targets, the constraint from 2020 was made “at least 3%”; the 2030 target was made “at least 50% lower than the baseline”; and the 2050 target was made “at least 80% lower than the baseline.”

The phrase “at least” is used intentionally. We do not want the figures to be viewed in any way as a constraint; we want to be as ambitious as possible and to deliver real improvements.

Philip Wright: Fiona Page quite rightly referred to our current set of ministers and our current Administration but, with a 2050 target, future Administrations are involved, too. The provisions are there for them to be equally ambitious. The Committee on Climate Change is charged with taking account of scientific advice and the latest scientific evidence when it offers its own advice. The facilities will be there for this and future Administrations.

The Convener: You mentioned the publication of the report of the Committee on Climate Change in December 2008. Forgive me if I misquote you, but I think that you described it as the first “definitive advice” that had been received. If it had been available a year ago, rather than in...
December, it might have informed some different decisions in the drafting of the Climate Change (Scotland) Bill. If that is the case, are there aspects of the bill that the Government is open minded about changing? Might it consider changes that the committee proposes, given that we will all share a few months of analysing the position of the Committee on Climate Change? I am happy to hear an answer from the optimist or from the pessimist.

Philip Wright: We do not reflect pessimism. [Laughter.] Your question principally concerns the targets in the bill. I spoke about the December report offering the first “definitive advice”, but I should properly have said that it was the first definitive statutory advice. There is no shortage of evidence in the area of climate change, but it has now been packaged up as advice for the UK Government and the devolved Administrations. The report of the Committee on Climate Change is the first such package to which we have had access. As we have said in previous responses, that committee’s advice will be taken into account in prescribing the trajectory, as defined by the annual targets. Yes, there are spot figures in the bill, but there will be an opportunity in the future for the Parliament to have a say in defining the trajectory, based on the advice of the Committee on Climate Change. That is covered in the bill.

Rob Gibson: The bill contains no sectoral targets. How will the Scottish Government and Parliament be kept informed on how different sectors of the economy are delivering on emissions cuts?

Philip Wright: We could respond to that in different ways. The greenhouse gas inventories are based on sectors, so we can examine performance in each one. The difficulty is that, although there is a lot of information, it is split in different sectoral ways. Land use and agriculture are defined in one inventory, but different aspects are treated differently in other inventories. Cameron Maxwell might be able to say something about the approach that we have been adopting in considering abatement potential in different sectors.

Cameron Maxwell: One of the important things to consider when it comes to significant emissions reductions over long periods is the fact that different sectors will play different roles at different times. The Committee on Climate Change suggests a heavy focus on decarbonising the power supply in the period to 2030—by that point, it should be largely decarbonised. There are further issues around transport technology, which might allow for some reductions in the period to 2020, with improved petrol and advanced diesel engines. During that period, there will also be a switch to plug-in hybrids, and then to electric vehicles.

Across sectors, large savings are being made at different times, but they are often interconnected. For example, if you run electric cars off the current energy mix, you will make a saving, but you will make a much bigger saving if you run them off decarbonised electricity supplies. Where we get the big savings from over the next 40 years is a complicated patchwork, and some will come quicker than others.

14:45

Rob Gibson: Will that be made explicit in annual reporting?

Philip Wright: There are different aspects to annual reporting—one is our performance and the other is the policies and measures that we plan to put in place. There will be a sectoral dimension to that. In a way that is similar to the approach taken in the report of the Committee on Climate Change, our reporting looks at the sectors in different ways because, as Cameron Maxwell said, they will respond differently and at different times.

Rob Gibson: I do not suggest that we can compare one year with the next if the policy is different by sector, but there will be some information in the reporting that gives us a handle on how each sector is performing.

Section 4 of the strategic transport projects review report 1 states:

“On present trends, transport will not contribute to the reduction target”.

Would it make sense for specific sectors to be given policy direction on annual emissions targets and for there to be more scrutiny of those sectors?

Philip Wright: I refer back to Cameron Maxwell’s response about the different times at which abatement potential occurs. The strategic transport projects review was published around the same time as the report of the Committee on Climate Change, in which issues were raised about the move towards electric vehicles, for example. That was not factored into the STPR, because it was built on a factual evidence base and stated, “Here’s where we stand on transport infrastructure and here are the possible interventions over the next umpty-ump years.”

Cameron Maxwell: Transport is a very interesting area because some aspects are held at UK or EU level. We spoke about vehicle standards, which must be driven from an EU level, but we benefit from that as electric cars and so on penetrate our ownership. Transport emissions will have to fall, and in our conversations with transport colleagues about how we will deliver the targets, we have discussed projections that are
either level with the current situation or show an upwards trend. Ultimately, it is not a question of maintaining the current level, because emissions have to drop. That will happen partly through demand management and partly through technology, and it will happen over time.

Our work on climate change allows us to ask how our transport colleagues’ thinking compares with what the Committee on Climate Change is saying. The work of that committee offers an opportunity for a useful benchmarking exercise, albeit on a UK basis at the moment. We can say, “This is what the UK Committee on Climate Change says we should be doing. It talks about technology and demand reduction and where we should phase things in.” It is useful to compare that committee’s thinking with ours.

The Convener: There are a couple of supplementary questions on transport before we move on.

Des McNulty: It is a paradox—I expect that the convener might use the same example—that we are building a road-only bridge at the same time as we are focusing on climate change.

Ministers have responsibility for distinct areas in the Administration. On the assumption that emissions reduction begins at home, are there any plans in the framework to give ministers an obligation to take responsibility for linking organisations in their portfolios—perhaps hospitals, in the case of the Cabinet Secretary for Health and Wellbeing—with climate change reductions targets?

Philip Wright: I will answer that with regard to the Scottish Government’s contribution. You know about the commitment to assess the carbon implications of the Government’s £30 billion-plus of expenditure. We do not know what the carbon impact of that expenditure is; we are trying to get a handle on it. That will be a means to an end—the end being to use that information to turn the screw on emissions that are associated with the Government’s expenditure.

That is the so-called high-level assessment; there is also an individual-level assessment, which scrutinises and assesses policies and identifies their carbon impact. We will want to see that, across Government, all policies contribute to the Government’s target, to the extent that that is possible. We will have a much better handle on the Scottish Government’s direct impact on emissions through either its expenditure or its policies.

Des McNulty: In effect, you are saying that the carbon assessment mechanism will allow you to measure those things better than you have been able to in the past.

Philip Wright: Not so much measure as assess. It is not an absolute science, but the mechanism will give us estimates of the carbon impact. I cannot go into the detail; it is extremely complex.

Des McNulty: Will any enforcement be linked to the carbon assessment tool? The Transport, Infrastructure and Climate Change Committee and the Finance Committee are interested in the way in which budgets are brought forward. Do you think that the carbon assessment tool will be a mechanism that can inform budget setting, both annually and perhaps over a programme period?

Philip Wright: The safest answer is to refer you to Mr Swinney’s response to a similar question that he was asked when he came before the committee. The carbon assessment tool will provide additional information in relation to the budget, but Mr Swinney’s reply was that, because the budget seeks to address so many other outcomes, it may be difficult to focus on only carbon assessment.

The Convener: Rob Gibson mentioned the STPR. If I may paraphrase, it has been stated that transport will not pull its weight. You said that there is perhaps less comfort around the idea of sectoral targets, but there must be a clear expectation of what transport will do in respect of emissions if the statement about transport not pulling its weight can be made. Can the Government say what the expectation is for the transport emissions trajectory and how much by way of additional emissions reduction will be required from the rest of the economy?

Philip Wright: I again refer back to the report of the Committee on Climate Change, which assesses the abatement potential in each sector. We can work with the information from that report and we will also have access to our own report, which will say what the abatement potential is in each sector. That will inform the Government’s response. The Committee on Climate Change will have identified potential in the transport sector, and the Government can look to ensure that it delivers that. The Government will look across the piece and say, “If we go with the Committee on Climate Change’s advice, we need to bring about these reductions in each area; if we do not achieve the reduction in transport emissions, we will have to compensate in another area.” That would be the Government’s call, but the Committee on Climate Change will give us the information to allow the decision to be made.

The Convener: In arriving at the position that allows the Government to state that, on present trends, transport will not contribute to the reduction targets, did it assess the role that demand management could play now if it was put in place, the role that land use planning could play now if a different approach was taken, and the role that a
re-evaluation of infrastructure projects that are already in the pipeline could play? Did the Government go through such a process?

Philip Wright: To the extent that it was possible to do so, carbon was taken into account. For example, the STPR attempted to assess the emissions implications of 100,000 to 150,000 tonnes of carbon. The modelling will, over time, result in a different figure because there will be a different fuel mix for transport. What is coming through on electric vehicles will influence the implications of infrastructure projects. If those interventions do not happen until 2020, there will be a different fuel mix, so the remodelling will probably produce a different figure. That is in the transport sector. Other sectors have also sought to identify carbon issues.

I go back a stage to carbon balance sheets for transport. Our transport policy colleagues are developing a carbon balance sheet, which the committee has been told about. It is a case of them bringing it forward in sync with the high-level carbon assessment project. The tools are being developed, but it is impossible to deliver everything in such a short time.

Alison McInnes: On that issue, I am concerned about the rather circular argument in the—understandably—cautious and slightly tentative approach that has been taken. The changes in technology that we all want to see will not necessarily happen unless we break into that circle by providing some certainty about the investment that is needed in new technology. Rather than going back round that argument again, if we included a provision in the bill to require all sectors to deliver, and to start delivering as soon as possible—however it is decided that that should be packaged up—the bill would surely encourage that investment, and attention would be paid to those issues. The danger is that we let people off the hook if nothing is firm and everyone thinks that the issue is for someone else.

Philip Wright: I apologise if our approach comes over as in any way cautious. The facts are complex, so we need to dip into those areas if we are to get a real handle on them. If we move away from transport and consider the energy sector, we see drivers for technology development such as the saltire prize. Initiatives in individual sectors—for example, the smarter choices, smarter places project in the transport sector—will encourage carbon reduction. Initiatives are being taken to help encourage innovation within the different sectors. Measures will also be put in place at UK level to meet UK ambitions and at EU level, if the EU moves to a 30 per cent target. We will rely on technology being driven at those different levels in achieving our target.

Rob Gibson: I want to return to the issue of international credits. The UK act places a duty on the secretary of state in London to set a limit on international credits that is based on advice from the UK Committee on Climate Change. Why does the Scottish Government not intend to prescribe such a limit?

Fiona Page: Ministers are anxious to ensure that the bill sets annual targets. They intend to meet the targets and do not favour the use of credits. In particular, they would prefer to focus Scottish resources on delivering emissions reductions in Scotland. That is why no upper cap or limit on the use of carbon credits has been included in the bill. Equally, I think that ministers would probably be happy to enter into dialogue with committee members if the Parliament felt that the bill should include such a limit.

Rob Gibson: Given that in previous evidence today it has been suggested that the emission trading scheme will cover about half of our CO2 emissions, should the bill not spell out the areas where the effect is likely to fail?

Fiona Page: When we consider carbon credits, we are thinking of additional carbon credits that might be purchased if targets are not met. The EU emission trading scheme is pretty much a closed loop that works on an allocation basis, so companies that emit beyond their allocations must purchase additional allocations. As part of the net Scottish emissions account that is established in the bill—which, in many ways, is an attempt to develop an accounting scheme—we will take account of those allocations. However, when I refer to carbon credits, I am thinking more along the lines of the possibility of purchasing additional units if we failed to meet a target. That is a little bit different from the allocations scheme that we are involved in through the EU emission trading scheme.

Rob Gibson: If there is no such limit, how exactly can the Scottish Government ensure that domestic effort accounts for the lion’s share of the emission reductions?

Philip Wright: Again, the fact that the EU ETS covers about 50 per cent of our emissions suggests that the balance is less than 50 per cent. Other measures at EU level, such as product standards, will also influence the achievement of our targets. As things stand, UK fiscal measures will also impact on the delivery of our targets. We are trying to identify the contribution that each of those will make, and the contribution that Scottish policies will have to make as well.

15:00

Rob Gibson: Can you share with us any particular example of that?
Philip Wright: It might be useful if Cameron Maxwell explained our strategic overview.

Cameron Maxwell: One of the interesting aspects of how the emission trading scheme works is that, because it captures the principal industrial installations and generators, it catches around 50 per cent of emissions and has a set trajectory.

It is common to consider the traded sector on one hand and the non-traded sector on the other, which is what the Committee on Climate Change’s report does. In the non-traded sector, there is transport, domestic heat and so on. Some people argue that the all-singing, all-dancing market will deliver. However, there are clearly things that Government does under the emission trading scheme that are important. For instance, any energy efficiency measures relating to electricity and incentives for renewable energy contribute to helping to meet the delivery trajectory for the scheme—they are enabling policies to help the ETS deliver, which might lead you to say that the market mechanism is not perfect. Similarly, with regard to domestic heat, the promotion of energy efficiency measures such as insulation, and boiler swapping is important.

The Committee on Climate Change says that the majority of the emissions reductions to 2020 will come from the trajectory of the emission trading scheme and will involve the big users of carbon, with a subsidiary contribution from the non-traded sector. That is a useful way in which to split the sectors.

It is interesting to note that, as transport becomes electrified, part of that sector will start to fall within the traded sector, as electric trains do just now.

Rob Gibson: Similarly, power stations, which are one of our major sources of emissions, will change over time either because there will be a different mix of electricity generation or because of carbon capture technology and so on.

Philip Wright: Yes.

Shirley-Anne Somerville: Section 18 of the bill deals with carbon units and carbon counting and allows for the establishment of a trading scheme in carbon units. Could you give us more information about the aim of that section and what it would establish?

Andrew Henderson: We talk a lot about frameworks, and section 18 deals with a framework within the framework. Should the Scottish Government be purchasing carbon units on the international market, we will need a mechanism that will enable us to keep track of what we are doing. There is a possibility that units could be purchased and not used or surrendered in the same calendar year. The provisions in section 18 will enable us to hold and transfer units that might be purchased from different sources and used in different ways. They will also enable us to keep track of that.

Shirley-Anne Somerville: The cabinet secretary made a commitment that the Scottish climate change legislation would include international aviation and shipping. Can you explain why those elements have been included in the bill in the way that they have? Is there any way in which the bill could be strengthened in that regard?

Fiona Page: Scottish ministers have committed to including Scotland’s share of international aviation and shipping emissions in the targets, and that remains the case. Section 14 is, obviously, the key provision in this context. The reason why we are suggesting that we bring those areas into the targets through regulations is simply to provide us with a flexible mechanism to adapt to international agreement in the future. Scottish ministers are obviously keen for other countries to follow their lead and take on board the need to tackle emissions from international aviation and shipping. We need a mechanism that we can use in the short term until we have an internationally agreed protocol.

When we first considered the topic, we thought about leaving the bill silent on it. Originally, the UK bill specifically excluded such emissions, but we felt that if our bill was silent on the issue—which would mean, by default, that it included such emissions—given that the very nature of international aviation and shipping emissions is such that they will occur, in part, beyond Scottish boundaries, there was a danger that we would not be able to capture them, so we decided that we needed to be quite active in capturing them. However, if we had put in the bill a mechanism that we could use for only a number of years until an internationally agreed method was developed that we wanted to adopt, we would have tied our hands in a way that might not have been helpful and might simply not have worked.

We decided that we needed to adopt a flexible approach and we thought that the best way of doing that would be through regulation. We could state in regulations how we want to deal with the issue and could change the regulations at a future date, if and when there is international agreement on the matter, which we hope will happen.

Shirley-Anne Somerville: I appreciate that there is a need for flexibility and that the use of regulations will help with the necessary calculations. Can we take it that there is an absolute commitment that emissions from shipping and aviation will be included in the targets?
Fiona Page: Absolutely. They will be included, beginning with the first set of targets from 2010 onwards. The order will probably come forward in tandem with or even, if possible, in advance of the annual target regulations. I am certain that Scottish ministers would be happy to make that commitment.

Shirley-Anne Somerville: The timing of the order will be based on the timing of the annual targets—that is when we will get the information.

Fiona Page: That is possible, but we have not pinned down whether we will lay the order six months after the bill is passed—as we hope it will be—by the Parliament. It must be in force by the time we set the annual targets, so it might come forward in tandem with or in advance of the targets.

Shirley-Anne Somerville: Okay.

I have a question about the advice that you have sought on including international aviation and shipping emissions. There are no international agreements on how the matter is to be dealt with; it is another area in which the bill is world leading. Has the UK Committee on Climate Change been asked for its thoughts on your proposal? What other advice have you taken on board in developing it?

Fiona Page: We have identified a methodology that we think represents a reasonable compromise and which allows us to capture a proportion of the relevant emissions such that they can be included in our future targets. We recognise that, until we get international agreement, the solution that we have proposed is temporary.

Our methodology will be based on the disaggregated greenhouse gas inventory, which is fed down from the UK greenhouse gas inventory. As of October last year, the emissions data for international aviation and shipping are published as a memo item. We will take the disaggregated inventory data, which are calculated on the basis of airport, source, destination, fuel type, plane type and engine type, and will include them in the emissions that are attributed to Scotland, which will then be measured against the Scottish ministers’ annual targets.

Shirley-Anne Somerville: Can you confirm that there will be continuous liaison with the UK Committee on Climate Change about the targets that are set in that area?

Fiona Page: Absolutely. I am sorry—before I explained how we would do the calculations, I should have said that, under section 14, ministers will be obliged to seek the advice of the UK Committee on Climate Change or a future advisory body, if a different arrangement is adopted, on how best to proceed. The proposal in the bill is our initial idea of how we can tackle the issue in the short term but, before we lay the regulations, we will seek the UK committee’s advice on whether our proposal represents the best interim solution. We will take time to have some dialogue with the UK committee on the proposal, but there will be no change in ministers’ decision to proceed with it. We will include Scotland’s share of the emissions from international aviation and shipping in a target. We will just seek the UK committee’s views on our suggested way of proceeding in the absence of an internationally agreed solution.

Philip Wright: Back in October, when the shadow committee on climate change suggested a revision to the UK target, it made specific reference to international aviation and shipping. It accepted the complexity of including emissions from those sectors in the target, but asked the UK and Scottish Governments to consider that as part of the policy response. The issue will be addressed at the UK level. The other new kid on the block is that aviation will be part of the emission trading scheme from 2013, so we have to factor the implications of that into the process by which we account for aviation emissions, although that does not apply to shipping emissions.

The Convener: I want to check up on one last detail, which is about the stated intention to introduce an order to include aviation and shipping emissions in the first batch of targets. Is it intended to include aviation and shipping emissions fully in all the targets in the first batch, rather than to phase them in?

Fiona Page: Yes. We do not plan on making a distinction. When we introduce the annual targets, they will apply to Scotland’s emissions, which will include Scotland’s share of international aviation and shipping emissions. So, absolutely, the first targets will include those emissions.

Charlie Gordon (Glasgow Cathcart) (Lab): What criteria will be used to assess whether a body other than the UK Committee on Climate Change is required to provide advice to the Scottish ministers, and how would such an evaluation take place?

Fiona Page: Ultimately, it will be down to the Scottish ministers to decide whether they are happy with the advice from the UK Committee on Climate Change. At present, the advice is of very high quality. The committee is a new one that is full of some of the best experts from throughout the UK and we are tied into it. I am confident that, in the short term, the Scottish ministers will be happy to use the UK committee. However, as members know, the bill will cover a long period—more than 40 years—and many Administrations,
so we want to ensure that it is future-proofed in respect of advice to ministers.

That is why we suggest the introduction of provisions that will allow ministers to have alternative sources of information. They could decide to confer the advisory duties on an existing public body or to set up a Scottish climate change committee. The criteria on which ministers base a decision to go down that route will be up to them, but I am sure that the issue will come down to whether the UK Committee on Climate Change provides the advice that ministers are after. The bill takes a slightly different approach from that in the UK act. The bill goes hand in hand with the UK act and we will be in line with the UK targets, but we are taking a distinctive Scottish approach, with the annual targets and the recognition of the importance of including international aviation and shipping emissions in the targets.

In many respects, in the years to come, the UK Committee on Climate Change will have to prove its ability to respond to Scottish ministers’ requests for advice. Obviously, the most significant advice in the next year will be on the levels at which to set our annual targets. That will be the first test. However, it is probably too soon to speculate—and possibly not for me to do so—on how exactly ministers will decide whether the UK committee meets their needs. I am optimistic that it will do so, but that will be for the current and future Administrations to decide.

**Charlie Gordon:** So there are no criteria—the matter will be left to the political judgment of future ministers.

**Fiona Page:** Yes. We do not want to tie down future ministers in legislation on how to judge on the issue. It will come down to a personal decision of the Administration at the time. Future Administrations will need to be confident that they are getting the best possible advice. I hope that they can get that from the UK Committee on Climate Change, but we want to provide flexibility in the bill to allow alternative mechanisms if that does not happen.

**Charlie Gordon:** Will you summarise the advice that the Scottish Government has sought thus far from the UK Committee on Climate Change?

**Philip Wright:** To date, we have made no formal request to the UK committee but, because we are co-sponsors of it, we are closely engaged with it. There have been various working groups both on the UK bill process and on the implementation of the UK act. There is contact through those fora and we also have direct informal contact with the committee secretariat. Lord Adair Turner and David Kennedy, the chief executive, have been up to Scotland on two occasions to engage with the Scottish stakeholders, and I think that David Kennedy will be here again next week. We have a good level of contact with the UK committee.

15:15

**Charlie Gordon:** So you pick their brains without making it too obvious or formal.

**Philip Wright:** It is not a case of picking their brains—

**Charlie Gordon:** Maybe they pick your brains.

**Philip Wright:** They might well do in some cases. I should add that we have a seconded to the Committee on Climate Change to help it to understand the Scottish issues to which Fiona Page referred. We are trying to be helpful in both directions.

**Charlie Gordon:** Has the Scottish Government considered in detail any advisory models other than the UK Committee on Climate Change?

**Fiona Page:** It is my strong recommendation that ministers use the UK committee initially. It is a new body that has not yet been given a chance to prove itself. It is made up of experts from across the UK, we fund it jointly, Scottish ministers are involved in any decision to appoint people to it and, as Philip Wright explained, a key member of our staff—an economist—is seconded to it to work on devolved Administration work. I am very hopeful that the new body will deliver great things and it useful for us to work closely with it on the Scottish bill as well as on the UK act.

I believe in seeking best value for money. Frankly, we get the services of that committee at a reasonable cost and we would have to pay much more money were we to set up a Scottish climate change committee in the future. Before we took the step of setting up such a committee, ministers would definitely consider first whether they wanted to apply the advisory duties to an existing body. The one that springs to mind logically is the Scottish Environment Protection Agency. However, we have had no dialogue with SEPA about that and Scottish ministers would not want to consider that option at this stage.

I am sure that members feel that I am beginning to sound like a broken record on the subject, but I do not think that we could get better value for money or better expert advice at this time than we will get from the UK Committee on Climate Change. Even though it has been established formally for just over a month, it has been sitting in shadow form for almost a year.

We have pooled the best minds in the UK to work on the UK act. Scottish ministers have an excellent provision in that act that allows them to seek advice from the UK Committee on Climate
Change—as any of the devolved Administrations can do—on anything to do with climate change targets, but the advice does not have to be only in relation to Scotland’s share of the UK act; it can relate to our own targets, including the annual ones. It is only right and proper that we explore that mechanism fully before we venture down other roads and consider other mechanisms.

Charlie Gordon: Thank you; you have convinced me.

Philip Wright: I add a supplement to that. Cameron Maxwell has just reminded me that, in my earlier response, I was thinking of direct contact with the UK committee officials, but we have also contributed our thoughts on its work programme—a package of activities that the UK committee is asked to address from 2009 to 2012. We have let the committee know at what points we are likely to seek advice.

Charlie Gordon: So you are in on the ground floor—

Philip Wright: Yes, but through the UK process rather than through direct contact.

Andrew Henderson: We are very aware that we will go to the UK committee with a formal request for advice on the annual targets. It also knows about our aviation and shipping considerations. Discussion has taken place at an official level, but the formal approach will come when the UK committee’s work plan, with which we are involved, is developed.

The Convener: If, at any point in the future, a political judgment is made, for whatever reason, that a Scottish advisory body should be established, we will want ministers at that time to work with an act that makes it possible to establish such a body in the best way. Has the Government considered creating a body that is accountable to the Parliament, rather than the Government? The Scottish equivalents of some UK bodies that are accountable to the Government at a UK level are accountable to the Scottish Parliament at a Scottish level. Does the bill make it possible to establish a body, would the provisions in the bill enable them to make that body accountable to the Parliament rather than the Government?

Fiona Page: That is an interesting question. Schedule 1 contains most of the detail on the matter, and it provides for the body to be an NDPB, rather than to be something under a commissioner, which would be an unusual step. I think that the legislation would need to be amended to enable that to happen.

Alison McInnes: The bill provides for Scottish ministers to produce a plan to compensate in future years, should annual targets not be met. Can you explain how that is substantively different from the approach that is taken in the UK act, which involves banking and borrowing from five-yearly budgets?

Fiona Page: Banking and borrowing was a key option when Scottish ministers were considering emissions budgets because, clearly, there is a high degree of flexibility in the emissions budgets period. We considered using the banking and borrowing approach when we were moving to an annual-target model, but we felt that it was not compatible with it—either we meet an annual target or we do not, and it is quite difficult to see how we can bank and borrow in that regard.

You are right that, in terms of meeting an annual target, purchasing carbon credits or carbon units is an option, but it is not one that is favoured by Scottish ministers.

Andrew Henderson: Banking and borrowing is a mechanism that is specific to carbon or emissions budgets, where one has a set quantity of emissions that should be permitted within a certain period—five years, in the case of the UK act. Within the framework of the UK act, the idea is that, for example, if one overemits by a quantity of 50 megatonnes in period 1, one can—rather than purchasing emissions units to offset that
overemission—reduce the level of the next budget so that it is 50 megatonnes lower than it otherwise would have been.

Ministers are required to produce an action plan setting out what they would do in order to address the failure to meet a target. That plan is simply a road map of any range of options that might be identified as ways of getting emissions reductions back on track in the short, medium and long term. Banking and borrowing is quite a specific element of the emissions budget mechanism.

**Alison McInnes:** That was helpful, thank you.

We have spoken about reporting on different sectors and so on. There is a requirement for electricity figures to be included in the report on annual targets. Is there a case for widening that out to cover other sectors?

**Andrew Henderson:** One reason for including electricity figures is that we have robust statistics on electricity production and consumption which have already been published. We believe that it made sense to draw them into what is being reported annually regarding emissions more widely. We can read across those statistics to see whether we could have a greener fuel mix in our electricity generation sector. There is not necessarily always an immediate read-across to reductions in emissions—although there might be a lot more green electricity generation from renewable sources, there will still be the same quantity of carbon emissions unless the fossil fuel parts of the generation mix are being decarbonised or brought off-stream. The inclusion of the electricity generation statistics in annual reporting is an attempt to illustrate better the advances that have been made in renewable and sustainable electricity.

We considered the inclusion of renewable heat in the reporting because heating emissions are an important part of our emissions, but we simply do not have good enough figures to do that yet. Work is continuing in order that we can produce better figures. We did not wish to include in the bill a provision that would compel us to report something that would not be useful. The bill contains a provision that ministers may add to the reporting duties that are already specified.

**Alison McInnes:** That returns us to an earlier point in the discussion. We do not have the information, but we perhaps need to encourage the gathering of information. The question is whether the bill can serve as a lever to bring that about.

I will move on to enforcements and sanctions. Targets being set in statute might focus the mind, but will reporting annually to Parliament be enough to ensure the step change that will be required to meet the 2050 target? What other enforcement measures did the Government explore?

**Fiona Page:** Reporting to Parliament is quite a robust measure. It is possibly more for ministers to consider the question, but I do not think that it would be practical for ministers to consider, for example, imposing financial penalties on themselves, or any other such mechanisms. It is difficult for us to see what further censure there might be. The requirement for robust reporting to the Scottish Parliament is a strong measure.

The Scottish ministers were keen to have strong reporting included in the bill. As members will probably have noted, we have gone much further in this bill than we have in a lot of previous legislation, by requiring ministers as far as is possible to make a statement in Parliament when the annual report is produced so that Parliament can scrutinise ministers, debate the matter with them and question them in public on their delivery of the policy.

Ministers wanted to go even further than that in requesting meetings with the Conveners Group at the time of reporting. That offers a further level of scrutiny and accountability, and goes much further than any other primary legislation has gone. We will be interested to know how Parliament responds to that provision. I can honestly say, hand on heart, that we made our solicitors quite nervous by requesting that provision in the bill. Scottish ministers had to insist that the provision be included and are particularly keen to be held accountable on this matter, and to ensure complete openness and transparency regarding the bill's provisions. I am sure that ministers will be happy to discuss the matter further if you think that they could consider other levels of scrutiny or accountability.

**Alison McInnes:** Part of good scrutiny is ensuring that there is enough information available for Parliament to make a considered judgment. Does the Government believe that there is enough information around for that to happen? Will there be enough information annually?

**Philip Wright:** I will offer a supplementary point to Fiona Page's response. Through the proposed reporting mechanism, plus the meetings with committee conveners, a certain onus is placed on Parliament. There is almost a cascade effect: because information will be made available to Parliament and committee conveners, they can challenge Government on the sectoral approach that Mr Gibson spoke about earlier. When the budget is presented, the Finance Committee may challenge the Government, this committee may challenge our transport colleagues, and so on. The bill will have that effect; the information that is made available to Parliament will allow Parliament
as a whole to challenge the various parts of Government.

15:30

Fiona Page: There are quite a lot of reporting provisions in the bill. I do not know whether you wish to explore the matter further, but I am happy to talk you through the different levels. Would that be helpful?

Alison McInnes: Yes.

Fiona Page: A helpful note has just been handed to me—but I know the provisions well enough.

Andrew Henderson: They are all in one place.

Fiona Page: After annual targets have been set, the first thing that ministers must do is to produce a report to Parliament to explain how they will deliver and meet the annual targets. That is the starting point. Scottish ministers will also need to produce an annual report to Parliament to confirm how they have delivered and met the targets for the year concerned. If they have not met the targets, they will have to explain what their actions will be to deliver them in the future.

There will also be a specific report on the interim target for 2030—or whenever it may be, once the bill is passed—and one on the 2050 target. Furthermore, there will be a reporting requirement in relation to adaptation. That allows us to fall into line with the UK 2008 act. When the Westminster secretary of state lays a report on adaptation for climate change at that time. I do not know whether you wish to explore the matter further, but I am happy to talk you through the different levels. Would that be helpful?

Fiona Page: There are quite a lot of reporting provisions—they are all linked to the annual reporting cycle and to the question of whether targets have been met, which the annual report will confirm. An independent report will also be made by the advisory body—for example, the UK Committee on Climate Change—on its view as to how successful Scottish ministers’ actions have been, and whether they could go further in delivering the targets.

Sorry—that was probably not a very good explanation, but there is a lot to cover.

Andrew Henderson: Ministers must, in turn, respond to that independent report. Included within the annual reporting cycle are reporting of emissions achievement statistics, with detail on what has been happening in respect of emissions and the linked reporting; scrutiny by the Committee on Climate Change; and ministers’ response to that scrutiny. That is all done publicly.

A further part of the reporting requirements is that, whenever ministers set annual targets—which, in practice, will be every five years or so, although we have a slight compression at the beginning of the target-setting process—a report must be made about the policies and proposals for meeting the targets. That will provide an indication of ambitions and of practice in respect of how the targets are to be achieved.

The Convener: The proposal for ministers to meet the conveners of parliamentary committees took a few people by surprise. It reminded me of the proposal by the First Minister in 2007 to answer questions by the Conveners Group, as a more in-depth version of First Minister’s question time. At the time, that was not felt to be an appropriate use of the Conveners Group. How was that proposal developed? How much dialogue took place with the Conveners Group, or with the Presiding Officer, to determine whether that would be a useful or, indeed, appropriate mechanism?

Fiona Page: The proposal came from ministers’ idea. We did not pursue specific engagement with Parliament on it. It was a decision by Scottish ministers: they wanted to go further than happens in normal reporting because they recognised the importance of the bill, in particular its long-term nature and how it will affect future Administrations over the next 40 years. They wanted to offer more than an annual report to Parliament. We adopted the first stage—an annual statement to Parliament, which provides members with a clear opportunity to debate the annual report and to challenge question ministers on it—but ministers wanted to go one step further and to help the committees. Ministers recognise the cross-cutting nature of climate change, and so wanted the committees to be fully involved and engaged in the process.

The thinking behind the proposal was that drawing the conveners together would provide one possible mechanism to do that—giving them a special meeting would allow them to question ministers specifically. As I say, it is a new territory and ministers will be happy to have dialogue on that provision, if Parliament feels that the provision is not appropriate.

The Convener: I appreciate the intention to go further than standard reporting mechanisms and I am by no means hostile to the idea of finding the right way to do that but, for clarity, was there no dialogue with the Conveners Group about whether it felt that this was an appropriate mechanism?

Fiona Page: I cannot answer on behalf of Scottish ministers, but I can say from the official side that we did not have any dialogue. That would have been quite a difficult dialogue for us to have; the matter probably should have been taken
forward, if it was felt necessary, through dialogue at political level.

The Convener: We can perhaps explore with the minister at a future meeting whether there is an on-the-record forum within which such dialogue could happen rather than its taking place in an off-the-record forum.

Fiona Page: Absolutely.

The Convener: Given Philip Wright's comments, information that is provided at the additional meeting must be available to the whole Parliament if it is to be fully used.

Andrew Henderson: I have a point that is relevant to what the convener has just said. Several subsections of section 34 use the words "in so far as reasonably practicable".

When we were drafting the section it was clear that we could not or would not wish to place a duty on Parliament itself, so in this case that phrase essentially refers to an offer made by ministers that is subject to Parliament's acceptance in so far as it is conditional on the Parliament saying, "Yes, we would like to hear from the minister in the chamber and we would like the minister to appear before a committee of the conveners." The ball is in Parliament's court on that one.

Fiona Page: We had to make it clear in the bill that we are not placing any obligations on Parliament or applying a duty that ministers could not meet, which is why section 34 is phrased as it is. I am certain that ministers are completely open to dialogue on the issue, if members feel that there is a better way to proceed. The spirit is clear: ministers want to be held accountable, to be open and to offer Parliament every opportunity to scrutinise and question them on these matters. Please, by all means, ask the minister to consider the issue further.

Cathy Peattie: I will pick up on that issue before I move on to the matter that I want to explore.

It is obviously important that ministers have given assurances that Parliament and committee conveners will have an opportunity to consider where we are on climate change. Can you give us an indication of what is happening, perhaps in the long-term, across departments? It is all very well to report to conveners and for ministers and departments to report to this committee or another, but I am not sure that we can, if the issue is not mainstreamed across departments, achieve what we need to achieve. Is there any dialogue on mainstreaming across departments?

Philip Wright: The carbon assessment project is one example of that. It is a cross-cutting mechanism that will be available to ministers and will engage other departments.

A long-term initiative to mainstream climate-change thinking across the Government has been in place for some time. It is about policy makers in the Government, senior staff in the Government and policy analysts all thinking about climate change when they develop policies in their areas. I mentioned the transport carbon balance sheet, which came out of that process. Our transport colleagues can now address climate change with less reference to us than used to be the case. Many years ago we, as a small climate change division, had to field all the inquiries that came in on climate change, but our transport colleagues, our energy colleagues and our agriculture colleagues can now deal with such inquiries. The situation is not ideal, but it is improving.

The same is happening at the top of the office. The strategic board, which is the top management group within the office, is being exposed to those issues and we are looking for buy-in from the top of the office. The issue is obviously reflected in the Government's purpose and in the sustainability targets, which support that purpose. A whole mechanism is in place within Government to ensure delivery of the two sustainability targets to reduce emissions by 2011 and by 2050.

Cameron Maxwell: It might be useful to flag up some of the work that I am heavily involved in, which involves mainstreaming the issue across the offices. We are working on a strategic overview and are trying to map out a pathway of emissions reductions for Scotland between now and 2050 for short-term changes, and focusing in particular on the medium-term and long-term changes that will have to take place. That involves my spending a lot of time talking to my energy, renewable energy and energy efficiency colleagues about their plans, and flagging up the type of emissions reductions that we need and what the Committee on Climate Change report recommends. We are trying to put together a document that will demonstrate that there is a pathway from where we are now to where we want to be in 2050. Areas that are important in that regard include energy efficiency, housing and transport.

This morning, for example, I was at a seminar with my transport colleagues in which I was able to assess the emissions-reduction potential of some of the work that they have been doing. Similar work has been going on in the rural land-use sector, as the agriculture and forestry sectors are quite big emitters. We are working to ensure that everyone across the office is aware of the key priorities that can be taken forward.

Cathy Peattie: That is an area that we should keep an eye on, convener.

When will the Government introduce secondary legislation that will place duties on public bodies? What will those duties be?
Fiona Page: At the moment, Scottish ministers have not earmarked a number of duties because we have been trying to future proof the bill and the ability of all the Administrations to deliver on the targets.

We hope that everyone will embrace the need to act to reduce greenhouse gas emissions, but we need to be realistic about the fact that, as emissions reductions become harder and more expensive to deliver, the public sector must be seen to lead the way, so ministers might need a number of tools to ensure that the public sector plays a significant part in reducing greenhouse gas emissions.

We recognise that we have to maximise Parliament’s opportunity to scrutinise any such proposals, which is why we recommend that we introduce them under the affirmative procedure. The proposals will depend on the level at which we want to start. However, public bodies could be required to ensure that they do a carbon assessment of any significant new builds. That could be taken to a lower level by requiring public bodies to report annually on the work that they are doing to reduce emissions, on the energy efficiency of their buildings and on the state of their estate.

It is important to recognise that ministers believe in working in partnership, and that the proposals that I am discussing are more of a last resort. We would not want to introduce regulations requiring things to be done that could be done voluntarily. The local government concordat is a good example of ministers’ aspirations for partnership working. Ministers hope that bodies will work to reduce their emissions either voluntarily or through dialogue with ministers, with ministers indicating their desire for certain activities to take place. However, the power to introduce regulations exists to enable us to take matters to a different level if we are not as successful as we would like to be in driving forward the emissions reductions.

The provisions are quite open ended, which I appreciate is challenging for Parliament. We have done everything we can do to ensure that Parliament will have an additional degree of scrutiny, through regulations that are introduced being subject to the affirmative procedure. We would introduce regulations only after considerable dialogue with the organisations and a lot of discussion about the types of duties that could be put in place. In particular, ministers want to ensure that they are tied into the process. Therefore, if duties are placed in relation to climate change, ministers have an obligation to work with bodies and organisations to help them to achieve those duties. That is why the bill is framed as it is. I hope that that answers your question.

Cathy Peattie: It does not. I am concerned about the fact that we are talking about “hope”. My experience in equalities is that it took 20 years for local authorities to make progress in that regard, and, even then, it happened only through legislation. It was hoped that progress would be made on equalities, and a department in each local authority had responsibility for equalities, but that work was not mainstreamed. I am concerned, therefore, that there does not seem to be a duty on public bodies and local authorities to work on the issues that are covered in the bill, such as conservation and biodiversity. Those bodies need to be given targets if they are to make progress. Frankly, “hope” is not enough. We all hope that things will happen, but unless legislation is in place, we might be hoping forever.

15:45
Fiona Page: If you have particular suggestions as to how the bill can be enhanced in that respect—

Cathy Peattie: I have.

Fiona Page: I am sure that ministers will be happy to have a dialogue.

Cathy Peattie: I am really shocked.

Philip Wright: Fiona Page was describing the bill, but a plethora of other measures will bear down on public bodies. For example, the carbon reduction commitment will bear down on local authorities, which will be obliged to participate in the scheme subject to their meeting a certain energy threshold—as a good number of authorities will. Other policy measures will also bear directly on public sector bodies. The bill represents a fall-back position; if the measures to which I have referred and other measures in specific policy areas that may come along in the future do not work, we can resort to the general provisions of the bill to apply the duty.

From working with local authorities and their community planning partners, we have the sense that there is a real willingness to address climate change. That may have been the case 20 years ago with equalities—it is certainly the case with climate change now. The Convention of Scottish Local Authorities has set up a task force on the issue and we believe that there is the momentum for a voluntary approach. If that does not deliver, we can fall back on the bill.

Cathy Peattie: So, there is no way of auditing what is happening. You just “hope” that it will happen.

Philip Wright: No. There is no “hope” behind the likes of the CRC—it is a statutory process with which authorities will be required to comply. There will be other examples of that in other policy areas.
The Convener: Is that all right for the moment? Save some questions for the minister.

Cathy Peattie: Just for the moment.

Alison McInnes: I share Cathy Peattie’s concerns. You have said that the bill is the “last resort”. Is not there an in-built time lag in the system, in that if the voluntary approach is not successful we will have to go through a process in imposing a duty? A co-operative effort is required. I do not criticise local authorities at all—some of the best examples of action to tackle climate change have been at local level—but it should be made clear in the bill that we are all in this together from the start. That would allow local authorities and other public bodies to plan. Why have you not been prepared to do that?

Fiona Page: I am not sure what duty or specific example you would like us to include in the bill.

Alison McInnes: You might want to consider including a provision for annual reporting, as is required of the Government, at local level. Such reporting could deal with issues such as the state of local authority estates.

Fiona Page: Would it cover emissions reductions, action on energy efficiency or other issues?

Alison McInnes: It could cover any of those issues. Did you not consider such matters?

Philip Wright: We were conscious that measures to address such issues are already in place or are planned. The carbon reduction commitment will require local authorities to report on their energy use and associated emissions. That will capture a large chunk of the public sector.

Alison McInnes: If we required something further, would we be duplicating the carbon reduction commitment?

Philip Wright: Any provision that we included in the bill would be duplicating the carbon reduction commitment. The UK Climate Change Act 2008 includes a reference to the commitment and to the need for provision of information. That was a preliminary move simply to get information to flow in and to provide a basis for the allowances that are made to the bodies that are covered by the carbon reduction commitment. The carbon reduction regulations will not be introduced until later, but they will cover many of the areas about which members have concerns.

Alison McInnes: Did not the consultation responses to the bill indicate clearly that public sector bodies such as local authorities support the introduction of a statutory duty?

Andrew Henderson: Some public bodies indicated that they are keen for a statutory duty to be imposed, but many others support our approach. COSLA was more than happy for us to include in the bill an enabling measure that might need to be used if we were not getting anywhere under the current concordat and the new arrangements that the Scottish Government has built up with local authorities through single outcome agreements and so on. The loudest message that came through was that we need to give those arrangements a chance to work before we impose specific obligations.

Alison McInnes: I asked about the time lag. If the voluntary approach is not working and you feel the need to impose a duty, what will be the timescale for the secondary legislation and how long will it take before we see action?

Philip Wright: If we consider the profile of sources of emissions, we see that the public sector does not make such a large contribution to emissions. Therefore, failure to deliver in that area will not have as significant an impact as it would have in the energy, transport or agriculture sectors, where the large emissions come from. The main reason why we want to focus on public sector organisations is that they have a key role as exemplars: they have a role in reducing emissions in their estates and through their procurement activities, although their direct emissions are relatively small in the overall scheme of things. That gives us breathing space to address the issue over time.

The Convener: Does the Government have a view on the timescale within which a duty would be implemented if ministers decided to make use of the provision? For example, would it be appropriate to impose a duty on the public sector within a spending review period? A public sector duty would have an impact on the finances of the bodies that were subject to it. Would it be appropriate for ministers to consider that in the run-up to the 2010 part of the cycle?

Philip Wright: I will think out loud. Fiona Page and I have mentioned the carbon assessment project. A large percentage of the Government’s expenditure—£11 billion-plus—goes directly to local authorities. The Government can try to do what it can, but once the money goes into local authorities, we lose it, to an extent. From our knowledge of how the carbon assessment project works, we might want to extend any commitment to undertake such an assessment into local authorities. However, it is a brave new area, so we are not sure how it will work. It may be the trigger for promoting action such as the convener suggests. We might not have to go to the extent of imposing a duty. There could be encouragement or demonstration.

The Convener: It could be argued that the promotion of a duty in association with a spending
review might be more compatible with the concordat approach, rather than with a return to ring fencing. Has the Government considered that or discussed it with local authorities?

**Philip Wright:** I will have to pass on that. I have heard nothing about a return to ring fencing.

**Rob Gibson:** We realise that other committees will deal with part 5 issues, but we are keen to talk about adaptation. Will the Scottish Government publish climate change adaptation documents before those are required statutorily under the bill?

**Philip Wright:** In parallel with the bill process, we are developing an adaptation framework. We consulted last year on the principles and definitions. That was a generic approach to building up Scotland’s resilience to the impacts of climate change. We will issue a second consultation in the spring, which will build on the earlier consultation and reflect something of the responses. That will be about development of the Government’s adaptation strategy, with a view to engaging with various sectors of the economy. It is a non-statutory approach to climate proofing Scotland and facilitating that process.

The approach will be based on the evidence that is available from the UK climate impacts programme scenarios of 2002. A new set of scenarios—or projections, as they are to be called—will be produced in the next two or three months, which will provide a new baseline for developing the adaptation agenda. There is a lot of activity.

The UK Climate Change Act 2008 contains an obligation to produce a UK risk assessment, which will use the UKCIP 2009 projections, as they will be called, to look across the economic sectors to identify the level of risk to which they are exposed. That will help to inform the Government’s response and the response of businesses and public sector organisations that operate in those sectors.

**Rob Gibson:** Can you share with us any outstanding ideas that emerged from the first consultation, and which you will include in the second consultation?

**Philip Wright:** I had a look at the draft last week. The document is in preparation and will be consulted on in the office because it is cross-cutting and touches on a number of policy areas. It would be premature to suggest how we will reflect people’s views; you will find out in due course.

**Shirley-Anne Somerville:** On the Scottish adaptation strategy, the bill will rely on a UK impacts report. What guarantees have you been given that the report will address Scotland’s unique opportunities and challenges? What role will Scottish organisations have in developing the report?

**Philip Wright:** I do not know the scientific detail, but there will in essence be a scientific assessment of the risk to the UK. Because the science does not acknowledge administrative boundaries, the UK will be considered as a whole. I expect the report to be relatively neutral in relation to administrative arrangements, so we should get as good a picture of Scotland as we get of the other countries in the UK. There will be a separate response from each of the four countries, because we will quickly drop into devolved matters. We are on the steering group, so we are closely engaged in the process. We are also engaged in the UK’s CIP programme.

**The Convener:** It is strange to mention this at the end of our discussion, but why is there no reference in the bill’s long title to the need to avoid dangerous climate change? Was such a reference considered? Its inclusion would allow the advice from the Committee on Climate Change or subsequent advisory bodies to be geared towards avoiding dangerous climate change rather than towards a specific target to reduce emissions by 80 per cent.

**Philip Wright:** Such a reference was called for during the passage of the UK Climate Change Bill. The UK’s responsibility in that regard is an issue, and such a high-level objective seemed inappropriate. The bill will inform the trajectory, as we discussed, but it is not in the gift of the UK Government or the Scottish ministers to prevent dangerous climate change—

**The Convener:** They might not be able to do so unilaterally. However, was another form of words considered? For example, there could be an acknowledgement of the need to contribute to international efforts to avoid dangerous climate change.

**Philip Wright:** That is the bill’s implied objective, but whether ministers would be prepared to make explicit such an objective is a matter for further consideration.

**Fiona Page:** As the convener knows, Parliament has the final say on the bill’s short and long titles. Ministers wanted to introduce a climate change bill, so that was our starting point. As additional provisions to help us to achieve the policy aims were identified, we captured the spirit of them in the long title, but we did not go much beyond that.

**Philip Wright:** I talked about moving targets. It has been suggested that dangerous climate change might be avoided if temperatures do not rise by more than 2°C, but there are different views on that, just as there are different views on the atmospheric concentration of greenhouse
gases that is associated with a 2°C rise. We must steer clear of words that attach themselves to anything too specific. A conference took place in Exeter two years ago simply to discuss what "dangerous climate change" means. The convener's suggestion might take us into a tricky area in legislating.

16:00

**The Convener:** No doubt the science will continue to develop on the danger of a 2°C rise and on parts per million. I understand why you would not want to include "2°C" in the long title. Does that not reinforce the argument for making the title less specific and more conceptual, for example by referring to the need to contribute to efforts to avoid dangerous climate change?

**Philip Wright:** We will take your proposal away and think about it. Perhaps you can ask the minister about it when he gives evidence to the committee.

**The Convener:** Thank you.

Were additional measures considered for inclusion in the bill, but rejected? Can you give us information about decisions to reject issues during the preparation of the bill?

**Andrew Henderson:** In the consultation, we explored in detail and asked about the possibility of using emissions budgets as a model for the reduction of emissions and the shaping of the trajectory to 2050.

**The Convener:** I thank the witnesses for answering our questions. We will no doubt be well informed by your answers as we continue our scrutiny of the bill.
ANNEXE C

20 January (3rd Meeting, 2009 (Session 3)) – Written Evidence

WRITTEN EVIDENCE FROM THE CLIMATE CHANGE BILL TEAM

Factual Briefing Document - December 2008
Climate Change (Scotland) Bill

Emissions reduction targets (Sections 1 – 44)

Overall aim of the Bill

To reduce Kyoto Protocol greenhouse gas emissions by 80% by 2050.

The emissions reductions targets in the Bill relate to Kyoto Protocol greenhouse gases, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride, the latter three being described as the F-Gases.

Public Consultation

Between 29 January and 23 April 2008 the Scottish Government ran a public consultation on its proposals for a Scottish Climate Change Bill. The consultation primarily addressed the subjects covered in Parts 1 to 4 of the Bill.

A total of 21,046 responses were received. The majority of respondents welcomed the consultation, the commitment and intention to introduce legislation or establish a framework, and/or the leadership shown by Scotland. Further information about the consultation, including a detailed report of the analysis of the responses, is available on the Scottish Government website from the following address: http://www.scotland.gov.uk/Topics/Environment/Climate-Change/16327/Climate-Change-Bill/SCCBConsultation

Stage 2

The Scottish Government does not anticipate making significant amendments at Stage 2 to the provisions contained in Parts 1 to 4 of the Climate Change (Scotland) Bill.

Part 1 – Emissions Reduction Targets

The Bill places a duty on the Scottish Ministers to reduce the net Scottish emissions account by 50% by 2030 and 80% by 2050.

The net Scottish emissions account comprises all Scottish greenhouse gas emissions and removals (i.e. carbon sinks such as forestry etc.) plus or minus any carbon units used or traded.

The Bill requires Ministers to set annual emissions reduction targets.

- Annual targets will be set in batches, the first for 13 years then for five years thereafter: 2010-22, 2023-27, and 2028-32 and so on until 2048-50, which will only cover three years.
- With the exception of the first batch, annual targets must be set at least 12 years in advance.
- Ministers must seek advice from the relevant body (the Committee on Climate Change or Scottish equivalent) before setting any annual targets.

The Bill permits Scottish Ministers to designate a share of the emissions from international aviation and international shipping as being attributable to Scotland. Scottish Ministers have committed to including Scotland’s share of international aviation and international shipping emissions and an order will be laid in the Scottish Parliament in time for these emissions to be included in the first batch of annual targets.
Transport, Infrastructure and Climate Change Committee, 2nd Report, 2009
(Session 3) – ANNEXE C

Part 2 – Advisory Functions

The Scottish Ministers have committed to using the Committee on Climate Change, established under the UK Climate Change Act 2008, to provide expert advice and independent scrutiny regarding Scotland’s climate change targets.

This situation will be reviewed and if it is concluded that a dedicated Scottish body would provide advice and scrutiny more suited to Scotland’s particular circumstances, the provisions enable equivalent powers to be conferred upon an existing Scottish public body or for a Scottish Committee on Climate Change to be established.

Part 3 – Reporting Duties

The intention is that the Scottish Ministers must report regularly to the Scottish Parliament on Scotland’s emissions, and on the progress being made towards the emissions reduction targets set in the Bill. The majority of reporting duties are contained in Part 3 of the Bill but two requirements are contained in Parts 1 and 5 respectively. These additional reporting duties are described here for ease of reference. The reporting requirements are as follows:

- **Annual reporting duty** (Sections 28 and 29): the Scottish Ministers will be placed under a duty annually to lay a report before the Parliament setting out specific information about the net Scottish emissions account for the year in question. It is these figures which will determine whether or not the relevant annual target has been met. If the annual emissions target has been exceeded, the report should also explain why.

- **Report on proposals and polices for meeting annual targets** (Section 30): as soon as reasonably practicable after setting any set of annual emissions targets, the Scottish Ministers will be required to lay a report before the Scottish Parliament setting out proposals and policies for meeting the current and future annual emissions targets, up to and including the annual targets just set. In practice, this report will require to be made at least once every five years.

- **Report on proposals and policies to compensate for excess emissions** (Section 31): where Scottish emissions exceed an emissions target, Scottish Ministers should also lay a report on the proposals and policies by which they will compensate for the excess emissions.

- **Requirement to seek scrutiny of relevant body** (Section 8): each year, following the annual statement on emissions, Scottish Ministers will be required to seek the views of the relevant body (the UK CCC) on progress towards achievement of the annual targets that have been set, the mid-point 2030 target and the 2050 target. Ministers will be required to lay a response in the Scottish Parliament to the points made in the report by the advisory body.

**Final statements for 2030 and 2050** (Sections 32 and 33): Scottish Ministers will also lay a final statement setting out whether the 2030 and 2050 emissions reduction targets have been met and, if not, why not. These reports will be distinct for the annual reports in respect of 2030 and 2050 which will focus on the action in these two calendar years as opposed to the long term targets.

**Reports on proposals and policies for adaptation to climate change** (Section 45): Scottish Ministers must lay a programme before the Scottish Parliament setting out their objectives in relation to adaptation to climate change, proposals and policies for meeting these objectives and the timescales within which they will be introduced. These programmes should respond to the risks posed by climate change identified in each UK-wide risk assessment prepared in accordance with the section 56 the UK Climate Change Act. In practice, the UK risk assessment will be published every five years and the Scottish Ministers’ response made as soon as practicable thereafter.
Provision of further information to the Scottish Parliament

Section 34 of the Bill requires that, where the Scottish Ministers lay certain reports before the Scottish Parliament they must as soon as reasonably practicable thereafter, and in so far as reasonably practicable (i.e. the Parliament agrees to it), make a statement to the Parliament relating to the report. These are:

- Report on annual target;
- Report on proposals and policies for meeting annual targets;
- Report on proposals and policies to compensate for excess emissions;
- Report on interim 2030 target; and
- Report on 2050 target.

Section 34 additionally requires that where the Scottish Ministers lay a report on the annual target, as soon as reasonably practicable thereafter, and in so far as reasonably practicable, they must meet with the Conveners of the Committees of the Scottish Parliament.

Part 4 – Duties of Public Bodies Relating to Climate Change

Scottish Ministers are committed to working in partnership with the public sector in reducing the target greenhouse gas emissions which affect climate change. The provisions in Part 4 of the Bill are only intended for use if emissions reductions become harder and more expensive to deliver and it is concluded that the Scottish Ministers have to use statutory measures to ensure consistent and fair contributions to delivery across the public sector.

Therefore the Bill contains an enabling power (Section 36) which allows Scottish Ministers to create secondary legislation to impose public sector duties, to take action on climate change. Scottish Ministers are required to carry out appropriate consultation before creating such climate change duties.

If duties are imposed, Scottish Ministers recognise the need to work with public bodies to help deliver these duties. Section 37 provides powers to issue statutory guidance in relation to these climate change duties.

If such duties are imposed, it will be important to monitor compliance. Section 38 of the Bill gives Ministers the power to require reporting on progress and Section 39 allows Scottish Ministers to appoint a monitoring body to monitor the carrying out of any climate change duties placed on public sector bodies under the Bill.

Climate Change (Scotland) Bill
Variation of permitted times for making muirburn (Section 46)

Summary of Bill provisions

This provision provides an enabling power for the Scottish Ministers to lay Orders to vary the permitted dates for undertaking muirburn where they consider it necessary or expedient to do so in relation to climate change.

In Scotland, there are discernible changes in the climate and in seasonal weather patterns. These climatic changes have impacted on the ability to undertake muirburn and have reduced the frequency of suitable burning days. As a result, the ability to use muirburn has been negatively affected.

Muirburn is an important land management technique which assists new growth on rough grassland and moorland managed for livestock, game and wildlife; and assists in the management of older vegetation which can act as a source of fuel for wildfires. The Bill provision aims to provide flexibility to enable it to continue to be used.

Implementation of any variation in the permitted dates will require Ministers to lay an Order in Parliament which will entail a Regulatory Impact Assessment. There is no expectation that the current muirburn season would need to be changed immediately.
Public Consultation

A consultation on the proposal that Ministers should have a power to vary the permitted dates for muirburn was launched on 25 August and ended on 17 November [http://www.scotland.gov.uk/Publications/2008/08/Muirburn](http://www.scotland.gov.uk/Publications/2008/08/Muirburn).

Analysis of the consultation is currently underway and the consultation responses will be available to view on the Scottish Government web page by the end of December 2008.

The consultation analysis report will be issued in January 2009.

Climate Change (Scotland) Bill
Power to modify functions of Forestry Commissioners (Section 47)

Summary of Bill provisions

These provisions will enable Forestry Commission Scotland to play a greater role in tackling climate change.

They will allow Scottish Ministers (by order) to modify the functions of the Forestry Commissioners in or as regards Scotland.

Such an order may also allow the Forestry Commissioners to delegate their functions to other bodies.

Public Consultation


This consultation seeks views on permitting:

- Forestry Commission Scotland to enter into joint ventures for the purposes of participating in renewable energy programmes;
- Scottish Ministers to lease land for forestry purposes and the Forestry Commission Scotland to grant cutting rights over this forest;
- Scottish Ministers the option of transferring ownership of leased land to a not-for profit trust and funds to be used to promote woodland creation to help mitigate greenhouse gas emissions.

Ministers are seeking a report on the results from the consultation exercise, and an associated options review, by the end of February. The results of this will be reported to the Parliament as soon as possible.

Stage 2

The need to amend the provisions at Stage 2 will depend on decisions taken following the outcome of the consultation exercise.
Climate Change (Scotland) Bill
Promotion of energy efficiency (Sections 48 - 49)

Summary of Bill provisions

These provisions are aiming to improve the energy efficiency of domestic, business and public sectors in Scotland.

These provisions will require Scottish Ministers

- to develop and publish an Energy Efficiency Action plan within one year of the provision being enacted;
- to report on the implementation of the action annually, laying this in parliament; and
- to review this plan at least every three years.

Although primary legislation is not required to prepare the plan, setting this in statute demonstrates the commitment of Scottish Ministers to improving energy efficiency across Scotland.

The action plan will set out all the action being taken across Government to improve energy efficiency in Scotland.

Public Consultation

The previous administration consulted on a draft Energy Efficiency and Microgeneration Strategy for Scotland between 13 March and 11 June 2007. Links to this and the associated documents are listed below:

- Energy Efficiency and Microgeneration - Achieving a low carbon future - A Strategy for Scotland: Consultation Responses (9 August 2007)

On 4 June 2008 the Scottish Government published a consultation analysis report summarising the issues raised by respondents.

As the consultation had been initiated under the previous administration, the Scottish Government published a separate response to the issues raised during the consultation along side the analysis report. Links to these documents are:

  [http://www.scotland.gov.uk/Publications/2008/05/30140817/0](http://www.scotland.gov.uk/Publications/2008/05/30140817/0)
  [http://www.scotland.gov.uk/Publications/2008/06/03113737/0](http://www.scotland.gov.uk/Publications/2008/06/03113737/0)

Stage 2

Officials are currently in discussion with the Steering Group for Sarah Boyack’s Members’ Bill on Energy Efficiency and Microgeneration and separately the Green Party over possible measures which could be included in either the Climate Change Bill or the Energy Efficiency Action Plan.
Transport, Infrastructure and Climate Change Committee, 2nd Report, 2009
(Session 3) – ANNEXE C

There is the possibility that these discussions may result in the need for Amendments at Stage 2.

Climate Change (Scotland) Bill
Energy performance of non-domestic buildings (Section 50)

Summary of Bill provisions
The aim of these provisions is to improve the energy performance of existing non-domestic buildings which will raise the contribution that the existing non-domestic stock can make to mitigating climate change.

Buildings account for over 40% of emissions and there is scope to further reduce these levels.

Why are they necessary?
The provisions are required to make regulations providing for the assessment of the energy performance of non-domestic buildings and the emissions of greenhouse gases produced or associated with such buildings.

The regulations for the assessment of existing non-domestic buildings could include:
  o type of non-domestic buildings covered;
  o persons who are required to obtain assessments;
  o time periods for carrying out assessments;
  o procedures and methodologies that must apply;
  o persons who can carry out such assessments;
  o certificates issued following assessment;
  o enforcement authorities; and
  o keeping of records and enforcement and offences.

Public Consultation
A public consultation “Action on Climate Change: Proposals for improving the energy performance of existing non-domestic buildings” was launched on 2 September 2008 and closed on 24 November 2008.

The consultation document can be accessed at http://www.scotland.gov.uk/Publications/2008/08/15155233/1

A total of 70 responses have been received and analysis of the responses is on-going and will be completed by the end of January 2009.

Topics covered in the consultation include:
  o Extending the scope of energy performance certificates into Assessment of Carbon and Energy Performance (ACEP) to take account of operational ratings as well as asset ratings and also embodied energy/carbon when a robust methodology is available to address the issue of historic and traditional buildings. This includes varying the lifespan of such assessments/certificates;
  o Requiring owners or their delegated persons to obtain ACEPs (even though they are not selling or renting out their buildings);
  o Requiring owners of non-domestic buildings to formulate action plans for building work arising from the advice on their ACEPs and encouraging them to implement their action plans;
  o Developing appropriate standards for such building work e.g. energy efficient lighting, roof space insulation or sub-metering; and
  o Empowering local authorities, or similar public bodies, to check ACEPs.
Scottish Climate Change Bill
Promotion of Renewable Heat (Section 51)

Summary of Bill provisions

This provision will enable Scottish Ministers to take steps to promote the use of heat produced from renewable sources.

This is needed to build a commercially viable renewable heat industry in Scotland in support of the Scottish Government 2020 renewable energy target (11% of heat demand to come from renewable sources). This will help to reduce carbon emissions.

It is recognised that Scottish Ministers already have powers to promote renewable heat – heat is not mentioned in the Scotland Act, therefore is devolved by omission. However setting this in statute (e.g. by putting an obligation on Scottish Ministers to develop and publish a Renewable Heat Action Plan) shows the importance and commitment by Scottish Ministers to increase the uptake of heat from renewable sources.

Public Consultation

In 2006, the previous administration asked a sub group of the Forum for Renewable Energy Development in Scotland (FREDS) to identify and develop recommendations for the key components of a Scottish Renewable Heat Strategy. The group published a report in February 2008. The link to the report can be found at:

  http://www.scotland.gov.uk/Publications/2008/03/11102501/0


The document contained a section on renewable heat (section 6) which included a proposed Action Plan for Renewable Heat in response to the report from FREDS. The link to the report can be found at:

- Making Scotland a Leader in Green Energy – draft framework for the development and deployment of renewables in Scotland
  http://www.scotland.gov.uk/Publications/2008/11/05115324/0

The responses to the consultation are currently being considered. However there appears to be broad support for the need to promote renewable heat and for the target of 11%. In addition other views expressed commented on the need to raise awareness by showcasing good practice, targeting off-gas grid areas and the need to produce a renewable heat route map. All comments received will help inform the completion of the Action Plan.

Stage 2

The responses to the consultation are currently being considered. It is possible that Scottish Ministers may seek to include an amendment at Stage 2 to require the production of a Renewable Heat Action Plan for Scotland. The Action plan could include a wide range of actions such as:

- Route map
- Information provision
- Links with waste heat
- Fuel poverty
- Planning
- Skills and Training
Additional information

Steps are being taken to introduce a UK wide financial mechanism to help support the take-up of renewable heat. The UK Energy Act includes enabling powers to design such a mechanism.

Renewable heat is a mixture of devolved and reserved provisions (while Scottish Ministers have powers to promote renewable heat, any regulatory incentive administered by Ofgem will cut across reserved functions).

Scottish Ministers have agreed with UK Government that Westminster can legislate on their behalf in terms of a renewable heat incentive (RHI) but that Scottish Ministers will be fully consulted. There is broad support from stakeholders of this approach.

Any future Renewable Heat Action Plan will focus on actions that are within Scottish Ministers devolved powers and will enhance any RHI introduced at a future date.

Scottish Climate Change Bill
Waste reduction and recycling (Sections 52 - 61)

Summary of Bill provisions

Scottish Ministers may, through regulations, introduce new obligations for providing:
- Waste prevention and management plans
- Information on waste
- Facilities for deposit of recyclable waste
- Procurement of recyclate
- Targets for reduction of packaging
- Deposit and return schemes
- Charges for supply of carrier bags

These powers are being taken to reduce the impact of waste management and, misuse of resources have on climate change.

It is intended that regulations (by affirmative procedure) would be used to set out detailed requirements, for example:
- Contents of a waste plan;
- Who should give what information on waste;
- Who should provide facilities to recycle, what should those facilities be and for what types of wastes;
- What types of recyclate should be procured and the quantities;
- What targets would apply to packaging placed on the market, the types of packaging and on whom the targets would apply;
- How a deposit and return scheme would function, in relation to which materials supplied by whom; and
- Charges for carrier bags - what charges, for which bags and the application of the charge revenue.

Public Consultation


The consultation responses indicated general support for the principal of taking measures in the Bill to implement zero waste.
The level of support varied according to specific provision (and, indeed, between taking powers and actually exercising them). The least support was for charges for carrier bags.

**Stage 2**
Amendments at Stage 2 are only likely if there is a need to refine provisions in the Bill in the light of discussions at Stage 1.

**TECHNICAL NOTE: Climate Change (Scotland) Bill: Greenhouse gas (GHG) Emissions, Annual Reductions and Targets**

**Purpose**
The purpose of this Technical Note is to describe in more detail the trajectory prescribed in the Climate Change (Scotland) Bill for reducing Scottish emissions of Kyoto Protocol greenhouse gases, in particular the annual percentage rate of reduction necessary to achieve the targets. The approach described includes estimated emissions from international aviation and shipping.

The target greenhouse gases for the Bill are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride, the latter three being described as the F-Gases.

**GHG Data**
Figures for Scottish greenhouse gas emissions at source are currently published approximately twenty months after the end of the calendar year to which they refer - 5 months after publication of the final UK inventory. The latest published figures, the 2006 GHG emissions, were published in September 2008¹. Disaggregated figures for international aviation and shipping emissions, for each of the four countries of the UK, have recently become available and the Scottish figures are included in this analysis².

**Baselines**
1990 is the base year for emissions of carbon dioxide, methane and nitrous oxide, and 1995 is the base year for emissions of fluorinated compounds (F-Gases) in accordance with Article 3.8 of the Kyoto Protocol. For ease of reference, the figures shown as 1990 in this document combine 1990 figures for carbon dioxide, methane and nitrous oxide with the 1995 figures for the F-Gases.

The first year for which an annual target will be set under the Bill, once enacted, is 2010.

**Emissions Reductions**
The emissions reduction framework in the Climate Change (Scotland) Bill is based on the following pillars:

- The annual target for the year 2010 must be an amount which is less than the estimated net Scottish emissions account for 2009.
- The emissions reduction targets for each year in the period 2011-2019 must be an amount which is less than the target amount for the previous year.


In the period 2020-2050 the annual percentage rate of reduction in greenhouse gas emissions will be driven by targets which must be at least 3% lower than the target for the previous year.

- Greenhouse gas emissions in 2030 must be at least 50% below emissions reported for 1990.
- Greenhouse gas emissions in 2050 must be 80% below emissions reported for 1990.

For information, on the basis of the 2006 GHG inventory (including international aviation and shipping emissions) Scottish emissions were 70.1 megatonnes of carbon dioxide equivalent (Mt CO₂e) of GHG emissions relevant to the 1990 baseline (1995 for F-gases).

Emissions in 2009

It is necessary to make certain assumptions about the starting point for the new statutory emissions reductions trajectories because the statutory regime is being put in place before the actual emission levels for 2009 will be known.

The first assumption is that greenhouse gas emissions in 2009 will follow a similar trend to 1990-2006, taking account of the EU Emissions Trading Scheme for emissions in 2005 and 2006. On this basis the average annual rate of reduction in GHG emissions between 1990 and 2006 was 1.23%. While we have information on UK allocations under the EU Emissions Trading Scheme for the period 2008-2012, there is as yet no agreed methodology on how to apportion a share of the allocations for Scotland’s carbon budget.

Reductions to 2019

Assuming the 2009 emissions have fallen at an average rate of reduction of 1.23% since 1990, emissions in 2009 would equate to some 55.4 Mt CO₂e. If the average annual rate of reduction in the period 2009-2019 ranges between 1.23% - 2.75% (as described in the example scenarios below), on the basis of these assumptions, emissions in 2019 would be estimated between 48.96 - 41.93 Mt CO₂e. This represents a reduction of 30-40% below the 1990 value.

Before setting the levels for annual targets, Scottish Ministers will be informed by the advice of the UK Committee on Climate Change. This advice is expected to detail the optimal, most cost effective emissions reductions options to pursue and may define a different trajectory to the range outlined in the paragraph above.

For illustrative purposes a number of emissions reductions scenarios are described below and detailed in Table 1. The reduction rates relate to the period 2010-2019.

**Scenario 1 – 1.23% average annual reduction in greenhouse gas emissions**
Annual rate of reduction is in line with the average rate in the period 1990-2006.

**Scenario 2 – 1.49% average annual reduction in greenhouse gas emissions**
Emissions reduction required to achieve a 34% reduction in emissions in 2020 against 1990 baseline – this target relates to the emissions reductions required by the interim carbon budget set out by the Committee on Climate Change in its inaugural report Building a low carbon economy, published on 1 December 2008.

**Scenario 3 – 1.50% average annual reduction in greenhouse gas emissions**

**Scenario 4 – 2.00% average annual reduction in greenhouse gas emissions**

**Scenario 5 – 2.50% average annual reduction in greenhouse gas emissions**

**Scenario 6 – 2.75% average annual reduction in greenhouse gas emissions**
Emissions reduction required to achieve a 42% reduction in emissions in 2020 against 1990 baseline – this target relates to the emissions reductions required by the intended carbon budget set out by the Committee on Climate Change in its inaugural report Building a low carbon economy, published on 1 December 2008.
Reductions from 2020 to 2030

From the estimated emissions level of 48.96 Mt CO$_2$e in 2019, which would be the position if emissions continue to reduce at 1.23% per year, in line with the average rate in the period 1990-2006, emissions would need to have an average annual rate of reduction from 2020 of 3.95% in order to achieve an 80% reduction by 2050. On such a trajectory, emissions in 2030 would be approximately 55% less than in 1990.

The Bill requires that emissions in 2030 be reduced by at least 50% compared to the amount in 1990. To achieve a reduction of exactly 50% in 2030 from a position of 48.96 Mt CO$_2$e emissions in 2019, the annual rate of reduction of emissions in the period 2020 to 2030 would have to average 2.99%. The Bill sets a minimum annual reduction of 3% from 2020.

Reductions from 2030 to 2050

Having achieved the 2030 target of 50% reduction in emissions, relevant to the 1990 level of emissions, the average annual rate of reduction required to achieve the 2050 target (an 80% reduction from 1990 emissions) would be 4.5%.

Chart 1 shows the pattern of reductions required to achieve the targets assuming that emissions in 2009 in line with the rate of reduction from 1990-2006 and that annual percentage reductions are constant in each period and as described above. Table 1 provides estimates of the key figures for the 6 scenarios.
Greenhouse gas emissions - 1990 to 2050 - includes international aviation & shipping & takes account of trading in the EU Emission Trading Scheme in 2005 and 2006

Assumes that emissions in 2009 are on the same trajectory as 1990-2006 and this continues to 2019 - annual rate of reduction 1.23%

Constant average annual rate of reduction of 2.99% required to achieve 2030 target

Constant average annual rate of reduction of 4.48% required to achieve 2050 target

Interim Target 50% reduction from 1990

2050 Target 80% reduction from 1990
Table 1  Emissions reductions necessary to achieve 50% reduction target in 2030, and 80% reduction target in 2050; taking account of trading in the EU Emission Trading Scheme in 2005 and 2006

Scenarios considered:
emissions in 2009 are in line with the rate of reduction between 1990 and 2006 (1.23%); between 2009 and 2019 rate of reduction ranges between 1.23% and 2.75%  

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<th>Scenarios</th>
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<tr>
<td><strong>Assume average annual % reduction 2010-2019</strong></td>
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<td>Assume 2009 in line with trend in period 1990-2006 (Mt CO₂e)</td>
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<td>Percentage change 1990-2020</td>
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<td>Resulting emissions in 2030 (Mt CO₂e)(3)</td>
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<td>Percentage change 1990-2030</td>
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<td>-51.3%</td>
<td>-51.4%</td>
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<td>Annual rate of reduction in period 2031-2050 required to meet 80% reduction target by 2050 (minimum of 3%)(3)</td>
<td>4.47%</td>
<td>4.35%</td>
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<td>2050 target is 80% reduction from 1990 baseline (Mt CO₂e)</td>
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EU Emission Trading Scheme allocations and emissions for Scotland

(1) This scenario shows that if emissions in 2009 have fallen in line with the average annual rate of reduction in the period 1990-2006 (1.23%) and this annual rate of reduction continues in the period 2010-2019, followed by a 3% annual rate of reduction in the period 2020-2030 - this would result in the 2030 target of 50% of 1990 emissions (i.e. 35.06 Mt CO₂e) being achieved and would necessitate an annual rate of reduction of 4.47% in the period 2031-2050 in order to achieve the 2050 target.

(2) These scenarios give the annual rate of reduction required in order to achieve emission reductions of 34% and 42% in 2020 against a 1990 baseline. The figures of 34% and 42% relate respectively to the emissions reductions required by the Interim and Intended carbon budgets set out by the Committee on Climate Change in its inaugural report Building a low-carbon economy - the UK’s contribution to tackling climate change, December 2008, available from: [http://www.theccc.org.uk/reports](http://www.theccc.org.uk/reports)

(3) From 2020, the Bill requires minimum annual reductions of 3% compared with the target for the previous year. In these scenarios, such reductions lead to emissions in 2030 below 50% of 1990 baseline emissions (35.06 Mt CO₂e), and the subsequent annual rate of reduction in the period 2031-2050 required to achieve the 2050 will differ from the 4.48% annual rate of reduction if 2030 emissions were exactly 50% of 1990 emissions.
Climate Change (Scotland) Bill
Written Evidence Request - Carbon Footprint Reporting Timeframe

At the Transport, Infrastructure and Climate Change Committee meeting on 20 January 2009, the subject of the Scottish Government’s ecological footprint project was discussed. The Convener stated that it would be helpful to explore in writing the potential timeframe for reporting the outputs of this work. This letter seeks to provide that information, which I hope the Committee will find useful.

The Scottish Government is committed to measuring Scotland’s ecological footprint, with work currently underway investigating the development of Scottish economic-environmental accounts to improve the quality and transparency of footprint calculations. The output from this work will include a carbon footprint for Scotland which we expect to be available in 2010.

In the interim, ecological and carbon footprint information for Scotland and Scottish Local Authority Areas will be available in May this year from the Stockholm Environment Institute (SEI), University of York and Experian. This footprint calculation uses UK input-output tables and UK economic-environmental accounts, disaggregated using Scottish consumption data based on 2006 data. By comparison, Scotland’s carbon emissions for 2006 were published in September 2008.

The Scottish Government is also considering the frequency for producing the ecological footprint indicator and, given the complexities of the indicator and the frequency of the data available to feed into the model, we anticipate recalculating Scotland’s ecological footprint every two or four years.

The frequency of reporting on the ecological and carbon footprint does not prevent the Scottish Government from reporting the latest position on the carbon footprint as part of the Scottish Ministers’ annual report on production-based emissions performance required by the current Climate Change (Scotland) Bill provisions.

Further information regarding the national indicator to reduce Scotland's ecological footprint is available on the Scottish Government website at the following address: http://www.scotland.gov.uk/About/scotPerforms/indicators/ecologicalFootprint.

I hope that this is helpful.

Philip Wright
Deputy Director
Climate Change Division
Scottish Parliament

Transport, Infrastructure and Climate Change Committee

Tuesday 27 January 2009

[THE CONVENER opened the meeting at 14:00]

Climate Change (Scotland) Bill: Stage 1

The Convener (Patrick Harvie): Good afternoon. Welcome to the fourth meeting this year of the Transport, Infrastructure and Climate Change Committee. I remind everyone present that all mobile devices—phones, BlackBerrys, pagers and so on—should be switched off.

There is just one item on the agenda for today’s meeting: continuation of our consideration of the Climate Change (Scotland) Bill at stage 1. This is our second evidence-taking session on the bill. Today, we will hear first from experts in the field from the Met Office, universities and the Sustainable Development Commission Scotland, and then from the United Kingdom Committee on Climate Change. We expect to continue taking evidence until some time in March, at which point we will hear from the Minister for Transport, Infrastructure and Climate Change and publish our report. In addition to taking oral evidence, we have issued a call for views on the bill; the deadline for written responses is 27 February.

Without further ado, I welcome the first of our two panels. We are joined by Professor John Mitchell, director of climate science at the Met Office; Professor Peter Smith, professor of soils and global change at the University of Aberdeen; Phil Matthews, senior policy adviser at the Sustainable Development Commission Scotland; and Dr Andy Kerr of the University of Edinburgh, who is the assistant director of the Scottish alliance for geoscience, environment and society. I invite the witnesses to say some brief words of introduction before we get started with questions.

Dr Andy Kerr (University of Edinburgh): I need to add that currently I am seconded part-time to the Scottish Government’s climate change team to work two days a week on its strategic overview project, about which the committee has heard. The project is concerned with delivery of whatever targets are set by the bill.

The Convener: I will kick off the questioning. When considering the bill, we are interested in hearing about the most recent climate science, to enable us to judge whether the approach that is being taken in the bill and by the Government more generally is up to the mark. Could you provide us with a synopsis—it may need to be a brief one, given the complexity of the subject—of how the science has moved on since the 2007 report of the Intergovernmental Panel on Climate Change was published?

Professor John Mitchell (Met Office): The IPCC report came out just over a year ago, by which point the science that it contains was about two years old. The biggest change that has taken place since then is that there is now more emphasis on trying to understand the probability of different levels of climate change. The word “probability” is relevant to the bill. For example, our current understanding is that reducing emissions by 50 per cent by 2050 would give us a 50 per cent chance of keeping warming down to 2°C; an 80 per cent reduction in emissions would bring the chance of warming exceeding 2°C down to 10 per cent. However, it is necessary to emphasise that this is cutting-edge science, and that both the mean level of change and levels of uncertainty may change. For example, the IPCC included in its report only at a late stage the effects of changes in the carbon cycle, which tend to push temperatures up slightly. When considering legislation, the committee must be aware that, in 10 years’ time, the numbers may be different.

My second point, to which we will probably return during the session, is that when considering measures to reduce emissions and to monitor what is happening, we must take into account not only climate change but climate variability in the future. For example, it is proposed to check emission levels every year; a very cold winter will increase space heating, which will push up emissions in that year, but the position may be different in the following year. Therefore, when you are considering measures, you must take into account not only climate change but climate variability.

The Convener: For clarity, are the 50 per cent and 80 per cent reduction figures to which you refer global figures?

Professor Mitchell: Those are global figures.

The Convener: So they are the figures before we get into any policy decision about whether richer countries should make deeper cuts and so on.

Professor Mitchell: Exactly.

Professor Peter Smith (University of Aberdeen): On mitigation, which is my specialist area, the work since the publication of the IPCC’s fourth assessment report has focused on identifying and better quantifying the economic costs of mitigation—how much we can do with a given range of measures across all the sectors, what that will cost and how it will play out across
the sectors. Many of the studies that have appeared since the assessment report have drilled down into the individual sectors to look at the measures that are available and to cost those to see how much we can achieve and how much it would cost to get there.

The Convener: The bill uses the IPCC report as its basis and the Government will also use advice from the UK Committee on Climate Change as a basis for determining its approach to the issue. Could the Government incorporate more recent scientific evidence and data into the bill? Is there a more appropriate way in which it could ensure that, once the bill is passed, further scientific developments are brought into Government thinking?

Professor Smith: As I understand it, the Parliament will take advice from the UK Committee on Climate Change and from a Scottish committee on climate change—is that correct?

The Convener: That is one of the possibilities for which the bill allows, although we have heard that the Government does not intend to propose the creation of such a committee in the immediate future.

Professor Smith: Clearly, that would be the main mechanism through which to get such information and to enable cutting-edge scientific understanding to be fed through to inform the passage of the bill and, after the bill has been passed, further decisions on setting and achieving annual targets.

Professor Mitchell: A couple of things are coming up. One is the UK climate impacts programme, which will produce its new scenarios by—I hope—21 April. That will help, perhaps not so much with mitigation as with adaptation. Those scenarios will be quite an advance on UKCIP02 and they cover all the United Kingdom, so they will be of interest.

My organisation provides advice to the Westminster Government through the Department of Energy and Climate Change and the Department for Environment, Food and Rural Affairs, which fund us, but we are able to advise where that is helpful.

The nice thing about the IPCC is that it ensures that there is a consensus. If you are looking for more recent advice, you have to trust the people whom you are asking; it is a matter of judgment.

Dr Kerr: I will add to what Pete Smith said, which is that if you are going to bring in the latest science, all that you need is a repeat cycle so that you keep checking against the latest science that comes out. As long as you have a process for doing that, you can update your targets a few years out. My understanding is that the bill delivers such an approach.

The Convener: Do any of the witnesses want to comment on where we are in the development of a global deal on climate change? The process attracts a certain amount of press attention and it is one in which the Scottish Government has some level of participation, but perhaps less than the Government of an independent country. Without getting into whether that would be desirable, where do you think we stand in relation to that process?

Professor Smith: I guess that you are referring to the Bali road map, which is in place. The meetings that took place in Poznań were to enable the various interested parties to position themselves with respect to the main decisions that will be taken in Copenhagen, so it would be premature to say now what we imagine will be in any agreement that is reached. The really important thing about the Bali road map is that it includes not just the developed countries, as the Kyoto protocol does, but the developing countries. Given that, from an emissions perspective, developing countries such as India and China, the economies of which are in transition, are jumping ahead of some of the formerly industrialised countries that were covered by the Kyoto protocol, it is extremely important to have those countries on board for any meaningful global climate agreement. Whatever agreement we reach, we need to have more global coverage than we had under the Kyoto protocol.

Dr Kerr: I will make two points. It is clear that one of the great sticking points has been that countries such as China and India have required the USA to be involved substantively in delivering emissions reductions, which has not been the case until now. Comments by the new President suggest that the USA will get on board, which might be grounds for optimism, but if one talks, in particular, to businesses and carbon market players in the City of London, it is fair to say that there is a degree of scepticism about whether the Copenhagen talks will deliver a meaningful global deal, as opposed to a series of regional deals, which appears more likely. It is difficult to say; that is just conjecture.

Professor Mitchell: It is too early to say exactly how the US position will change as regards engagement in emissions reductions. We might be optimistic, but we should wait and see what happens. Through the World Meteorological Organization, I have been involved in organising the next world climate conference, and the US has been highly reluctant to engage in anything involving climate change. It is too early to say whether that has changed—the President has just been inaugurated—or in what direction it might
change. It might not change in the direction that we expect.

The Convener: Before we move on to the next set of questions, I should have recorded at the beginning of the meeting that Cathy Peattie and Charlie Gordon have sent their apologies. That is on the record now.

Alex Johnstone (North East Scotland) (Con): As practitioners in the field of climate change science, do you feel that the Scottish Government has properly exploited your expertise in framing the Climate Change (Scotland) Bill and other proposed legislation that might take climate change into account?

Professor Mitchell: From my point of view—this is the second committee that I have appeared before—you have tried to take into account a range of scientific opinion and, so far, that has been done well.

Alex Johnstone: I am trying to get at whether, in this bill and in other proposed legislation, the Scottish Government is up to speed with scientific opinion. Is there any lag? Is more effort required?

Professor Smith: The Government—as in the civil service part of the Government—is consulting and has had a number of meetings. More broadly, outside the Government specifically, the public consultation on the bill has allowed various groups and interested parties to feed in. From my perspective, that process has been completely open and inclusive. The Government has taken the necessary advice and has contacted the main players. As far as I am aware, no one in the scientific community has felt excluded from that process.

Dr Kerr: An issue from my perspective is that all Administrations, certainly in the United Kingdom and in most other European countries—it is not just to do with the Scottish Government or any particular Administration—have had a significant problem with delivery, as opposed to the setting of targets. They might well set targets that are based on science, but it is clear from their emissions inventories that there has been a problem with how those targets are delivered. One of the key issues is delivery rather than the use of science to set targets in the first place.

14:15

Alex Johnstone: The bill consultation stated that one of the reasons for legislating in the first place was

"to create and enable new means of reducing emissions."

Are any of the means in the bill to achieve Scottish targets new? Are any of them world leading?

Professor Smith: I would say that there is nothing new under the sun. We have known for a long time that planting trees will deliver carbon sequestration, for example. Some measures are specific to Scottish circumstances, such as the muirburn provisions, which you will not find in many other places, simply because muirburn is not an issue in many other countries. The bill also covers land use, land use change and forestry emissions that are specific to Scotland.

The targets are ambitious. There are no more ambitious targets anywhere else in the world, although some other countries are also aiming for an 80 per cent reduction in emissions by 2050. The targets are brave, bold and world leading in that respect.

Professor Mitchell: I want to comment on the measures and their relative effectiveness. Carbon credits are a one-off. In a sense, you buy the emissions for the year and that is it. If you want to keep the emissions down to that level, you have to repeat the exercise each year or find a replacement.

Forestation is a fairly short-term measure in terms of the carbon cycle because, after a while, the forest reaches maturity and no more carbon is being fixed. One has to be aware that forestation is not so effective in areas of prolonged snow cover, because there begins to be an albedo effect: the trees make the ground appear black and there is more heat, particularly in spring, when the sun comes up. The main point is that to keep the benefit, the land has to be kept forested—it saturates if it is kept forested. How you frame the conditions on which land is let out to forestry will have to be managed carefully, so that people do not take the money for putting forests in and then take them away again, in which case you would lose the benefit.

I know that in Northern Ireland they have been looking at carbon capture and sequestration in the area between Larne and Portpatrick. I am not sure to what extent you have looked to Northern Ireland or Norway to see what can be done. Scotland has a lot to learn from countries that are in an equivalent geographical position and have similar vegetation. In relation to muirburn, it might help to find out what is happening in similar countries.

Dr Kerr: Can I just clarify your question? Are you talking about measures such as the energy efficiency action plan and the measures in relation to public sector organisations, or are you talking specifically about the natural science?

Alex Johnstone: In effect, I am talking about both, but we are looking primarily at the provisions in the bill. I am interested to know whether you feel that we have achieved anything unique in Scotland, particularly in the bill.
Dr Kerr: I back up Peter Smith’s point: I am not aware of any more stringent targets in any other country. On the measures to reduce emissions, it is my understanding that the bill is enabling legislation and that other pieces of work will have to be brought forward.

It is worth flagging up that we have to work within the context of the UK and the European Union when it comes to a number of these measures. For example, we know that the UK Government is going to bring forward the renewable heat obligation. Scotland will need to work within that context. The bill will have to work hand in glove with the legislation that is coming through at Westminster. I imagine that that can be done by providing enabling powers, although you will understand the process better than I do.

The main gaps in terms of economic instruments to reduce emissions will be in the domestic heat sector, so a heat obligation is important. Everyone recognises that energy efficiency is critical, but it is still very hard to achieve. Transport is also important. Some of these things relate to reserved powers, some are EU functions, and others are things that can be done in Scotland by local authorities and local agencies. I suspect that it is difficult to put all that into one bill, rather than saying that you will have enabling powers that will deliver measures elsewhere.

Shirley-Anne Somerville (Lothians) (SNP): Could you explain the importance of cumulative emissions? Is it technologically possible to measure them and, if so, how would that be done?

Professor Smith: If by cumulative emissions you are talking about the emissions that have accumulated since the industrial revolution—

Shirley-Anne Somerville: Sorry—I am talking about what is going to happen. The bill contains annual targets, but it is also concerned with what goes under the graph, if you like, and with cumulative emissions up to 2050.

Professor Smith: I misunderstood. I will pass the question over while I have another think about it.

Dr Kerr: There are two ways of finding out emissions from Scotland, the first of which is the annually published emissions inventory. However, one problem with that is that it is 20 months in arrears. The second way is the allocation of auctioning rights in the traded sector. Using both, you can get a sense of what the net Scottish emissions will be and adding them up over the years will give you a figure for cumulative emissions. In that sense, the information is available if you want to understand what the total emissions block will be up to 2050 and whether we will meet the stretching targets that you set.

Phil Matthews (Sustainable Development Commission Scotland): I also assume that you are referring to the area under the curve of emissions between now and 2050. The bill sets out a broad trajectory of gradual reduction in emissions up to 2020, followed by a 3 per cent reduction per year from 2020 and perhaps a 4.5 per cent cut per year after 2030. The steepness of the curve between now and 2020 is actually quite important to the overall carbon budget to 2050; I believe, for example, that it has been calculated that an additional 200 million tonnes of carbon will be generated by following that path instead of having a linear 3 per cent cut from now onwards.

The commission recognises that, in the immediate term, it is hard to move beyond what we are doing, but we would like to get much closer to 3 per cent per annum before 2020 instead of setting that as the benchmark for the 3 per cent annual cut. That approach will be important to our overall impact on the climate over the 40 years covered by the bill.

Professor Mitchell: The theoretical attraction of using cumulative emissions is that, because carbon dioxide has such a long lifespan, they probably indicate what long-term global climate change will be. However, as far as the bill is concerned, it is less clear how such an approach is relevant to a particular country that is trying to restrict its own emissions.

Dr Kerr: Many of the policy statements that have been made have been about cutting emissions by 3 per cent a year. Of course, 3 per cent of a large number is bigger than 3 per cent of a small number; as a result, there will be a very steep drop to begin with. However, because of the momentum in economies, emissions reduction will almost always take the form of an S-shape; almost all economies will reduce slowly to begin with, sharpen up in the middle and slow down again when they have to deal with the really challenging stuff at the end. I think that, instead of the assumption that emissions will simply drop away to begin with, that is a more pragmatic view of how emissions will be reduced.

Shirley-Anne Somerville: Have any other countries—large states or whatever—set cumulative emissions targets rather than annual targets in their climate change legislation?

Phil Matthews: I am not aware of that. Given that, to my knowledge, the UK and Scottish bills are the first of their kind in the world, we cannot draw on other evidence.

Alison McInnes (North East Scotland) (LD): The fact that, as Dr Kerr pointed out, the emissions inventory runs 20 months in arrears has always concerned me. Has anything been done to
speed up the process? How important is it for such information to be reported sooner?

Professor Smith: The inventory runs behind because the activity data for a given year need to be collected and pulled together. Although one could improve the efficiency of an inventory process, there is only so much that can be done. After all, a certain amount of time will always have to elapse before one can feasibly collect necessary statistics such as livestock numbers, afforestation rates and fuel consumption. Although the delay could be reduced from 20 months, a reduction to 12 months would be the maximum that could be achieved even if there was an instantaneous evaluation.

Alison McInnes: Would it be worth while trying to report within 12 months rather than 20 months?

Professor Smith: Under Kyoto accounting, reporting must be done at the end of the first commitment period, which is in 2012. Reports will be made more or less at the end of that period for the previous five years. Once we reach critical periods such as that, one would hope that annual reporting targets could speed up that process, but we will still be reporting at least one year in the past because that is where the data for the period come from.

Dr Kerr: The international standard is that reports must be made 15 months in arrears of the end of the year, so a 2006 report should be published in March or April of 2008. The Scottish statistics are published five or six months later. Presumably, we could get that back to somewhere closer to the international reporting requirements. However, we are unlikely to beat those requirements, so there will be a limit to how much can be achieved.

On the question whether the delay affects things, the answer is yes. If Scotland does not achieve its 3 per cent cut by 2021, we will find that out only in 2023. By the time that we have done anything about that, it will be 2025 so, yes, you bet it makes a difference. Such delays create all sorts of problems with the whole principle of having annual targets as opposed to carbon budgets.

Shirley-Anne Somerville: Is it feasible to measure and report on the emissions generated anywhere for goods and services that are used in Scotland?

Phil Matthews: That is consumption-based reporting. We support the Government’s general approach of using source-based emissions as the basis for the Scottish target. In our view, it would be useful to have an indicator of our wider carbon footprint or wider consumption in parallel with that, given that the two issues have been closely linked over the past 20 years. For example, in closing Ravenscraig and importing steel from the far east, we are still using something that is part of our overall carbon impact on the global economy. I would say that, yes, consumption-based reporting is important and, yes, it can be calculated. Within the national performance framework, the Government already has an environmental footprint indicator from which—as I understand it—our carbon footprint could quite easily be extrapolated.

Dr Kerr: It would be great if such reporting could be done, but it will take a while before the standards of reporting around the world are appropriate. We have global movements of goods, but the standard of reporting for emissions inventories is reasonably good in countries that are liable under the Kyoto target and pretty weak in countries that are not liable under Kyoto. There will always be a challenge in dealing with that sort of trade of goods.

Shirley-Anne Somerville: You suggest that there will be a time lag. When might the reporting be statistically strong enough?

Dr Kerr: I would not like to conjecture, to be honest.

Professor Smith: We are limited by the capacity to collect those sorts of data in the countries from which we import. Whereas many industrialised countries have what the IPCC calls tier 2 or tier 3 methods that use national bases and fairly sophisticated models for calculating emissions, many developing countries use tier 1 methods that just use default emission factors, which are not specific to their region. Generally speaking, I think that there is a greater uncertainty associated with the emissions inventories of developing countries. The only way to improve that would be to increase the capacity within those countries to move from tier 1 reporting to higher tiers of reporting. Perhaps that could be done through capacity building to improve the way that we report globally.

Shirley-Anne Somerville: Do the emission tracks that the Government has outlined—mention was made earlier of the line that the Government is assuming in the bill—reflect any of the global emissions deals that are happening? Are they flexible or stringent or optimistic enough?

14:30

Phil Matthews: The Scottish trajectory is towards a cut of 50 per cent by 2030. The cut that the Committee on Climate Change recommended as a potential target by 2020, which could be a cut of up to 42 per cent from 1990 levels, is a more ambitious target than what we have in Scotland. Obviously, Scotland is part of the wider UK act as well, but I am not sure that our target is as ambitious as the one in the UK act.
Dr Kerr: You will hear from Katherine White later, but the interim target of a reduction by 2020 of just over 34 per cent from 1990 levels, which includes Scottish emissions, was deemed to be done within the UK. The expectation was that a lot of credits would be purchased to help to deliver on the more stringent target of 42 per cent. It is not entirely appropriate to use an identical system to that which is laid out in the Government’s technical note, which talks primarily about internal emissions production.

Shirley-Anne Somerville: Based on the current scientific consensus, do you have a view on the 2030 and 2050 targets in the bill?

Phil Matthews: I take on board what Andy Kerr said earlier. Obviously, we cannot turn the economy around overnight. We are likely to see an S shape as we get all the mechanisms in place, proceed to more stringent cuts, and finally, when the low-hanging fruit has gone, complete the last stuff, which will be quite hard to achieve. However, I still think that we can do more between now and 2020 than just move on from the business-as-usual case that we have at present, with cuts in emissions of about 1.25 per cent per annum. I do not know how it could be included in the bill, but it would be good to move more quickly than the bill suggests towards annual cuts of 3 per cent by 2020.

Professor Smith: There are two factors that influence the rate at which we can change. We can change things quickly by taking the easiest and cheapest mitigation options that we can identify. Those are the options that we can adopt fairly quickly. From that perspective, we can make a large cut in emissions relatively quickly. However, there is inertia in some of our systems and institutions. We have to strike the right balance between taking the quick and easy options that we can identify and implement relatively quickly and tackling the inertia that we encounter in the system as we try to change things. Some of the changes that are required involve large changes to infrastructure. Some things will cost more but will be easy to implement once the infrastructure has changed. Some things will be relatively easy and cheap to implement. The target needs to strike a balance between those competing pressures.

However, I agree with Phil Matthews about the interim targets. It is great that we have an 80 per cent target by 2050 and a 50 per cent target by 2030, but it would focus our minds a little more if we had a more stringent target in the nearer future, such as in 2020.

Dr Kerr: I agree that Scotland can do better than scenario 1 in the technical note suggests. I wrote a paper a couple of years ago on the extent to which lots of different industrial countries had reduced their emissions, and not a single country had managed to reduce emissions year on year by more than 1 per cent except those that were going into a major recession or depression, which will deliver reductions quite easily. I impress on members the fact that radical changes will be needed in the next few years in the production and use of energy and the use of land. Whatever the trajectory is over the next 10 years, the key is to put in place the processes and policies that will deliver the cuts of 3 per cent and more that are required thereafter.

I will give an example from transport. Everyone is talking about going electric with hybrid cars. Large-scale commercial production of such cars around the world may start in about 2014, but would you buy a plug-in hybrid car unless there was electrical charging apparatus in every town and city throughout Scotland? Your answer would be no.

Scotland can put in place policies, programmes and infrastructure that will not reduce emissions now but which will enable really radical changes in the future. Regardless of what targets you set, in the next 10 years you can deliver renewable heat and electricity opportunities within the domestic sector—although renewable electricity is tied to the traded sector—and get the transport infrastructure sorted out. Those measures will not necessarily be reflected in the emissions inventory but they are critical to delivering the longer-term radical cuts that we are talking about.

The Convener: There has been some discussion of the annual targets and the trajectory in emissions reductions that are expected from the bill. Professor Smith described the momentum in the system that makes it more likely that the economy would achieve an S-shaped curve in reductions rather than more sudden or stark cuts. We have acknowledged that cumulative emissions over time will determine whether we contribute to dangerous climate change. Is the S sufficiently curvy, if I can put it that way, to avoid that? Do any of the witnesses have a view on the suggestion that the bill’s long title should explicitly refer to the Government’s contribution to the avoidance of dangerous climate change and include a specific figure for 2050?

Professor Smith: Including “dangerous climate change” in the long title would not add anything other than complexity and lots of argument about what the phrase constitutes. My preference would be to leave it simple, but that is up to you guys.

The less stringent the annual emission reduction targets are now, the more stringent they need to be in future. Andy Kerr commented that the best that has been achieved so far is a 1 per cent year-on-year reduction, so we already have fairly ambitious targets. However, just as we do not
want to load future debt on to our children, we do not want to load future emissions reduction commitments on to them. My preference, not as a Scottish citizen but from a climate change perspective, would be to have a sharper reduction and to try to identify some low-cost or even negative-cost options that could be implemented quickly to put us on the right track. The S-shaped curve could be steeper at the beginning.

The Convener: It could be steeper at the beginning than is suggested by the range of targets that are made possible by the bill.

Professor Smith: That is my opinion. Having said that I do not think that this will be easy. It will be tough to do the job that we are trying to do, and we need to balance out how realistic we are being. However, from the climate change perspective, more radical mitigation early on would be preferable.

The Convener: Some people suggest that, as Dr Kerr perhaps hinted, if an economy experiences a spike in energy prices followed by a recession, its emissions might go down as a result. It is not necessarily simple to predict whether that will happen, but it is a scenario that might occur. Given the situation that we are in, could we not expect more ambitious reductions in the early stages and require that, should the recovery materialise as expected in a couple of years, it must be sustainable in the fullest sense of the word and based on policy changes that we can put in place before then?

Professor Smith: Reduced demand and consumption should reduce emissions, but we must also develop the infrastructure to ensure larger reductions in emissions later on. Although we would rather not be in the current economic situation, it may lead to some short-term windfall benefits through a reduction in greenhouse gas emissions. However, the same economic situation may reduce the opportunities for investment in infrastructure that would lead to larger reductions in emissions later on. Andy Kerr spoke about electric cars and the need to put infrastructure in place for them. Infrastructure is also required to feed the results of microgeneration back into a large electricity grid for distribution, and that will require investment.

The recession—if it is a recession—will work in two ways: there will be a short-term windfall benefit, but there will also be threats to future investment in infrastructure.

Dr Kerr: We should also flag up the difference between the traded sector and the non-traded sector. Emissions from the traded sector are fixed by the number of allowances across the EU. Those are now set until 2020, regardless of whether people use them up or—if there is a recession—do not use them up. If people do not use their allowances this year, they will be able to keep them until 2018 or 2019. As a result, the nominal emissions in Scotland from the traded sector are fixed until 2020, regardless of what happens with end-of-year emissions.

The non-traded sector—for example, domestic heat, agricultural land use and much of transport—is a different issue. Emissions have come down, but can we drive them down further? Yes—absolutely. However, we have to distinguish between what Scotland can deliver and what has already been fixed at international level for the future.

The Convener: Should we simply accept that the traded sector can defer its emissions reductions if it does not use up its allowances, or should we challenge that assumption?

Dr Kerr: You can challenge it, but the place to do so is the European Commission. The challenge will be to get 27 member states to agree.

The Convener: I am told that that can be complicated.

Dr Kerr: Yes.

The Convener: Are there any more comments on the trajectory and on whether we could be more ambitious in the early stages? Would there be value in that? Would it be achievable?

Professor Mitchell: There is an obvious comment: it is a bit like paying off your mortgage. The sooner you start, the easier it is.

Professor Smith: I wish I had thought of that analogy.

The Convener: The Government has said that it will bring forward batches of targets, rather than set targets year by year. What issues should the Government take into account when it determines what the targets in the first batch ought to be?

Phil Matthews: The first batch goes up to 2022, so it covers the period up to and beyond the time when we are definitely aiming for 3 per cent reductions, even based on what is in the bill at the moment.

It is important that a clear steer is given every year to the business sector and the public sector on the reductions in emissions that are expected. However, it is also important that, towards the end of the period, we ensure that the slope in reductions is steeper.

Dr Kerr: If, because of any recession, emissions reduce in the next year or two, we should take that starting point and then consider the non-traded sector’s potential for reductions. We should then set targets that are a real challenge, so that the sector delivers right at the limit of what it can
achieve. That is how to push things forward. However, in order to help the sector reach those targets, you will have to vote through the right policies and measures. That may be the most challenging part.

**The Convener:** So this is about not only achievability but sending a signal. Are we talking about sending a signal that the handle will be turned further each year?

14:45

**Dr Kerr:** I would have thought so. We need to balance achievability against wanting emissions to be as low as possible. A fair approach would be to set out what is achievable and push it as hard as we can.

**Rob Gibson (Highlands and Islands) (SNP):** The bill contains no sectoral targets. Would it make sense for specific sectors to be given more scrutiny and policy direction in relation to annual emissions targets?

**Dr Kerr:** There should certainly be more scrutiny, but I am not sure whether it would be sensible to have specific sectoral targets. The more we salami slice an economy down to specific regional areas or industries, the more costly it is to deliver overall emissions reductions. However, it is clear that certain sectors have not delivered. For example, neither the transport sector nor the residential heating sector has delivered because neither sector has serious economic instruments for reducing emissions. We can pinpoint areas that have not delivered at all over the past eight to 10 years, which we must scrutinise particularly carefully. Given the Committee on Climate Change’s figures for the UK as a whole, many sectors will have to deliver dramatically more than they have done in the past few years. If one or two of them do not deliver what is required, it is clear that the overall target will not be hit. There is therefore a requirement on them all to deliver far more than they have done.

**Professor Smith:** It is useful to maintain the flexibility of not having sectoral targets at the outset because that allows the Government to choose the policy instruments that it feels are appropriate for each sector’s prevailing economic situation. If one analyses how much potential different measures can have in a sector and how cheaply that potential can be achieved, one can then assess where to get most bang for our buck across the sectors and implement a range of policies that will influence different sectors in different ways. Having separate sectoral targets at the beginning would be unnecessarily cumbersome and reduce the policy levers’ flexibility to influence different sectors at different times.

**Rob Gibson:** Professor Smith referred to low-cost options for early action in certain areas. Is the domestic heating area one of those areas, given that it has the potential for energy efficiency as well?

**Professor Smith:** Yes—definitely. On the marginal abatement cost curve, energy efficiency is right down there as cost negative; it saves money and energy, so it makes a huge amount of sense. The question is why it is not happening. One must consider the educational, societal, institutional and economic barriers that prevent it from happening. If energy efficiency is cheaper, why are we not being more energy efficient? There must be barriers in the way. The policy levers ought to try to get in place energy efficiency and other mitigation or abatement options.

**Rob Gibson:** Given that, for most parts of the UK, winter has been colder this year than in the past 10 years, I wonder whether, despite the economic depression, more domestic heating has been used than before. Does that kind of variable highlight why we should make tackling the domestic heating issue a high priority?

**Professor Mitchell:** Yes.

**Professor Smith:** Yes.

**Phil Matthews:** There has been much discussion at the UK level of a green new deal. It is vital that, in seeking ways to get out of recession, we target investment at areas that are job-creation rich, which the home energy area is. That would create an awful lot of jobs, particularly for lower-skilled people. It would have huge social benefits and provide the carbon and environmental benefits that we want. In the short term, that would help to deliver those benefits and would give us time to wait for the technologies that might take longer to kick in.

**Rob Gibson:** To sum up, you think that scrutiny is the best way to achieve the aim—you have highlighted that for us. Thank you.

Land use, land use change and forestry are particularly important to Scotland. Will you explain why that sector is important to net greenhouse gas emissions?

**Professor Smith:** Our country has a large area and a relatively small population of 5 million or so. For an industrialised country, emissions from our land use, land use change and forestry make up a relatively large proportion of our total emissions. That is why the sector is important for Scotland.

As members know, agriculture emits fairly large amounts of greenhouse gases, which could be reduced. Forestry could provide a carbon sink to remove carbon dioxide from the atmosphere. We have a lot of land and quite a lot of forestry, and
the sector is larger in Scotland than it is in most other industrialised countries.

**Rob Gibson:** Given earlier remarks, are you saying that the best policy now is not clear fell but managed forestry, which will require working in a way that is very different from how the Forestry Commission has operated?

**Professor Mitchell:** That depends to an extent on what we are trying to achieve. If we are thinking of using wood as a renewable fuel we will continue to keep the carbon sink by deforesting and allowing forests to grow again. Wood is not particularly efficient, and processing and transporting it might involve extra costs. If a forest is used merely as a sink, some management might help as it becomes more mature. However, that is a short-term measure in the life of carbon dioxide, because when a forest eventually matures, respiration and so on will start to occur, which means that the amount of carbon that it can store is saturated.

**Rob Gibson:** Since the industrial revolution, woodlands in this country have vastly diminished, so it could be argued that it is important for Scotland to restore more woodland. I will leave aside the albedo effect, because it is increasingly the case that Scotland does not have much snow.

**Professor Mitchell:** A couple of centuries ago, deforestation contributed to early increases in carbon dioxide. Scotland does not have the problem of Brazil or some other tropical countries, which found that when they started to use renewable fuels they were pushing out areas that were used for food production. That is not the case in Scotland, so the measure seems appropriate for Scotland.

**Professor Smith:** Increasing the area of woodland is a key option. The only point to bear in mind is that there are appropriate and inappropriate sites on which to do that. Deep peats hold huge amounts of carbon, particularly in Scotland, which has massive reserves of carbon stocks. About 50 per cent of all the UK’s soil carbon is held in Scottish peats, so we need to protect that resource. We could increase our sequestration by planting more trees, but we would need to do that in appropriate places and to ensure that we do not lose the large carbon stocks in our peatlands.

**Rob Gibson:** Does that apply to areas such as the east Highlands, where the only food source on the prospective land is grouse?

**Professor Smith:** We would need to look at the soil carbon map to decide that.

**Rob Gibson:** We must consider those large areas for such development, given the difference between the minerals in the soils there and those in the deep peat areas in the north and the west.

**Professor Smith:** One would need to consider the issue case by case.

**Dr Kerr:** There is a real issue with the emissions inventory in relation to land use, in the sense that landowners can undertake a number of abatement measures that will not get flagged up in the inventory as it currently is. The methods that are used to create the inventory will not necessarily flag up actions that are taken by landowners on a year-to-year basis. Until that is rectified, there is a real problem in using the emissions inventory.

**Rob Gibson:** For the record, how do you suggest that that be rectified?

**Dr Kerr:** We need annual surveys of land cover, and we need to change the methodology that is used to create the emissions inventory.

**Professor Smith:** At the moment, the inventory is too blunt a tool. It picks up land use change, but it does not pick up very well changes in the management of an individual piece of land. For example, if an area of cropland is managed differently from the way in which it was managed 10 years ago, that will not show up very well; however, if the land use changes from cropland to grassland, that will show up. We would need a new level of information and data to enable us to process that. As with all inventories globally, the activity data—the data on what is going on in management terms—are difficult to come by. Therefore, we would need not just a new inventory, but many additional resources to collect the statistics that would be needed to drive that inventory.

**Rob Gibson:** That is very helpful. Thanks. I have no further comments on that point just now.

Let us turn to international credits. The UK Climate Change Act 2008 places a duty on the Secretary of State for Environment, Food and Rural Affairs to set a limit on international credits on the basis of advice from the UK Committee on Climate Change. The Scottish Government does not intend to prescribe such a limit. Why might those different approaches have been taken?

**Professor Smith:** I do not know.

**Dr Kerr:** I do not know.

**Rob Gibson:** The UK Climate Change Act 2008 provides access to the levers at an international level that the Scottish Government does not have. Is that a reason? Could there be other reasons?

**Professor Smith:** I cannot comment.

**Dr Kerr:** The Scottish Administration has argued that it will not use carbon credits to meet its targets but that it is leaving the option open in case it
needs to do so in the future. If there is an international agreement at Copenhagen and the UK then buys in carbon credits to meet the Committee on Climate Change’s intended target of 42 per cent, a certain number of those credits will be allocated to Scotland. In that scenario, the Scottish Government will have no choice but to accept a certain number of credits on behalf of the overall UK target. So, in talking about the traded sector credits, there are sometimes unintended consequences of which we must be aware.

I do not know why the Scottish Government has chosen not to set a limit. I cannot answer that.

Rob Gibson: We will have to dig into that a little further.

I will use two value-laden words: George Monbiot. In his critique of Lord Adair Turner’s report, he suggests an immediate renegotiation of "the European Emissions Trading Scheme, imposing a lower cap on carbon pollution and the mandatory sale of all emissions permits to the industries covered by the scheme (currently over 90% are given away)."

We know that the proposal has been watered down, in European terms, even since that report was published because of the fears of industry in Germany and Poland. How do those events bear on the intentions regarding the carbon trading accounts and so on, given the conversation that we have just had?

Dr Kerr: There was a fairly basic misunderstanding among some of the non-governmental organisations after the EU agreement in December. The environmental effectiveness of a trading scheme is set entirely by the number of allowances that are available. Whether those are given out free affects distributional consequences—who has to pay the money. If they are all given out freely to industry, that is fine as long as the cap comes down—the environmental effectiveness is not changed. What that means is that consumers pay more, as industries will pass the cost of the allowances on to consumers. So, there is an economic issue to do with industry in Poland and Germany getting more free allowances over the next few years.

Nevertheless, the original proposal that was laid out by the EU to reduce the number of allowances from 2 billion to 1.7 billion in 2020 is what was agreed, so the environmental effectiveness of the scheme is as it was proposed two years ago.

You need to distinguish between the distributional consequences of the proposal—who pays for it—and its environmental effectiveness, which is set by the cap. The proposal was certainly watered down, and many industries will get windfall profits out of it. However, in December, many NGOs did not pick up on the fact that we are dealing with two very different issues.

15:00

Rob Gibson: Thank you for that helpful explanation.

The Convener: Notwithstanding Dr Kerr’s comments about the UK’s relationship with the use of international credits, the Scottish ministers have stated publicly their intention to expend most of the effort to reach Scottish targets in Scotland. However, if the bill is passed in its current form, it will allow them to decide on the additional use of credits. If the Parliament wants to hold not just the current Government but future Governments to the pledge to expend the bulk of the effort on Scottish emissions reduction targets in Scotland, would it not be most effective for us to include a cap or limit in the legislation?

Dr Kerr: Yes. Two types of credits may be distinguished. One is an EU allowance within a capped system—many of those are traded and surrendered by Scottish installations. The other is something like a clean development mechanism credit, which is bought in from an outside source. If the committee wants to create a trajectory that guarantees that emissions from Scotland through to 2050 are below the curve and that cumulative emissions are at a set amount, it must impose limits.

The Convener: Would other witnesses like to comment on that issue or on the effectiveness of CDM credits? Are such credits a reliable way of achieving additional emissions reductions?

Phil Matthews: I support what Dr Kerr said. If you want a limit, which is a good way of ensuring that the majority of action is taken at home, you should impose one through the bill.

Professor Smith: I agree. I assumed that the aim was to maintain flexibility, to allow other mechanisms to come into play if there was trouble in meeting targets. Such mechanisms are better than nothing, and it would be difficult not to allow any flexibility. However, placing a limit on their use would be beneficial.

The Convener: How much better than nothing are the other mechanisms outside the EU system?

Professor Smith: It depends. There are all sorts of issues to do with leakage and so on. I do not want to say that the other mechanisms are not credible, but we have less control over their credibility. We have much better control over reductions in domestic emissions.

The Convener: Presumably, we would also have to factor in impacts on aspects of sustainable development and the interests of developing countries, as well as our emissions targets.

Professor Smith: Quite so.
Dr Kerr: Yes. If Scotland meets its 80 per cent target in 2050 and sits there grinning at everyone else, but no one else has got halfway there, we will not have achieved anything. There are mechanisms, such as the CDM, that have the potential to support technology transfer and low-emission routes for other countries. However, whether they achieve that is a moot point—some do and some do not. It is difficult to say in the round whether such mechanisms are good or bad; it is a grey area. Some are very good and some are very poor.

Shirley-Anne Somerville: If we set 10 per cent as the maximum reduction from international credits, is there a danger that future Administrations will use that figure instead of seeing it as the ultimate limit, on the basis that it must be okay because it is set in statute? We have seen that happen in other sectors. Are we in danger of giving future Administrations an easy opt-out by setting the limit in statute, rather than basing it on independent advice and allowing flexibility?

Professor Smith: I suppose that one way round that would be to make the cap more stringent as time goes on—as will happen with the annual targets. The cap could be made more stringent each year.

Dr Kerr: Shirley-Anne Somerville made a good point. I have no doubt that once a figure is put in statute it will be used. There might be an argument for leaving things slightly more ambiguous, while ensuring that there will be a credibility gap for the Government if it has to buy credits. That might be a more powerful tool. If the penalty for missing a target is simply a loss of credibility for the Government, an approach whereby a cap on credits is not set but the Government has to go to the Parliament and say, humbly, “We’ll have to buy credits to meet our target,” might be better. Shirley-Anne Somerville was quite right to suggest that enshrining a figure in statute would force the issue.

Alison McInnes: It is intended to include international aviation and shipping in the Scottish targets. Why are those sectors often singled out as important?

Professor Smith: It is difficult to attribute emissions from those sectors to individual countries. Such emissions have historically accounted for one of the least tractable aspects of negotiations under the United Nations Framework Convention on Climate Change. That is simply to do with the fact that ships sail all round the world and can be owned in one country and registered in another. There are issues to do with bunker fuels in shipping. Aviation raises similar issues, although they are perhaps slightly less intractable.

That is the background to the position that we are in, but it does not excuse the position.

Alison McInnes: Will you talk about the sectors’ contribution to emissions?

Professor Smith: Globally, the sectors are relatively small, but, as is often pointed out in the media, they are rapidly growing, so it is right to account for them. Whether it is easy to do so is a different matter.

Alison McInnes: The bill does not set targets for emissions from those sectors, but provides that “The Scottish Ministers may, by order, make provision regarding the emissions of greenhouse gases from international aviation and international shipping that are attributable to Scotland.” Are there inherent weaknesses in such an approach?

Dr Kerr: It is worth flagging up that disaggregated emissions inventories for aviation and shipping came out only last autumn. Disaggregating to constituent countries in the UK is at an early stage.

There is a particular problem with leakage. If we fly to the United States, many of us go via Amsterdam, Heathrow or Paris. Under the inventory, such flights are deemed to be local flights, even though our end destination is the US or Asia. There is an issue about how we account for those types of emissions, and how we get round the problem is not straightforward, given that we do not always know passengers’ end destinations. There will always be an issue to do with trying to draw a little circle round Scotland and say, “These emissions are caused by passengers from Scotland.” We cannot get round that problem; it is a challenge for us.

Alison McInnes: Should we do nothing until we have solved the problem or should we accept an imperfect system?

Dr Kerr: An imperfect system is far better than no system at all. We should bear it in mind that international aviation will come into the EU emissions trading scheme from 2013. As Pete Smith said, shipping is a real challenge, which we need to find ways of meeting.

Professor Smith: That should probably be done at international level—at UNFCCC level. We cannot take action unilaterally.

Alison McInnes: Will the witnesses elaborate on the impact of Scotland’s being the only place so far to set targets that include emissions from international aviation and shipping?

Dr Kerr: The challenge is about what policy levers allow the Scottish Government to reduce emissions from those sectors. International aviation will be tied into the traded sector, so
Scotland will be allocated a certain proportion of the nominal emissions from the UK that are associated with that. Shipping is a real challenge. If that is the sector that is pushing Scotland over a target, what is the Government supposed to do to reduce emissions from that sector? The answer is that there is very little that it can do at present, but it can work with others. It can set in train a series of actions and events to support local shipping around Scotland. There are measures that can be taken in relation to Scottish waters, but one must be aware of the wider context, especially within Europe.

The Convener: Will the witnesses say a little more about the contribution that aviation emissions make to climate change? Beyond the volume of greenhouse gases that are emitted from aviation, a number of different multipliers are used to determine the impact of aviation on the climate and on climate change. Is it safe to say that we know what the correct figure is, or is that still a developing area of the science? Is the IPCC or the UK Committee on Climate Change in the correct position in that regard?

Professor Mitchell: It is not really my area of expertise, but I understand that aviation has tended to include some of the knock-on effects, which has not been the case with other areas of transport. If the committee would like, I could make a written submission on that.

The Convener: That would be very helpful. Thank you.

As there are no more comments on that issue, we will move on. I see that Des McNulty has rejoined us.

Des McNulty (Clydebank and Milngavie) (Lab): I apologise for having to leave the meeting for a period.

I want to ask you about advisory functions and the role of the UK Committee on Climate Change. I am sure that the fact that the chief executive of that body is sitting behind you will not influence your answers.

The Scottish Government proposes to use the UK Committee on Climate Change to provide advice in the first instance, but the bill allows for the establishment of a Scottish body to reflect Scottish conditions, if that is necessary. Is such a body likely to be needed? Should we draw on the best expertise that is available in the UK, or should we look to Scotland-based scientists to provide a Scottish perspective on climate change in Scottish conditions?

Phil Matthews: I think that the position that is set out in the bill is extremely sensible. There is a great deal of expertise on the UK committee, which has just published a good report, but it is useful for Scotland to at least have the option to create a body that is separate from the UK committee if, for any reason, it is thought not to be providing all the information or evidence that is necessary to implement the bill.

Professor Smith: My view is that it is extremely useful to have a critical mass of expertise. If we can ensure that the Committee on Climate Change is able to provide everything that we need in Scotland, it will be the appropriate advisory body. It is early days—the committee has been around for only a year or so—but, if things are done in that way, the more scientific expertise one has, the better.

There are unique conditions in Scotland, and there are provisions in the bill that are relatively unique to Scotland. We will need to ensure that the advice that we receive from the Committee on Climate Change adequately reflects the specific conditions in Scotland. In the first instance, the way to go might be to ensure that the committee has on it people who have some expertise of Scottish conditions in each of the various sectors.

Des McNulty: So rather than establish a separate Scottish body, you suggest that we should go for the biggest mass of expertise but consider how we access it, to ensure that the advice is particularly appropriate for Scottish conditions.

15:15

Professor Smith: Yes. For example, the land use sector might not consider muirburn, but we need to ensure that it is considered when land use, land use change and forestry projections or recommendations are passed to the Scottish Government.

Professor Mitchell: As Pete Smith said, the climate change community is quite small, and we must be careful that we do not dilute the expertise. Apart from that, I do not have a view on the question.

Dr Kerr: It is important to realise that Scotland cannot achieve its targets alone. To achieve them, the United Kingdom, European Union and local authorities all need to work together. It is therefore extremely important to have advice at a UK level, but that could be added to with specific Scottish advice if the Committee on Climate Change does not provide such advice.

Des McNulty: The Scottish Government can ask the UK Committee on Climate Change for advice but, so far, it has not done so formally. Should it ask for advice as we move into detailed consideration of the bill?

Dr Kerr: In the first report of the shadow committee on climate change, the work on
Scotland was fairly cursory, but it tried to cover an awful lot of ground. I think that the Committee on Climate Change will pick up a number of issues from that. The Scottish Government ought to say that, now that the overview report has been delivered, it needs much more detail on specific issues that are associated with the Climate Change (Scotland) Bill and/or other specific Scottish issues. Now is the time to argue for that.

Des McNulty: Is that a shared view?

Professor Smith: Yes. The national inventory is compiled at the UK level, but it is split up into the separate countries. It would be useful to receive advice in a similar way, so that it is specific to the individual devolved Administrations.

Des McNulty: Is the UK Committee on Climate Change sufficiently independent, robust and flexible to maintain the consistency of its advice and strong recommendations in the context of the present policy diversity on energy generation, for example, and fluctuating political balances in future?

Professor Smith: I have no reason to suspect otherwise.

Dr Kerr: It is worth pointing out that the energy market—or at least the electricity market—is a UK market, so even though projections may be devolved or disaggregated to Scotland, they are tied to the wider UK situation. There is no reason to assume that the Committee on Climate Change is not doing its job of considering the Scottish issues, but that needs to be scrutinised, and if the advice is inappropriate, you will need to push harder.

Des McNulty: I can give you an example. The Scottish Government is not of the view that nuclear power has a role to play in future energy generation, whereas the UK Government sees it as central to its strategy. How can the Committee on Climate Change deal with that different policy context in two separate jurisdictions when it makes recommendations?

Professor Smith: I guess that it will be your job to ensure that the brief for the Committee on Climate Change is clear and to tell it how you need the information. You will need to say that we have a separate policy environment in Scotland and that you want not a devolved, area-based estimate that is derived from the UK estimate but one that takes account of the situation here. If Scotland buys into the UK Committee on Climate Change, you can ask for that.

Professor Mitchell: I guess that the same issue applies to adaptation, in that the changes and issues in Scotland will in some respects be different from those in the rest of the United Kingdom. My understanding is that, for example, the next UK climate impacts programme will deal with the whole of the UK. It is expensive to produce that information, and it is probably more effective to do so corporately than for each bit to try to produce its own. Climate change is very much a global problem.

Des McNulty: The difficulty that I have is that the UK Committee on Climate Change is made up of people with scientific expertise. Although they are sensitive to the policy climate, if they believe that one approach to energy generation is the best approach, arguably they should argue for it and say, “But if, in policy terms, you want to do something different, here are the consequences.” It would seem to be sensible not to place the scientists in the difficult position of following the politicians. I am trying to tease out what you think the role of the UK Committee on Climate Change is. Is its role to offer the best evidence—irrespective of policy considerations—and challenge the politicians to come up with their policies on that basis, or is it to devise advice that fits in with policy considerations with which it might not agree?

Phil Matthews: I am wary about saying this when the head of the UK Committee on Climate Change is sitting behind me, but my recollection is that its recently published report said that nuclear is a low-carbon and potentially cost-effective technology, but that Government will have to take on board wider considerations. Such advice will be taken on board by the UK Government and the Scottish Government, and different decisions might be made. The Committee on Climate Change gives scientific advice and lets people take on board the wider consequences of decisions.

The Convener: I will follow up briefly on one aspect. Dr Kerr said that the community of climate expertise is small. Given that commitments are being put into legislation at a Scottish level, that commitments are already in legislation at a UK level, and that, if the international process is successful, a host of other Governments will take on responsibilities, seek to acquire such expertise and put in place arrangements so that they can meet their commitments, are we doing enough, either in Scotland or in the UK, to increase that expertise and grow the knowledge base?

Dr Kerr: I guess that I have a slight conflict of interest, in that the Scottish alliance for geoscience, environment and society, of which I am assistant director, is a big initiative by the Scottish Further and Higher Education Funding Council and 10 different Scottish universities to pool resources and expertise in environmental science to bring some of the best people into Scotland—people such as Professor Simon Tett, a climate scientist whom John Mitchell knows very
well. Having been at the Hadley centre at the Met Office, he is now up at the University of Edinburgh.

About 30 outstanding new people have been brought into Scotland under the initiative. There is a desire within the academic community to bring in the best. There is still work to be done in translating some of the academic work into usable policy evidence. That is, essentially, about a knowledge exchange involving academia, business and policy makers. I suggest that there is still a gap.

The Convener: The ability to attract talent to Scotland is positive, but if the same desire to attract talent increases in other countries, is there a danger that we will face limited supply?

Professor Smith: That is possible. Although the climate change science community in the UK is small, it is world leading, so we are not currently experiencing that problem. We have a small but very healthy community. Many of the research councils’ new research programmes, including the living with environmental change programme, which is a cross-Government, cross-research-council initiative, are moving funding in the direction of climate change science. The fact that climate change is recognised not only within society but within the research community as a large and challenging issue will attract more funding into the area. Unlike many areas of the economy, we are in relatively good shape.

Dr Kerr: Because of the very strong leadership that has been shown, people who are into renewable energy engineering and technologies, for example, find Scotland a very attractive place to come to. Also, a lot of work is being carried out on, for example, soils, soil emissions and terrestrial carbon cycles. Strong demand will follow Scotland’s genuine leadership.

Professor Mitchell: Over the past 15 years, the number of people in the field has grown enormously. For example, there has been a lot more work in universities, and the good side of that is that it brings diversity. Indeed, the Met Office is just about to sign an agreement with the Natural Environment Research Council on a joint climate research programme. There is a tension between having diversity, which allows new ideas to come forth, and bringing together people in areas where critical mass is required. One of the hopes behind the programme is that the work that is carried out in academia and at the Met Office’s Hadley centre will be well distributed to ensure that we cover the gaps and do not tramp on each other’s toes or do things twice.

The situation in the UK is becoming healthier. As Dr Kerr made clear, the important point is to build expertise and bring climate science into applications. At this point, I must declare an interest, as the Met Office is trying to use some of its commercial expertise in weather and climate issues to grow that area, which is probably where demand is greatest. Provided that things are well enough organised, climate science is probably okay; indeed, as Professor Smith has said, we are leading in the area.

The Convener: That is helpful. We touched on reporting duties a little earlier, but I believe that there are a couple of follow-up questions.

Shirley-Anne Somerville: We have already heard about the time lag between emissions taking place and reporting on them. How strong are the statistics with regard to margins of error? How are the figures revised over time? Is that an additional problem and, if so, has any work been carried out on it?

Professor Smith: Uncertainties have to be quantified as far as possible, and the UK follows the IPCC’s good practice guidance on quantifying uncertainties in national greenhouse gas inventories. Occasionally, however, there might be a methodological breakthrough or we might get a better data set that allows us to go back and make better assessments of our emissions. That is particularly the case in the very messy biological system of land use, land use change and forestry. When that happens, we have to revise the estimates all the way back to the baseline. Of course, that can be tricky for policy makers. The proportion of emissions from the land use sector can fluctuate with every new method of calculation that emerges. Once we are sure that it is the right way to go, we back-calculate the figures, which can change the relative importance of different sectors in the total budget.

As I say, all uncertainties have to be reported as best they can. There are internationally agreed methods of doing that and, as you know, the national inventories are relatively regularly—and quite stringently—inspected and reviewed by independent review panels. The issue, I think, is covered.

Dr Kerr: Professor Smith makes a good point about uncertainties. For example, the baseline between the 2005 and 2006 inventories moved by 4 million tonnes, which is a non-trivial movement—indeed, all the numbers in the 2006 inventory were changed, because they were revised backwards. Such moves cause presentational problems.

The other issue is variability in year-to-year data sets as a result, for example, of more coal burn in power stations or of a colder winter requiring more domestic heating. As I say, between 2005 and 2006, there was a change in CO₂ of about 4 million tonnes, because of an increase in coal burn in Longannet and Cockenzie. That is 7 per cent of the entire inventory and, in setting targets, one
needs to be aware of such variability and try to understand that one year's high figures might mean nothing more than that it was cold that year. I suspect that the Government’s report to the Parliament will set all this out but, as I say, one has to be sensitive to the inventory’s sheer variability from year to year.

15:30

Shirley-Anne Somerville: Do you think that the Scottish Parliament has enough expertise to assess whether the Scottish Government is delivering on its emissions reduction targets?

The Convener: You can laugh if you want.

Professor Smith: It should not be difficult for the Parliament to assess progress. The targets are transparent and there are inventories to back them up, so we will know what the emissions are and where the targets have been met. It will be challenging to allocate the emissions to different sectors and work out why things have gone wrong—that will be challenging for the science too—but you should receive advice on that from the Committee on Climate Change.

The Convener: Do you have any thoughts on what climate change duties should be imposed on public bodies? The Scottish Government is accepting some duties on ministers, which are explicit in the bill, but it is also taking the power to impose duties on other public bodies in the future. Is that a useful mechanism? What might those duties be? Would there be value in holding other office-holders in the public sector to account for their performance?

Dr Kerr: If you are talking specifically about duties to reduce emissions, the UK carbon reduction commitment will impose reductions on all public bodies that use more than a certain amount of energy, so that will be captured anyway. I presume that you are asking about other duties. Is that correct, or are you thinking about emissions reductions?

The Convener: The bill gives a broad power to impose climate change duties, but it does not specify what those duties would be, and so far the Government has not said whether it intends to use the power. Perhaps the power would be used later if it was felt that the voluntary approach was not up to the mark.

Dr Kerr: I return to the point that was made earlier about providing the required infrastructure and programmes for radical changes in the next few years. The Government may well need to require certain public bodies to do more than they would otherwise do to set the changes in train. In that sense, the provision seems a sensible measure, but it will depend on how it is delivered and used.

To give transport as an example, if we want to install charging points for hybrid cars in every city and town and at every supermarket throughout Scotland, who will pay for that? The Government might need to place a duty on local authorities to enforce the system and ensure that charging points are delivered. That is just an arbitrary example, but such things might not happen without enforcement from the top, which might well be a good place to start.

Phil Matthews: I support the Government’s ability to use that power in the future. As Andy Kerr said, the carbon reduction commitment partly addresses the matter, but we should also consider the wider community leadership role that a lot of public bodies have through community planning and so on. There is potential for joined-up local action, which could have the benefits of engaging with local people and encouraging behaviour change.

There are issues about adaptation at the local level, and a duty on that could be placed on public bodies. There is also potential to use mechanisms such as best value to encourage better performance from public bodies in relation to climate change. Some big changes are under way in best value. There are different approaches, but the bill must be flexible enough to allow more direct engagement on the matter between the Government and local authorities and other public bodies.

The Convener: That concludes our questions. Do you want to bring to the committee’s attention any points or issues that we did not discuss?

Professor Mitchell: There are a couple of minor matters. First, I mentioned the importance of taking into account adaptation—both to climate variability and to climate change—as well as mitigation. We have talked a lot about mitigation, which is right, but I will give a couple of examples of adaptation. Hydro power and, in particular, wind power are subject to variations in weather. Often when there is a persistent high-pressure system over the country, which in winter brings cold weather and high energy demand, there tends to be little wind. We must plan a certain resilience into renewables, although that is not an argument against using them. For example, some hydro power facilities have small catchments, which tend to dry out first in summer.

Secondly, on muirburn, the Met Office hopes to make a submission, with the Scottish wildfire forum, on how climate change may affect vegetation, the length of the dry season and so on.

The Convener: I am aware that secondary committees are also examining some of the issues
that you have raised. Thank you for taking the time to answer our questions. I remind you that we have set a deadline of 27 February for written evidence, if you wish to raise any other issues in writing. I suspend the meeting briefly to allow for the changeover of witnesses.

15:36
*Meeting suspended.*

15:43
*On resuming—*

**The Convener:** I welcome our second panel of witnesses: David Kennedy, chief executive of the UK Committee on Climate Change; and Katherine White, economic adviser to the committee. Thank you for joining us. Would you like to make some brief introductory comments before we move to questions?

**David Kennedy (Committee on Climate Change):** No, we are happy to crack on with questions.

**The Convener:** That is grand. I will start with an easy opener. Will you share with us your initial reflections on the Climate Change (Scotland) Bill?

**David Kennedy:** Is that an easy opener? As you know, to date we have been very focused on the UK Climate Change Bill. My first reaction to the Scottish bill is that it sets an ambitious long-term target. We have thought a little about the interim target and have some questions about how ambitious that is. We are not saying that it is not ambitious enough, but there is more thinking to be done about it and its implications for what must be done now. I reiterate a point that was made by the previous panel—the next five, 10 and 15 years are key. We must take our lead from what we have to do in the longer term—that has implications for what we do now—but we must act now. We must take opportunities and put in place the necessary policies. If we do not, we will miss the boat on reducing the risk of dangerous climate change.

15:45

**Des McNulty:** I have been beating on about the idea of short-term action and the fact that if we do not set targets that change the shape of the curve, we will end up not being able to achieve the targets that are set after 2020—which might be irrelevant in the end. Does the bill as drafted provide any—or adequate—reassurances about action in the short term, for example on our contribution to the peaking of climate change internationally?

**David Kennedy:** The framework is there. You need legally binding targets in the near to medium term, which you have in the bill. You have not said what those targets are, which is probably appropriate, because you have to do more analysis of what needs to be done and what can be done over the next few years.

There are two parts to this. One is the legislation and the numbers that you put in it, such as whether you have a 2 per cent or a 3 per cent annual emissions reduction target or whether you have five-year carbon budgets. Secondly—and possibly more important—there is the strategy that you adopt to deliver the carbon budgets. As a previous speaker said, we have a good track record at UK level of adopting ambitious targets, but a less good track record of meeting those targets. The challenge will be to set the targets, but the bigger challenge will be to come up with the strategies, and to implement them across all the sectors to achieve big social transformation, such as changes in the way that we think about business or corporate culture. That is what is required in the near to medium term. The targets are a starting point—you have the framework for them—but we need action around the targets, too.

**Des McNulty:** You said that the target for 2050 is ambitious and that it is in line with ambitious targets elsewhere. We do not have a target for 2020. The trajectory to 2020 perhaps does not do all that the environmental organisations are suggesting should be done. Do we need to have a target for 2020? If that target is not a percentage reduction of 3 per cent, what should it be?

**David Kennedy:** Let me talk you through the thought process that we used to set our carbon budgets. First, we asked what we need to do in 2050. We have said that we need at least an 80 per cent emissions reduction in 2050, relative to 1990. We then asked, what are the implications of that for 2020 and how do we get to 2020? You could take the same steps and swap 2030 for 2020 within your legislative framework. In 2050, you want to achieve an 80 per cent or more reduction in emissions. You would ask how you get to 2030 and see whether that is consistent with your being on the path to 2050. You would then ask what the implications are over the next 10 years for meeting your 2030 target rather than your 2020 target. There is a question about whether your 2030 target is appropriate; I do not know the answer to that, because we have not looked at it in detail.

At UK level, we will do a lot of work over the next year and a half on the appropriate path through the 2020s on the way to 2050. The UK Climate Change Act 2008 requires us to do that in recommending the fourth carbon budget, which we will do at the end of next year. In principle, it is okay to have the 2030 target and draw the implications for the next 10 years. As long as you
have a target for the next 10 years that is legally binding and is on track to what you are trying to achieve in the long term, that is adequate.

Des McNulty: What type of advice can your organisation make available to the Scottish Government to assist it in taking forward this policy agenda?

David Kennedy: Let us take stock of where we have got to. First, we asked what the appropriate target is based on the science and judgments around that science at UK level. You can move from the UK level to the Scotland level in relation to what is appropriate both in 2050 and on the path to 2050 in terms of ambition and contributions to global emissions reduction. We have put out a comprehensive picture of what is achievable in our view across the UK economy as a whole, in the sectors of power and transport, in our buildings, industry and in the non-CO2-emitting sectors.

We have tried to provide a high-level assessment of what is possible at the level of the devolved Administrations. That assessment is high level—an earlier witness described it as “cursory”—and it is certainly preliminary. We have had to use rules of thumb to go from the UK level to the Scotland level. For example, in considering Scotland’s energy efficiency potential, we have simply said that Scotland’s share of the total UK energy efficiency potential should be in proportion to Scotland’s share of total UK energy consumption. However, that might not be the appropriate way to go when we look at the issue in more detail if Scotland has specific factors—for example, if the building stock here is different—that need to be taken into account.

The next stage of our analysis will be to ask whether those rules of thumb are appropriate. For example, if we have not accounted for the specific factors that face the different national authorities, we will need to ask what we can do to correct that. Going forward—this depends to an extent on resourcing—we hope to build on our preliminary assessment by providing an assessment that is much more tailored to the specific circumstances that face the different national authorities in Scotland and other parts of the UK.

Des McNulty: You heard my question to the previous panel about the different policy context within which you might operate here in Scotland. Is the Committee on Climate Change’s role to provide scientific advice irrespective of the policy context, or should that advice to some extent be influenced by, and adapted to, the goals that are set by the politicians? How will you deal with that dilemma in taking things forward?

David Kennedy: I think that we will take things forward in a pragmatic way. First, we are independent, so we will not always take the policy context as a given. Before we published our report, the UK Government’s policy position was to proceed with investment in conventional coal-fired generation. Rather than take that as a given, we have said that it might be appropriate to take a different approach. Similarly, on the expansion of Heathrow airport, we have been asked to review UK aviation emissions but we will revisit the Government’s policy positions on aviation infrastructure rather than take those as a given.

That said, we are sensitive to the policy context as well. For example, on the question of investment in new nuclear power stations, it might be useful to recap what the Committee on Climate Change has said on power generation. We have said that there are different ways of decarbonising the power sector. One way is to have a portfolio of low-carbon generation assets that includes nuclear power alongside carbon capture and storage for coal and gas, as well as different forms of renewable energy. However, one could decarbonise the power sector without all those technologies in one package. For example, one could do it without CCS, in which case nuclear energy might need to pick up the slack. Alternatively, one could do it without nuclear power, in which case CCS might need to pick up the slack.

I liked the way in which you described the issue previously as a choice between various scenarios. Because of a particular policy position—for example, if people do not want nuclear power because they do not like the safety consequences or the proliferation issues, or the concerns about waste disposal—people might choose a different scenario. The consequences of that choice might be to raise the cost of meeting the given target, but people might choose to pay that extra cost to avoid building nuclear power stations here because they value some things differently from how they are seen in the UK context.

We will take a pragmatic approach that is sensitive to the policy context without taking it as a given. We will work around the policy context and be constructive by showing how the targets can be met in a way that is consistent with people’s objectives.

Des McNulty: The next question perhaps builds on that. Can you outline how the Scottish Government currently fits into your developing work plan? How do you expect that contribution or involvement to develop in the future?

David Kennedy: It is fair to say that our work programme for Scotland and the other national authorities is in flux and is up for discussion. In the discussion with the previous witnesses, it was mentioned that no formal request has been made to the Committee on Climate Change. I think that we need a formal request asking us to carry out
work to which we can then respond. Certainly, our intention is to carry on working in this area. We are committed to understanding better what opportunities exist at the level of each of the national authorities. The level of detail to which we take that work is open for discussion.

The issue of resource is involved: the more detail that you require, the more resource we need. We are resourced to take this work to a certain level, but not beyond it. More discussion is needed on the subject. That said, in principle, we are open to giving the committee the kind of advice that is needed in terms of target setting and strategies to meet those targets.

**Des McNulty:** I am not entirely clear on how the Scottish Government fed into your work plan. Your answer drifted into the issue of resources. Are you saying that you have taken a high-level look at the situation, but that you have not undertaken the detailed work that would have required greater input from the Scottish Government? As things move forward, will it make that greater input into your work?

**David Kennedy:** We should not underestimate the level of interaction that we have had thus far. When Adair Turner became the committee chairman, the first thing he did was to come up to Scotland and go to Northern Ireland and Cardiff. He did that as a statement of intent, to send out the message that the committee took seriously its duties under the Climate Change Act 2008 to contribute to an understanding of what is possible at the national level.

Beyond that, we have on-going interaction with officials at various levels of Government. I speak to some officials and Katherine White works with others on a frequent basis. Various groups also shape our thinking; again, Scotland is represented on those groups. In the report that we published in December, we scoped the part that talks about Scotland in consultation with officials in Scotland.

Thus far, we have not received a formal request from the Scottish Government. It has not yet said, “Can you advise us on what carbon targets can be achieved in certain sectors, or give us an overall picture that will tell us what our targets should be over the next 10 years?” In principle, we could do that, albeit that logistical issues would arise as a result.

**Katherine White (Committee on Climate Change):** Over the past six to eight months, I have worked directly with each of the devolved Administrations in preparing the committee’s first report. We held regular videoconference meetings during which we discussed how things were going. The Scottish analysts in particular were supportive of the process. They supplied the information that we required for our analysis. We are at the stage of thinking about what next year’s work programme will look like. We are doing work on behalf of the three devolved Administrations to contribute towards the UK progress report and UK budget. We are also in the process of developing the provision of specific advice to each Administration.

**Des McNulty:** With regard to the bill, the Scottish Government’s position is that it will rely on the UK Committee on Climate Change for advice in the first instance, but it reserves the option to establish a separate Scottish committee in due course. What level of resource and which governance and accountability arrangements need to be put in place if the UK Committee on Climate Change is to continue to act as the appropriate resource for advice to the Scottish Government?

**David Kennedy:** Under the Climate Change Act 2008, appropriate provision was made for governance, the framework for which involves a set of duties that include the duty to respond to requests from Scotland, whatever the issue. The sponsors group is key to shaping our work programme and channelling requests to us. We are holding a sponsors group meeting tomorrow, at which we might discuss the detail of what we can contribute to the emerging agenda in Scotland.

You asked about resource. At the moment, in our work with all the devolved Administrations, Katherine White is our only resource. She is on secondment from Scotland to the committee. Although she has made a valiant effort, I do not expect her to be able to propose appropriate targets and say how Scotland should meet them across all the sectors over the next 10 years. That would be too much for one person to do.

Further discussion will be needed on how to make progress. We will probably need at least one other person on our side; we are not talking about another five or 10 people, but at least another one. That person would work on the analytical and evidence base with all the people whom you have on your side, to make joint progress. I will have to go back and discuss the issue, but I think that our committee would probably have the capacity to scrutinise and discuss issues relevant to the Scottish Government, just as we did on the UK carbon budgets.

16:00

**Des McNulty:** Scotland has a specific landscape and environment—not just in geographical terms, but in policy terms. Can the way in which your committee is set up take account of our different circumstances?

**David Kennedy:** The short answer is yes. That will be the next stage of the work.
I will give you another example. We have done high-level UK assessments of changes in land use, of forestry and of agriculture. We suspect that the analysis will be very different at Scotland level, and we would like to look into that in more detail. From an analytical perspective, we are well equipped to do that. We have the collective expertise; we may need more people, but they could tap into a general expertise that we have built up. If evidence were taken to the committee, it would be able to give it a good hearing, understanding the specific conditions in Scotland under the different authorities here, and making appropriate recommendations.

**The Convener:** Earlier, in discussing whether the UK committee could challenge Government policy, you described the committee as independent. How is that independence guaranteed?

**David Kennedy:** It is up to us to ensure that we continue to be independent. From what we have already reported on, I think that you can see that we have not been swayed by Government—for example, on the question of investment in coal-fired generation. On the issue of credits, we have suggested that the Government be more restrictive than I think it would like to be. I could give a range of examples.

We report to Government and to Parliament, and what we say is transparent—everybody can see why we are saying what we are saying, and that it is all based on evidence and analysis. That is the foundation of our independence. We are not pulled by the political considerations of the day, and we demonstrate that by backing up our arguments with evidence and analysis.

**The Convener:** You will be well aware that, in Scotland, we do not always have Governments with a majority or a democratic mandate in the Parliament. Could it be argued that the resources that are made available for an advisory body in Scotland, or for appointments to that advisory body, might be better held by the Parliament than by the Government?

**David Kennedy:** I have asked myself that question in the context of the UK Government and our funding. The people who decide on my budget are the people whom we are advising, and we might not be advising them in the way that they would want. One solution to that would for Parliament to agree the funding and the appointments each year. At the moment, we could have recourse to a select committee if we felt that issues arose to do with funding and appointments, but such issues have not arisen so far. However, there could be a risk.

**The Convener:** It is early days.

**David Kennedy:** Yes.

**Rob Gibson:** The convener’s question may have been relevant at UK level, because there might be a minority Government in London after the next election.

You heard the evidence—Mr McNulty did not, because he did not hear the questions—on fine-tuning the emissions inventory. You have spoken about Scotland’s particular land use concerns. In the next year, will you be able to use the inventory? Your first reports contain high-level information, but will it be possible to collect better information for the emissions inventory, as part of our weaponry?

**David Kennedy:** In respect of non-CO₂ emissions, particularly in land use in agriculture, there is uncertainty about what the emissions actually are. There are rules of thumb, and conventions are used for translating numbers of livestock into emissions, for example, but that may not reflect what happens in practice on individual farms. Ideally, that should be addressed over time, and it is being addressed. We are moving towards using a smart inventory, which DEFRA is developing at the moment. We will have better information.

Does that mean that we should just wait and do nothing in those areas until we have better information? No: it is pretty clear—even on the basis of the information that we currently have—that there are abatement opportunities that we can quantify and take advantage of, although they may change over time. That is not a reason not to proceed, and we can make progress over the next year.

**Katherine White:** I recognise that the uncertainties that are associated with reporting land use change emissions in Scotland are greater than those for the UK, but the figures are the best that we have for now. There are two ways in which they will be improved over time. The centre for ecology and hydrology, which produces the projections and inventory for land use, land use change and forestry, is constantly improving its approach—that is part of its contract. Also, I am involved in the steering committee for the inventory contract that DECC leads on. The national atmospheric emissions inventory team is reviewing every area of the disaggregated emissions inventory and considering how it could be improved. No doubt, it will identify areas in land use change and other sectors where, as Pete Smith discussed, we could collect more bottom-up, Scottish or relevant devolved Administration data to support a more accurate inventory. We are directly engaged in that, but we recognise that it will take time and more resources if we are to collect annual surveys of different types of data.

**David Kennedy:** A flexible strategy might be needed. If it becomes clear that emissions
reductions in land use change, forestry or agriculture are not being delivered, they may need to be picked up somewhere else or the level of ambition may need to be changed. That will be a choice in the future. However, the Scottish Parliament’s legislative framework will allow such flexibility.

Rob Gibson: That is interesting work in progress that is happening before our eyes. Are you in a position to tell the committee about advice that may have been requested by either the UK Government or other devolved administrations either since the Committee on Climate Change was statutorily established or while it operated in shadow form?

David Kennedy: Can we tell you about work that the Government has requested from us?

Rob Gibson: Yes.

David Kennedy: The Committee on Climate Change existed in shadow form for a year and was established statutorily on 1 December 2008, which is when we reported back on the first set of questions we had been asked. Originally, it was about the carbon budget and the five-year emissions ceilings for the UK. The questions then became, “Should those be carbon or greenhouse gas budgets?” “Should aviation and shipping be included in our long-term target?” and “What should the long-term target be?” We reported on all those on 1 December 2008.

The next thing on which we have to report to the UK Parliament is progress in reducing emissions relative to budgets, in September 2009, although we will not by then have a lot of data. We will have preliminary data on 2008 emissions, but they will not be the basis for a substantial report. We are going to use that report as an opportunity to lay out a set of detailed indicators—a road map or strategy for meeting the carbon budgets that we proposed last December.

Another piece of concrete work that we have been asked to do is to review UK aviation emissions between now and 2050; to provide advice on whether they should, in 2050, be below or at 2005 levels; to consider the implications for emissions in aviation on the path to 2050; and to draw out some of those implications as regards infrastructure—the expansion of airports, new runways and so on.

We were also asked to review the UK framework for low-carbon technology research and development. I think that we are about to agree in principle to do that review. We will be asked next year to review the second-phase cap for the carbon-reduction commitment across the UK. We must also fulfil some statutory duties and report in July 2010 to Parliament, which we must also provide in 2010 with our first report on adaptation and our advice on the appropriate path through the 2020s.

Rob Gibson: Has either of the other devolved Administrations asked you for advice?

David Kennedy: We have worked closely with them, but have not had specific requests. They know that we have a work programme in this area and that we are scoping another—which is where the opportunity to advise you here in Scotland comes from—but they have made no specific requests. I am not sure that the Northern Ireland Assembly will do so, but the National Assembly for Wales might.

Rob Gibson: It is early days. Given that the UK Committee on Climate Change will have a role in reporting on progress towards the Scottish emissions targets, do you monitor the Scottish Government’s policy decisions and publication of key documents, such as the national planning framework and the strategic transport projects review? If so, how do you do it?

David Kennedy: Rob Gibson has touched on a sensitive issue for us. When the UK Climate Change Bill was going through the Westminster Parliament, there were many questions about what we would say about policy as opposed to what we would say on appropriate targets and the technical means of meeting them. There is a difference between saying what we can do about our buildings and saying something about the policies that will help to achieve that.

We started by looking at what we need to do and at the opportunities, but we are moving into a space in which we will speak much more about appropriate policies, whether for buildings, supplier obligation or energy performance certificates. For example, we will ask what the appropriate policy is for making people want to buy electric cars rather than conventional cars.

Moving into the policy area is a transition for us. We are aware of the UK policy framework and of the national authorities’ frameworks at a high level, but we have not yet looked at them in as much detail as we will. Part of our work programme will therefore be to develop a detailed understanding of the policy framework, and then to make appropriate statements to take it forward.

Rob Gibson: It appears from what you say that you expect the UK Committee on Climate Change to change how it gives advice. Currently, you can give advice, but people can carry out their own policies, whatever you say. However, you expect increasingly to target policies in such a way that it will be more difficult in the future for Governments to dodge them because they will be more focused through having better information.
David Kennedy: We will have our views on what the appropriate policies are, and we intend that they will be based on robust analysis and evidence. If Governments—at UK level or at the level of the national authorities—disagree with us, they will have to say why. That will certainly be the case at UK level. Governments set the rules and are free to disagree with us, but a dialogue would have to happen before they could disregard what we said.

The Convener: You said previously that you can advise not only the Governments but the Parliaments and the Assemblies. Does that apply to requests for advice? For example, would a request for advice from the Transport, Infrastructure and Climate Change Committee be dealt with in the same way as a request from the Scottish ministers?

David Kennedy: Let us be clear: the UK Parliament cannot ask us to do things. We will report to it annually on progress on meeting carbon budgets. I am not sure whether, under the relevant legislation, this committee could make a request to us—I suspect that it could not. I think that such requests must come to the sponsors group from the Scottish Government.

The Convener: That is clear—thank you.

16:15

Shirley-Anne Somerville: You believe that the Scottish Government's 2030 and 2050 emissions reduction targets can be met, but will the requirement to implement 3 per cent year-on-year cuts only from 2020 deliver those targets?

David Kennedy: The best way to answer that question is to approach it from the UK level. We have said that under our intended budgets—which would apply following a global deal and which would make the appropriate and necessary contribution to global emissions reduction—we envisage a 42 per cent emissions reduction by 2020, on the way to an 80 per cent emissions reduction by 2050. Along that path, the annual average percentage emissions reductions are between 2.5 to 3 per cent to 2020 and are above 3 per cent beyond 2020. If we read across from that, the 3 per cent reductions from 2020 that Shirley-Anne Somerville mentioned are probably okay as a minimum. Scotland might well want to do more than that—it will depend on how far it has got by 2020. Up to 2020, Scotland will be looking for reductions of at least 2 per cent, moving towards 3 per cent, to be consistent with the UK as a whole.

Shirley-Anne Somerville: The Climate Change (Scotland) Bill's approach differs from that in the UK act. Do you have a view on setting batches of annual targets rather than carbon budgets? Is one option better than the other or does the choice of approach make no difference?

David Kennedy: We took carbon budgets as a given in the UK context. Our duty was to advise on carbon budgets, not on annual targets. If we were asked to advise on annual targets, we could do so using our analysis and our evidence base, because we have assessed the emissions reduction opportunity in each year to 2020 and we have assessed the appropriate and required international contribution by the UK in each year to 2020.

I can rehearse the arguments that arose as the UK act went through Parliament. That act does not include annual targets because they might not provide adequate flexibility, given the year-on-year changes in emissions because of the weather, for example—emissions rise in a cold winter because people use more heating and we must burn more coal in our power stations. Such factors can mean that reductions go off track from year to year, although they are not off track in the five-year context. That is why the UK went for five-year carbon budgets.

Shirley-Anne Somerville: Another difference is that the Scottish bill does not include the concept of banking and borrowing. Do you have views on the different approach that we are taking?

David Kennedy: Banking and borrowing—particularly borrowing—was felt to be necessary in the UK to allow for events that can happen year on year. If a cold winter occurred at the end of a budget period, borrowing against the next budget might be possible. Banking and borrowing provides flexibility for such events. What can be borrowed is tightly drawn; that is certainly not a get-out-of-jail-free card that allows borrowing to delay the taking of action, which would store risks for the future.

Is it appropriate not to have banking and borrowing in Scotland? If Scotland has year-on-year targets, some flexibility is probably wanted to allow for such events. The committee might want seriously to consider allowing a little borrowing from future years.

Shirley-Anne Somerville: You have said that Scotland has opportunities to reduce emissions by 7 million tonnes of carbon dioxide by 2020. Have you calculated what year-on-year percentage reduction would be required for Scotland to hit your figure?

Katherine White: No. That figure is the sum in 2020 of the sector-specific abatement opportunities that we identified for Scotland—it means 7 million tonnes of abatement in 2020 versus the projected emissions without those measures. We have not yet examined how that would evolve over time, nor have we examined the
annual savings in Scotland, which would enable us to say what percentage reduction would need to be achieved.

**David Kennedy:** We can do the calculation for you—not today but with a short turnaround. It would not be difficult to compare reduced emissions levels with current levels and to come up with an annual percentage reduction.

**Shirley-Anne Somerville:** Am I right in saying that the figure for abatement potential for each nation was not arrived at through a bottom-up analysis of policies and might be subject to change?

**David Kennedy:** Yes. That is the next stage of the work. The preliminary assessment does not reflect specific circumstances in Scotland. That is something that we need to bottom out. We have said clearly in our report that the figure would not be an appropriate basis for target setting, because further work is needed to tailor it to the specific situation in Scotland. We envisage that work being done during the next year, which will lead up to the inclusion of your targets in legislation in about a year and a half.

**Alex Johnstone:** It is interesting that you think that there is the potential to reduce CO₂ emissions in Scotland by 7 million tonnes by 2020. Have you done the calculations for any of the other five key gases?

**Katherine White:** Alex Johnstone quoted the CO₂ equivalent figure, which includes savings associated with methane, nitrous oxide and fluorinated gases.

**Alex Johnstone:** If that is the case, in which key area can the best savings be made in Scotland?

**Katherine White:** The abatement potential that we identified, which I stress is an initial assessment—as David Kennedy said—does not cover all areas of the Scottish economy. We focused on emissions savings through energy efficiency in buildings and industry as well as on savings in the road transport, agriculture and waste sectors. We did not cover the power sector, for example.

There is significant potential in energy efficiency in the residential sector. If I remember rightly, about 3 million tonnes of the 7 million tonnes of savings would come from the residential sector. Energy efficiency is a key area of potential in Scotland. However, we did not take into account the state of the housing stock in Scotland, which is different from the UK average on which the analysis was based. We have done an initial assessment, but we would have to take into account that there are more off-grid homes in Scotland and that different types of wall structure might mean that it is not possible to insulate walls as cost effectively as we assumed it would be in the assessment. Although we identified considerable abatement opportunity, I cannot say that there is an accurate assessment for Scotland.

**David Kennedy:** Let us not underplay the assessment too much. We keep saying that it is an initial assessment; although the numbers might change a little as we take account of specific circumstances, the message will not change. The message is that there are opportunities in all sectors in Scotland, none of which should be neglected. Scotland’s strategy should cover residential and non-residential buildings, transport, agriculture, waste and the power sector.

**Alex Johnstone:** In statistical terms, would you say that potential savings are about 7 million tonnes?

**Katherine White:** Yes. I cannot give the range, but we expect the figure to be in that ball park.

**Alex Johnstone:** Is the information that is available on international aviation and shipping robust enough to be included in Scottish targets at this stage?

**David Kennedy:** I would differentiate between aviation and shipping. We have considered the issues in great depth and we have been troubled over whether aviation and shipping should be included in the UK carbon budgets. We recommended that they should be in the long-term target but not in the budget, because of complexities to do with measuring and allocating emissions. There are methodologies that we are comfortable with for allocating aviation emissions to the UK from international flights. Bunker fuels data comprise one of those. We could have gone either way on recommending whether or not aviation should be included in the carbon budget.

Somebody asked a question earlier about radiative forcing. That issue needs to be bottomed out—there is no consensus on the appropriate solution. We have used a radiative forcing factor of 1, as is the convention—that number is used for the inclusion of aviation under the EU ETS. Everybody agrees that 1 is not the number that we would choose, however; it is at the very left-hand side of the distribution of numbers that we could possibly use, and its use is the result of political negotiation. That number will probably have to change in the future. We will examine further whether it should be 2, 3 or 4, in the context of the aviation emissions review.

Aside from radiative forcing, we think that it is possible to allocate aviation emissions at least to the UK level; we will need to look into the complexities of going to the Scotland level. I believe that you will be asking us about that as part of your wider requests in the future.
Shipping is slightly different. We were not satisfied that we could get a handle on the UK share of international shipping emissions. If we think about a ship that has come from east Asia and has stopped at 15 places on the way here, unloading and loading different cargos and fuelling up at different places, it is not clear what the UK’s share of that vessel’s emissions will be. Although we have methodologies to apportion emissions, we were not comfortable that they actually represent our share of shipping emissions. That led us to conclude that we cannot tackle shipping emissions at national level, and that the only way to tackle it is at global level, with global agreement. With that in mind, we are watching what the International Maritime Organization proposes to the United Nations Framework Convention on Climate Change by way of a global agreement later this year. That will be the key as far as shipping is concerned. It is difficult, however, to arrive at a meaningful number for shipping at the national level.

Alex Johnstone: We heard earlier that the UK act is likely to apply a limit on international credits, based on your advice. The Climate Change (Scotland) Bill does not contain a similar power for the Scottish Government. What is your view on that difference?

David Kennedy: I will quickly take you through why we said what we did about credits. We started off at 2050. We do not envisage that there will be a lot of use of credits in 2050 because all the countries of the world will have ambitious targets that they will have to meet under a global agreement. Nobody will be selling. The implication is that we must have an 80 per cent reduction domestically—or largely domestically—by 2050. As we move forward in time, we must start preparing for that. We cannot buy credits right up until 2050 and suddenly have an 80 per cent cut domestically; we must do things domestically on the way to 2050 to meet the 80 per cent target through domestic action. We were aware of concerns around the certainty of credits, which are calculated against the baseline—rather than a cap—but that was not why we said that we should limit the use of credits; rather, it was because we need to be on track in taking action domestically for 2050.

We should certainly meet our interim budget through domestic action alone—that is the 34 per cent cut. Then, we could buy credits to go from 34 to 42 per cent in 2020. The UK act, as you have said, requires the Government to consult the Committee on Climate Change on the appropriate use of credits and to legislate five years ahead. The use of credits will be discussed only for the first budget period. In March or April, the Government will say what legislation it will introduce on carbon budgets.

We expect the Government to follow our advice and to allow the use of credits under the legislation, but to choose not to, in order to meet the interim carbon budgets. Beyond that, when there is a global deal, we will be comfortable about buying in, for instance, 10 to 15 million tonnes of CO₂ emissions reduction a year. In the Scottish framework, you do not have the flexibility to buy in 10 or 15 million tonnes of CO₂ a year. Within your framework, I would approach carbon budgets by asking what is achievable in the non-traded sector—buildings, transport and so on. That would form the basis of the targets in Scottish legislation—unless you decide that you, too, wish to buy credits as a means to meeting targets. I am not sure, however, whether that would be consistent with the Climate Change (Scotland) Bill.

The Convener: You mentioned that you were doing some further work on radiative forcing. Are you able to say when that is likely to be completed?

16:30

David Kennedy: We have to report back on aviation emissions in the UK as a whole in December this year. It is not specified when in December, but we are working towards the end of November for a 1 December delivery. We will examine a range of matters, including the role of carbon prices in aviation, possible efficiency improvements, the role of infrastructure investment, radiative forcing and what forcing factor is appropriate. I imagine that we will say that 1 is not is an appropriate forcing factor to use, but it is difficult for the UK to change to a different forcing factor. Unless other countries also change, there is not much point in doing it. However, let us not pre-empt what we will find.

The Convener: A couple of committee members asked the previous panel of witnesses about whether the current economic situation makes a reduction in short-term emissions over the next year or two likely. There will obviously be a time lag before we find out whether it has happened, but is it a reasonable expectation? If it is, should that make it possible for us to set a more ambitious trajectory in the ranges for annual targets that are specified in the bill?

David Kennedy: I cannot give you a definitive answer to that, but it will be part of our work programme at UK level over the next few months. We want our report to Parliament to include a chapter about the macro context and its implications for meeting carbon budgets.

There are two countervailing forces. As economic activity falls and gross domestic product drops, energy consumption goes down and emissions go down with it. On the other hand,
fossil fuel prices have fallen as part of the global economic situation and, as they fall, we consume more energy. We will have to watch how those two forces balance out. We will analyse that using our energy models and come to a view on it.

I agree that, if emissions were to go down because of the macro situation, you should reflect that in your targets and make them more ambitious than they otherwise would be. You should not use the economic downturn to say that you have been successful in reducing emissions and do not need to take other measures on buildings and transport. That is a risk, but we will give a clear message in the UK context that, although the budgets that we will have in legislation may have been based on a different macro context, we should attempt to outperform them because the macro situation has helped to drive emissions down.

Alison McInnes: Will you outline the reporting requirements that result for you from the Climate Change Act 2008?

David Kennedy: The primary requirement is that we must report annually to Parliament on progress in meeting carbon budgets. The way that we interpret that requirement is that we will make a detailed assessment. We will not simply say what the trajectory for emissions is under the budgets, what emissions are doing and what the difference is and leave it at that. In our report to Parliament this year, we will publish a set of leading indicators against which we will judge future progress. We will have indicators for the number of buildings that should have been insulated, the number of hybrid cars that we should have in the mix at a certain point in time, and the number of gigawatts of renewable electricity capacity that we should have on the system, as well as targets for emissions in particular years. We will use that framework to report annually to Parliament. The first annual report after September this year will be in July 2010 and we have to report each year after that.

Alison McInnes: Will the Scottish Parliament have sufficient expertise to assess whether the Scottish Government is achieving emissions reduction targets? How might we improve that?

David Kennedy: I do not know enough about what expertise the Scottish Parliament has to be able to have a view on that. It will depend on whether the Parliament is presented with a robust analysis upon which it can make a judgment. One does not need to be a specialist scientist to read a decent progress report, so I guess that it will come down to the quality of the report that is presented to the Parliament.

The Convener: My final question concerns the part of the bill that creates the power for the Scottish ministers to introduce secondary legislation to impose climate change duties on other public bodies. Do you have any thoughts on what the role of those duties might be and what kind of duties would be applied? Would there be value in acting on that power early rather than tucking it away and thinking about using it in a few years?

David Kennedy: The main lever for reducing emissions in the public sector is the carbon reduction commitment, which provides a significant opportunity across public sector bodies. If the cap in that is set correctly, it will provide incentives to get emissions down and manage energy efficiently. It is not immediately obvious to me that there is a need to go beyond that, but there may be scope for the Government and public bodies to do something on green procurement. Certainly, many of our stakeholders perceive that the Government must be seen to act as it tells everybody else to act. Green procurement is a highly effective lever in that, so there may be an opportunity to do something on that over and above the carbon reduction commitment.

The Convener: That would mean requiring public bodies to do what they have been permitted to do so far: to take sustainable development into account in procurement.

David Kennedy: Yes, it would mean strengthening the incentives and requirements on green procurement, although I am not in a position to say exactly what that would achieve. As I have said, there is a lot in our work programme this year. The Committee on Climate Change has existed for only a year and there was a limit to what we could do in the past year. However, green procurement will be important for us in the future and we want to come to a view on whether it will be a big issue. I suspect that, regardless of whether it results in big emissions reductions, the signal that it gives will be important as part of leadership from Government on the climate change strategy.

The Convener: The committee has no further questions. Do you want to bring to our attention any other issues that have not been covered?

David Kennedy: We have covered the range of issues that came up in the report and signalled our intention and willingness to work with you in the future. We need to take that debate forward, but we can do so offline; we do not need to do it today.

The Convener: We look forward to that. I thank you both for the time that you gave to answer questions. That concludes the meeting.

Meeting closed at 16:37.
Dear Mr Harvie,

During your evidence session on the Climate Change (Scotland) Bill which took place on 27 January, you asked for witnesses views on the use of aviation multipliers. I undertook to provide you with a written note.

Aviation emissions contribute to climate change through a variety of climate agents (carbon dioxide, ozone and methane, water vapour, aerosols, contrails and cirrus) with a large range of timescales. The objective of non-CO2 multipliers is to factor in these non-CO2 climate effects into an equivalent CO2 alone effect. It has been suggested that the Radiative Forcing Index –defined as the ratio of the total radiative forcing due to aviation to that due to CO2 alone– should be used as a non-CO2 multiplier for aviation. We do not believe this is appropriate because radiative forcing is an instantaneous rather than a forward-looking measure of climate change. As such it can be highly misleading, because it gives too little weight to carbon dioxide –that remains in the atmosphere for several hundred years after emission– and too much weight to the effect of condensation trails that only last for a few hours. Other metrics of climate change can be used, which suggests that if an aviation multiplier is to be used, it should be smaller than earlier suggestions that were based on the Radiative Forcing Index.

In addition, multipliers have not been calculated systematically for every economic sector. Some sectors like shipping have a multiplier less than one because of the negative radiative forcing—or climate cooling—associated with emissions of short-lived sulphur dioxide and smoke particles. It is not clear yet how to treat less-than-one multipliers in climate policies because there are also good reasons to reduce aerosol emissions to improve air quality and combat acid rain.

In the case of aviation there are further issues concerning the long term effects of nitrogen oxides on methane and ozone which are not yet well quantified.

In conclusion the current scientific knowledge does not support the use of a non-CO2 aviation multiplier when assessing the impact of aviation emissions on climate. However, given that there are currently no robust alternatives, there may sometimes be a case for using RFI for illustrative purposes to show the non-CO2 effects of aviation until a robust measure is available, provided its limitations are made clear.

Our research has shown that there is some scope to reduce the non-CO2 climate effects from aviation and more collaborative research is needed to find practical solutions that would allow the aviation sector to minimise their non-CO2 climate effects.

I am grateful to Professor Keith Shine (University of Reading) for directing me to the following papers, where further information on this issue can be found:

Forster P, K Shine and N Stuber, 2006. It is premature to include non-CO2 effects of aviation in emissions trading schemes, Atmospheric Environment, 40, 1117-1121.

Forster P, K Shine and N Stuber, 2007. Corrigendum to It is premature to include non-CO2 effects of aviation in emissions trading scheme, Atmospheric Environment, 41, 3941. (The corrigendum does not materially affect the conclusions of the original paper.)

Thanks also go to Olivier Boucher, Met Office Hadley Centre, who undertook several pieces of work on this subject for the International Civil Aviation Organisation (ICAO) and EUROCONTROL.

I hope this information is helpful.

Yours sincerely,

Professor John Mitchell
Director of Climate Science, Met Office
Climate Change (Scotland) Bill: Stage 1

14:01

The Convener: Item 2 is continuation of our scrutiny at stage 1 of the Climate Change (Scotland) Bill. This is our third evidence-taking session on the bill. Today, we will hear from two panels of representatives of the Stop Climate Chaos Coalition. We expect to continue taking evidence on the bill at stage 1 until around March, when we will hear from the Minister for Transport, Infrastructure and Climate Change. In addition, we have issued a call for written evidence, the deadline for which is 27 February.

I welcome the first of our two panels, which comprises Richard Dixon, director of WWF Scotland; Duncan McLaren, chief executive of Friends of the Earth Scotland; and Dave Watson, Scottish organiser for Unison. I gather that the witnesses would like to make some brief opening remarks.

Richard Dixon (WWF Scotland): I will introduce the Stop Climate Chaos Scotland coalition, so that the committee is clear about who we are. Today, you will hear from two panels of witnesses from the coalition. We are made up of 30 organisations that are campaigning together on climate change. Our members include environment groups, two of which are represented here today, development non-governmental organisations, some of which will take part in the next session, faith groups, unions, community councils, student societies, women’s organisations and many others. Collectively, we represent supporters in Scotland numbering about 1.5 million.

For more than two years, we have been coming together to think about the key issues and how a Scottish climate bill might look, and to discuss what our collective views should be. Active working groups in the coalition have worked on detailed issues, which we will address when answering members’ questions. We have campaigned on those issues for most of the past two years.

As members know, 2009 is a critical year for action on climate change. The global deal negotiations will continue throughout the year, culminating in the Copenhagen meeting in December. In Scotland, we have an opportunity to contribute to that global deal by producing a world-class piece of climate legislation. Our aim is to help the committee and the Parliament to come up with a benchmark piece of legislation that means that the global deal to which everyone signs up at
the end of the year is better than it might otherwise have been.

The Convener: I will begin with a couple of questions about the science. The scientific basis for the Climate Change (Scotland) Bill is the reports of the Intergovernmental Panel on Climate Change and the United Kingdom Committee on Climate Change. Is the Scottish Government using the most relevant and up-to-date scientific information on climate change? If not, where should it look?

Richard Dixon: The IPCC is a big, collective scientific enterprise. It is quite conservative, because its conclusions must be signed off by all the Governments that have signed up to it. When it presents a picture, we can believe that that has a lot of credibility. We can also believe that its reports are quite conservative and that the science that has gone into them was probably a couple of years out of date by the time that they were published, because the process is so long. When the IPCC assessment report first appears—the most recent is the fourth assessment report—it is the authoritative, mass verdict of scientists. However, after it has appeared, other studies might be published that suggest that a particular thing is going wrong more rapidly than we expected.

We need to start with the IPCC report because it is the collective view, but we must also be up to speed with new science that comes along, which might suggest different impacts from those in the IPCC report. For example, it is quite well known that the most recent IPCC report reduced the estimates for what the sea level rise might be in 2100. Since then, a number of studies have suggested—there is now quite a consensus on this within the scientific community—that the estimates should go back up again to a higher set of numbers. The Government’s civil servants, those who deal with the science and committee members have a judgment to make about the credibility of individual scientific studies. Pretty much anything that the IPCC says can be taken as credible, but it will be out of date. In taking other studies into consideration, we need to be careful about how we treat what might be an outlier or maverick study.

For the bill, the key thing about the IPCC reports and any other additional studies is what they say that we should do. There has been a quite consistent message: we must reduce emissions rapidly, as the next five to 10 years are important for global reductions; the scale of the reduction required is that we reduce emissions for the whole world by about 50 per cent by 2050; for industrialised countries such as ours, that means that we need to reduce emissions by at least 80 per cent by 2050. That is what the bill is telling us.

On the scale of the emissions reduction that is required by 2050, we are still saying the same sort of thing about the need for early action, on which we are very keen. The most important thing is how quickly everyone’s emissions decline. The IPCC agrees on that, but some scientists now say that, actually, 450 parts per million or 400 parts per million might not be quite enough. The outliers now suggest that we need to aim for around 350ppm of carbon dioxide equivalent, so we need to do something more impressive in terms of the global concentration in the atmosphere in 2050.

The bill has in mind the 2° threshold that most scientists have been talking about, which is somewhere between 400ppm and 450ppm. That is still probably where the scientific consensus is. Aiming for that sort of temperature increase and that range of concentrations gives us a reasonable chance of keeping the final temperature rise to a 2° increase. However, some credible outliers are beginning to say that we need to do a bit more than that. By starting off with rapid reductions and the long-term target, the bill is probably about the right thing to pass just now.

Duncan McLaren (Friends of the Earth Scotland): I have two brief points to add.

On a practical note, I am not sure that it would help if the bill specified additional sources of scientific advice. However, the bill could ensure that the advisory body is constituted in such a way that it can access the most up-to-date scientific advice and that it has a remit to transmit that advice to ministers. That could have implications for a number of the high-level targets and mechanisms within the bill, including the 80 per cent target. Members will note that we have called for a reduction of at least 80 per cent. My reading of the climate science as it is moving—in particular, the advice that concentrations will need to be lower—suggests that 80 per cent will be only a staging point in a longer-term transition. The target might need to be achieved earlier than 2050. It ought to be possible within the mechanisms under the bill to bring the target forward or to make it tougher before we reach 2050.

Similarly, if the bill requires ministers to make reference to a safe cumulative budget as well as to a point target—as part of a belt-and-braces approach—that will, by definition, require the advisory body to think about what is safe and fair in the context of the current state of the science. I understand that that is how the UK Committee on Climate Change intends to operate. The UK committee has indicated that, if the science changes, it expects that it will advise budgets for subsequent periods to be significantly tightened. We need to have that capacity in the bill.
Rob Gibson (Highlands and Islands) (SNP): I just want to catch up with your thinking. How can outlying scientific studies do any better, given that, at present, it takes about 20 months to provide the statistics for the IPCC to judge how we are progressing?

Richard Dixon: The issue is that the IPCC process involves about 2,000 scientists. It is a lengthy process that involves a lot of sign-off and peer review. Many of those 2,000 scientists are doing their own research. Even while the IPCC report is in gestation, they might be producing another paper that is more up to date. Even if that takes a year to get through the peer review process before it appears in a credible scientific journal, it is still probably a year more advanced than the IPCC report that has just been published.

Important, credible and correct pieces of research can emerge even at the same time as the IPCC report, and certainly just after it, which are worth taking note of.

As Duncan McLaren suggests, part of the advisory body’s role must be to help you as parliamentarians and the Scottish Government as the Administration understand which bits of research are significant and worth acting on straight away; which bits have findings that are interesting but that it is worth waiting for confirmation of; and which bits are outliers, which you would not accept only one of. That is how to treat the stuff that comes through.

We expect that sea levels will be higher than the IPCC says; we certainly see that the north polar ice cap is melting much faster than the IPCC suggested. There are quite credible results and there are other outliers that suggest things that it is worth waiting to see whether someone else confirms.

The Convener: You mentioned the figure 2°C, which, according to the bulk of consensus, is tied to 450 to 400 CO₂e parts per million. Is that the definition of “dangerous climate change” that you would use? It has been suggested that that phrase should be somewhere in the text of the bill. Is that how you would define dangerous climate change, or is it more about the impact that climate change has on systems than about the degree of warming?

Richard Dixon: The phrase “avoiding dangerous climate change” comes from the United Nations Framework Convention on Climate Change, to which most nations of the world, including the UK, signed up in 1992. The convention does not use that exact phrase; it has been paraphrased. The figure 2°C is the scientific translation of that into something practical.

The World Health Organization says that 150,000 people are dying every year because of climate change, which is an extremely conservative estimate. Those people probably think that climate change is already dangerous. There is a question about what the phrase means.

In trying to interpret that political phrase, the scientists have come up with a reasonable consensus that 2°C is about the right figure. The European Union signed up to that in 1996 and the UK signed up to it, too. There is a reasonable consensus that we should be trying to avoid exceeding that. We are heading towards it quite rapidly, so we need to act quite fast if we are really going to stop there. The figure is important.

Scientific studies try to predict what will happen at different degrees. If you look beyond 2°C, you start to see some really important things going wrong. You start to see the Amazon rainforest dying back and eventually becoming the Amazon desert, releasing all the carbon that is locked up there and disrupting the water cycle that it regulates. You start to see the big ice caps and ice sheets being really affected.

Two degrees is bad enough and is already dangerous, but we are saying that if we tried hard, the world could stop at 2°C and that some of the big things that would go wrong will not go wrong if we stop there. It is a good place to aim for, but that is based on our current understanding. If we want to put something in the bill, we should go back to that phrase “avoiding dangerous climate change” and rely on advice from our advisory body in 2030, 2040 and 2050 about what we think that dangerous climate change is then. We might have become more relaxed and decide that 2.5°C is the right figure or we might have become much more nervous and decide on 1.5°C.

We also have to translate that number into a concentration of gases in the atmosphere. That science is evolving and we might decide on a different number that corresponds with a good chance of stopping at 2°C. As a way of referring in the bill to the global discussion, the safest place to start would be to add something on the fair contribution that we should make to avoiding dangerous climate change. At the moment, we think that that means 2°C, but it would be wrong to add in a number, as we may decide on a different number in future.

Duncan McLaren: The Government should state, either in the long title of the bill or in its objectives for the bill, that it is to play a fair role in preventing dangerous climate change by reducing Scotland’s emissions in a sustainable manner. Whenever we hear the shorthand of 2°C, we should understand it to mean that a rise in temperature of no more than 2°C is compatible with
preventing dangerous climate change rather than that getting to 2°C warmer is a target.

The Convener: I would like to put what we are talking about into the current economic context. The argument has been put that a recession might make it easier in the short term to reduce emissions or for emissions to fall by more than would otherwise be the case but that, instead of putting Scotland on a more ambitious trajectory for the longer term, the recession could undermine the investment that needs to be made in low-carbon infrastructure and make the problem worse. I seek the panel’s view on that. Also, given Scotland’s current skill base, what is our ability to rise to the challenge?

Dave Watson (Unison): We hope that the recession, or economic downturn, is relatively short lived. Even the most pessimistic of people—and there plenty of those on the television and radio every morning—would admit that the recession will not take the timescale of the bill, which is 2050 and beyond. We have to look at climate change in the context of the longer term and not be too fazed by the immediate economic circumstances.

I would argue against what you suggest. Certainly, the stats might show that there is a downturn in activity during a recession and that we may see a reduction in emissions as a result, but we should see the opportunities as well as the threats from climate change. The opportunities for a country such as Scotland are clear to see. For example, there is a lot of talk at the moment about a green new deal. That offers opportunities for Scotland to address the issues by creating new manufacturing and service opportunities, which will in turn bring new jobs. Importantly, those jobs will be at a higher skill level. We need to start thinking now about the sort of skills that our universities should consider. We need to build those skills into our education plans right down to school level.

Great opportunities will arise, but only if we are ahead of the game. Too often, Scottish Enterprise and others say in reports that 30,000 or 60,000 jobs will be created—indeed, last week, the number was 160,000 jobs. That is fine but, unless we put in place hard plans and real accountability—which is a key part of the discussion that I am sure we will come to—none of that will happen. Our view is that we should look past the short term to the longer term. If we plan now, we can take advantage of the opportunities.

The Convener: Is that happening?

Dave Watson: It is not happening yet. There are a number of reasons for that. In the main, it comes down to the fact that not everyone has signed up to the approach yet. The Government has not set clear targets and not all public bodies have signed up. We see some good initiatives, but it has not all come together. The bill will put in place the framework that ensures that there is at least a fighting chance that that will happen.

Duncan McLaren: One unhappy advantage of a recession is the cuts in emissions that we might see in the first year—or two years, if we are unfortunate—without any effort being made. Obviously, we should not give up on the additional effort but should recognise the need to lift the investment about which the panel spoke at last week’s meeting.

Governments are talking right now about directing and stimulating investment. They are putting together the largest fiscal and economic stimulus packages that we have seen—certainly in my lifetime, and long before that. The key question is whether those packages are being targeted at creating future low-carbon economic opportunities or whether they are indiscriminate and do not take any account of whether any growth that is stimulated might be under the conventional high-carbon model. Given that money is short, we must surely be discriminating and targeted. As Dave Watson has pointed out, such an approach will give us an opportunity to provide jobs not only in high-skilled and high-knowledge sectors but in lower-skilled sectors. For example, a Scotland-wide home energy insulation package would provide work for plumbers, builders and carpenters as well as for scientists and energy specialists.

I might have been rather unfair in my paraphrase of Dave Watson’s comments.

Cathy Peattie (Falkirk East) (Lab): I am interested in your views on the consultation process for the bill. We have already heard about Stop Climate Chaos Scotland’s role in developing the bill, but how do you reach the wider community, win hearts and minds and get round the attitude of “That sounds like a good idea; someone should do it. Not me, though”?

Richard Dixon: The fact that, as you know, the consultation received 21,000 responses from all over the world—indeed, it has been the biggest response ever to any consultation, apart from that on the smoking ban—shows the strength of feeling on this issue. The motivation for many of the people whom we helped to send the Government this message was the link between the Scottish bill and the global process and the fact that, because of the timing, the bill could influence the global deal that will be struck in Copenhagen at the end of the year. That level of response sends a very clear message that large numbers of people both inside and outside Scotland expect the bill to be world leading.
Some interesting issues that the consultation treated in an even-handed and sensible way—for example, consumption targets, which we might well discuss later—have not made it into the final bill. That said, our reading of the process is that, as a standard consultation, it was fairly well done. Of course, that does not mean that it reached every community or was covered in the Daily Record on more than half an occasion. There is a bigger job to be done, and we would like the bill to say something more about how we might capture hearts and minds.

All of us in the coalition agree—and, I think, the general feeling is—that in tackling climate change the Government has a very important role in putting in place the right frameworks, the Parliament has an essential role in ensuring that things work and individuals have a very important responsibility to do their part. For example, 40 years ago, no one did what we now call recycling; now a third of the population are quite happy to sort lots of things and either take them somewhere or put them out on the right day. Although the activity can be quite bothersome, people feel good about it; it has become habit, and they are doing the right thing for the environment. If we can make tackling climate change a bit like that, with the Government setting the framework and the targets that drive the big processes and individuals realising that they have to do their bit to make the system work, we will have won.

**Duncan McLaren:** The bill’s provisions can be delivered only if the public are engaged and begin to change their behaviour. However, our experience is that the public often find it difficult to change their behaviour on matters that are out of their control. Such changes can be made not only through the powers proposed in the bill but, particularly, by duties that the bill might put on public bodies. The coalition strongly advocates that a general duty be placed on public bodies to reduce emissions in line with the national target. That would enable and encourage local authorities, health authorities and a range of other public bodies to start thinking about what people who live in their areas or who work for them could do. That would be one of the best ways to trickle down, or perhaps drive down, the impetus for engagement and behaviour change.

**Dave Watson:** In many ways, this is one of the most important issues that we need to address. We, and a number of other organisations, got involved with Stop Climate Chaos Scotland because, historically, climate change was viewed as something that beady environmental groups did. I do not have a beard—I am only a trainee eco-warrior, you understand. It was something that green bodies did and no one else. However, we have to realise that we all have to do something about it.

We have not yet got people to come on board; we have not yet achieved the public engagement that was achieved on the issues of drink driving and the smoking ban. The bill will be important in that regard, but only if it drills down that engagement to the local level. For example, I have been encouraged by the hard time that I have been given at schools events. Sometimes when I have done events in schools about workplace greening, I have had a harder time than I ever had on a picket line with disgruntled union members in a dispute. That is how keen some of the responses that we have had are.

From a trade union perspective, I note that two thirds of all greenhouse emissions come from the workplace. If we do not engage people in the workplace, we will not address that issue. That is why we emphasise workplace environment agreements and the role of environment representatives, for example. When we have done that in workplaces, we have found that when we sit down with workers and get them to talk about how they can be greener in their environment, they take it home. Sometimes, they bring their home practice in and say, “We do more at home than our workplace is doing, yet two thirds of all emissions come from the workplace.” That is one example of our experience of how we can drill down that engagement and start to set a tone or attitude that will mean that we can make progress on the issue.

**Cathy Peattie:** I was going to ask about public duties later, but the issue has been raised, so I will ask about it now. I am interested to hear the panel’s view of placing duties on public bodies, such as local authorities, education authorities, environmental health and so on. Last week, we heard the word “hopeful” at least five times. The witnesses were hopeful that local authorities and public bodies would do something, but I am not hopeful.

**Dave Watson:** The coalition’s position is very clear. We believe that hope is a wonderful thing, but a bit of statutory action gets things moving.

In my long experience of dealing with public bodies, I know that if you want to move things up the line or get something on to the chief executive’s agenda, you do not say, “We hope you’ll do it.” You say, “You have a statutory duty to do it, and you might be summoned to this or another committee to be quizzed on exactly what you’ve done.” There should be a duty in the primary legislation, but that does not mean that there should not be secondary legislation that might give more detail. It is not good enough for a piece of legislation to say that the Scottish Government may give secondary powers. That is not adequate in any way.
The other reason for building duties into legislation is that we need to start now. If the word used is “may”, and there is to be secondary legislation on the subject, we all know that there will be another round of consultation, discussion, and regulations, and it will be two or three years before anything happens. If we put the duty into legislation now, we can get cracking. Many of the consultation responses indicated support for that.

Statutory duties should include a requirement to measure the environmental impact of all decisions that are made by public bodies. There should be emission targets. They might not be the same for every public body because some areas will have a bigger impact than others, but there have to be targets.

There also has to be an annual report from public bodies. We came up with a range of ideas for the annual report. For example, the chief executive and leader of the council should have to have an annual meeting to which each school sends a rep to quiz them. If I have had to do it in the schools, the leader of the council can do it as well. You should watch the way schoolchildren ask really difficult questions. They do not fluff about being polite like we do; they ask direct questions and if they get waffle, they say, “That’s waffle. What are you actually doing?” That kind of accountability is very important and it will bring out the lower level rather than some of the higher-level things that are in the bill.

14:30

Cathy Peattie: Does anyone else want to say anything on that?

Duncan McLaren: Dave Watson has said it all.

Shirley-Anne Somerville (Lothians) (SNP): I will bring the panel back to the question of engagement with the public. I agree that it is an important issue for which we have a number of layers of responsibility and that we should examine it as a committee.

Do you think that the bill is one of those pieces of legislation that is so important that Parliament, and all of us, have a responsibility to ensure that we do not use it as a political argument and thereby allow the public to switch off? If we get into that kind of argument, there is a danger that members of the public might say, “Parliament cannot even get a handle on the issue—we should just leave it,” without changing their individual behaviour. Do we need to make clear our responsibility to ensure that we deal with the bill in the most sensible way?

Duncan McLaren: It is clear that there is a responsibility to engage in the debate in a way that reflects the science as it is understood and the urgency and reality of the problem. However, I do not believe that Parliament should seek consensus purely for the sake of it. Healthy debate is one of the ways in which we can get the public interested in a topic. If they see that their representatives—who they hope share their views and values—are having a healthy debate about the topic, that will raise the level of public engagement rather than turn the public off.

Dave Watson: I think that we have made quite a lot of progress. The existence of coalitions such as ours illustrates the fact that there are fewer blatant climate change deniers around any more. There is a debate about how we should tactically deal with the issue, and there is also debate within our coalition: we do not agree on all the fine points of detail. However, there is now a clear consensus in Scotland about the key things that need to be done—we have managed to reach clear agreement on those areas and on the practical measures that need to be taken.

I know from talking to people at workplace and school events that we are a long way down that road. People would not be too worried if there was a debate about the detail, as long as Parliament did not get into climate change denial. In fairness, I have heard very few, if any, MSPs getting into that area of debate. We can have a legitimate debate about how we deal with the issue without damaging the overall message that the public has—largely—already got. As Duncan McLaren said earlier, they just need some help to get there.

Richard Dixon: In the message that we are sending to the public, we are suggesting that the bill is a good start and has great potential, both here and internationally, but that there are important details—in relation to targets, aviation and international credits, for example—that still need to be dealt with. That is the arena of debate: we need to tighten up those detailed issues and get them exactly right. It is not that anything is fundamentally wrong. I hope that, in that context, we can have a healthy to and fro, but without challenging the idea that there should, of course, be a climate change bill, which I think all of us agree with.

Des McNulty (Clydebank and Milngavie) (Lab): I will ask a brief supplementary to Shirley-Anne Somerville’s question before I move on to my main topic.

Do you think that there should be a public engagement target in the bill, in the same way that there are scientific targets for emissions reductions? Would that route perhaps take the bill even further forward as world-leading legislation?

Dave Watson: It is an interesting idea, but I am a touch sceptical about it. In my long experience of public bodies, any public engagement target that
is created tends to be measured in terms of how many public meetings are held, or how many surveys are sent out. I am more in favour of energising local communities and essentially getting them to set the targets for local politicians and other public bodies. If we get them interested, there will be no limit to the amount of public engagement that will follow.

The bill needs to include a framework that forces public bodies to go out there and enable the communities to give that pressure back. I am a little wary about the fairly artificial targets that I suspect would be involved in public engagement. However, I am open to other ideas—anything that would achieve that public engagement would be a good idea.

Duncan McLaren: There is an interesting idea or concept to be pursued here. I note that David Kennedy told you last week that the UK Committee on Climate Change is going to set what will be, in a sense, performance indicators, which will include such things as the number of renewable energy systems that are installed, the number of electric vehicles that are available and the number of homes that are insulated. With such indicators—they might not be in the bill but they will follow guidance from the advisory body, and there will be a role for the delivery bodies—you might get some engagement with the public. They could say, “Hold on. If 150,000 homes were insulated last year, why wasn’t mine?” or, “Mine was one of them. Now I’ve seen what I can do. I’m telling my colleagues and friends that they can do the same.” The practical delivery of the bill may allow for engagement without necessarily specifying a target for talking to X number of people or whatever.

I am not sure whether that was in your mind, but you are right to highlight the fact that we need to engage people in delivery and in behaviour change. That is all well and good, whether it is done through targets, performance indicators or public duties.

Des McNulty: Let us move on to targets. Before we get into the meat of the debate, I have three brief, relatively technical questions. First, do you have any comments on how the net Scottish emissions account has been calculated?

Do you want to come back to that?

Duncan McLaren: Yes.

Des McNulty: My second question is about cumulative emissions. Why are cumulative emissions in the atmosphere considered more important than the amount of greenhouse gases that is emitted annually, and is it technically possible to measure and report on them?

Richard Dixon: On cumulative emissions, the thing that matters to the planet is the amount of greenhouse gases that is in the atmosphere at any one time, which causes climate change. Different gases have different lifetimes in the atmosphere, so some of the gases that were emitted 20 or even 30 years ago are still there, causing an impact. Between now and 2050, we must reduce not just what we emit in any given year, but the totality of the gases, many of which have long lifetimes. That is important. The area under the curve that describes Scotland’s emissions will tell us about the total contribution that Scotland is making to the climate change problem around the world.

It is important to think about that total amount, which is why it is important to define the shape of that curve tightly so that no one is allowed to get away with not doing very much in the early days or slacking off somewhere in the middle and leaving it all for someone to catch up with at the end. It is pretty simple to measure cumulative emissions, as we know how much we emit every year. We understand at least a reasonable amount about the lifetime of the gases, so it is also possible to calculate our cumulative impact over the period, or the impact today of gases that we have emitted in previous years and gases that we are emitting at the moment.

We can produce all those numbers, but the key is to ensure that the area under the curve is as small as possible and that the early part of the curve declines sharply. That will show that we are acting early to get ourselves on the right track.

Des McNulty: I will come back to both those questions, but first I will ask my third technical question. Is it feasible to measure and report on emissions that are generated elsewhere as a result of goods and services that are used in Scotland? Are you aware of that approach being taken anywhere else?

Richard Dixon: The approach is possible, but it is much more difficult. In Scotland, we still use plenty of steel—we buy cars and washing machines with steel in them, and we build buildings with steel frames—but we do not make any steel in Scotland any more. Apparently, we are saving 2 million tonnes of CO₂ because we do not make steel here any more; however, somebody else is emitting those 2 million tonnes or more, which is really our CO₂. There is a need for us to capture that information. There are calculations that suggest that a third of all emissions from China result from China making things for the western world. We are always worrying about China, but a third of its emissions are actually ours. We should be worrying about ourselves.

Although it may not be possible to set targets, because it is difficult to be very accurate with the
numbers, we should certainly try to understand our total global impact. WWF Scotland would like the bill to contain provisions on parallel reporting of the impact of our consumption. The reporting of consumption would not have a target, unlike the reporting of production, but every year the minister would tell you not only how many emissions Scotland had produced directly a year or two ago but how many Scotland had been responsible for around the world. We could do terribly well with our nice, sharply declining curve, and we could reach 2050 having produced hardly any emissions at all, but that would be because the Chinese, the Indians and the Taiwanese were doing it all for us.

The planet would still be in a disastrous mess.
The other scenarios in the technical note are clearly more interesting. The sixth scenario involves a much quicker reduction in greenhouse gas emissions between now and 2020 of 2.75 per cent a year, which is nearly the 3 per cent that was promised in the SNP’s manifesto. Such reductions would pretty much deliver on the UK Committee on Climate Change’s intended target of a 42 per cent reduction by 2020, which is why the Government presented that scenario. The Government has shown how things could be done to meet that target, giving possible reduction rates between now and 2020. Ministers clearly suggested that they would be doing more already, and that they would do even more as soon as the bill came into force, but the scenario that they have chosen to illustrate does not deliver on either of those things.

Duncan McLaren: Stop Climate Chaos
Scotland is clear that we want the statute to establish that there should be emissions reductions of at least 3 per cent year on year from the beginning, not from 2020. We think that such reductions are necessary to meet the requirement for early action and that they are entirely possible.

Earlier, I spoke about an unforeseen advantage of recession for a couple of years. There is also good evidence from jurisdictions such as New Zealand, Brazil and California that significant emissions reductions in the order of 10 to 15 per cent over periods of two to four years can be achieved by concerted effort when there is a need to save energy because of energy shortages. If we move from recession with an investment package to improve our energy efficiency and reduce demand for energy, annual emissions reductions of 3 per cent or more could be sustained for several years. We would then clearly be in scenarios in which we would be looking at the technological solutions that are coming online.

Last week, it was rightly said in evidence to the committee that emissions reductions follow an S-shaped curve. There is a period at the start when things go slowly and very little is done, a period in the middle when a lot is done, and a period at the end when it becomes hard to make the last bit. We are already between 10 and 20 years into the flat bit at the top of the S shape. Industry has explored solutions and scientists have done the research, so the technologies and solutions that are necessary to move us on to the fast descent part of the curve are generally available or are very nearly available. We are not in 1990, saying, “We’ve just realised that this is a problem, and it’s going to take us 10 years to start to cut emissions by 3 per cent a year.” This is 2009, when cutting emissions by 3 per cent a year is entirely feasible. Such cuts are the minimum necessary if we are to give the urgent response to the science that we have all been told about.

The Scottish Government’s most robust scenario, which matches the UK Committee on Climate Change’s scenario, probably would not contribute what the UK expects. The UK sees Scotland as a renewable energy powerhouse, and Scotland rightly adopted an 80 per cent emissions reduction target when the UK still had a 60 per cent target. The UK reasonably thinks that, proportionately, Scotland will contribute more to the UK’s target, not less. If we are to do so, that would clearly push us above even the reduction targets of 2.75 per cent a year and 42 per cent by 2020, perhaps into achieving reductions of as much as 50 per cent by 2020, and certainly into achieving reductions of at least 3 per cent a year.

Des McNulty: I will pursue that in a bit more detail. At one level, there is a clear difference of view, which we can talk about in general terms. The climate change organisations say, “We want a 3 per cent reduction in emissions now. We believe that that can be achieved.” The Government has different advice and says that it cannot reach a 3 per cent target until 2019-20 but that it will make its best efforts to reach that point as the years go by.

How can we find out who is right? How can we decide whether you are right to say that the reduction can be achieved immediately or whether the Government is right to accept the advice on which it based its projection that it cannot reach 3 per cent reductions year on year until 2019? How can we get at the scientific correctness, if I may put it that way, of the argument?

Duncan McLaren: The challenge is that it is not just a physical science argument but a social science argument. People make different assessments of how quickly different technologies can penetrate the building stock or the vehicle stock, and you could get modelling done on those by experts of various persuasions. However, the crux of the matter is how much leadership the Government shows by saying, “We know that some of these things might feel uncomfortable, some might be expensive, and some might be politically unpopular.” That is a challenging thing for a Government to do, of course, which is why the suggestion of winning cross-party consensus for the principles of the bill is valuable. A Government that does something that is politically unpopular in the short term is unlikely to lose an election as a result, and obviously no one would counsel a political party that it should lose an election, even if that was necessary for the planet and the people in the longer term.

It would be nice to get to the scientific detail, but at the heart of the matter is a cultural question. The suggestions about how we can engage the
Public more are therefore critical to whether we will sustain significant emissions reductions year on year.

Richard Dixon: I will clarify a technical point. The bill does not rule out going for reductions of 3 per cent a year between now and 2020 and having 42 or 50 per cent reductions by then. That is possible under the bill, because all that it says is that we must have at least 50 per cent by 2030—we can have considerably more than that if we want to—and that we must have a reduction every year between 2010 and 2020, which could be 0.1 per cent, 3 per cent, or more. In its most ambitious scenario, the Government’s technical paper proposes 2.75 per cent. That suggests that it is possible to get close to 3 per cent.

In considering what recommendations to make, the question for the committee is how much you want to constrain the Government and push it to increase the targets in the bill. That might involve increasing the percentage reductions in the early years so that they are higher than just 0.1 per cent, or it could involve introducing an interim target so that we have to move faster in order to reach it. To what extent do you want to put such targets in place so that you know how fast the Government will go?

Under the bill, the Government could do 3 per cent a year and have a nice reduction by 2020, or, as the first scenario suggests, it could do nothing new for 10 years and only start getting serious about 3 per cent reductions in 2020. One of your key challenges is how to constrain things in the early years by suggesting changes to the bill that mean that whoever is in power in that decade has to act more quickly.

Rob Gibson: Duncan McLaren talks about doing things that are good or bad and popular or unpopular with the electorate. It is time to cut to the chase. What actions with which the public can engage will provide the answers to the questions that Des McNulty asked? What things could we do easily in the early period of tackling climate change? Do they involve renewable energy development? I would like concrete answers. Arguing about 2 or 3 per cent is all very well, but the public are mystified.

Duncan McLaren: The easiest way to make significant reductions quickly is by reducing energy consumption. The Sustainable Development Commission has told us that, in households that are provided with an energy display meter, average consumption reductions of 12 per cent are made in the first year. That device costs only a few pounds. Even if meters were installed in only half the building stock, a major reduction would occur in the first year. Such measures are not necessarily unpopular.

It might be unpopular to encourage people to make a similar reduction in their vehicle-related emissions by committing to work from home or to walk or cycle one day a week. Such steps are not impossible or inconceivable, although they would be more difficult to take in some areas than in others. However, that would generally be seen as an imposition. That is what I mean in talking about how far to push the politically unpopular.

The Scottish Government does not control fuel prices, on which even more unpopular decisions could be taken, but it controls the support that is made available for public transport, walking and cycling. It also controls support for improving the building stock, and the speed at which we make those improvements, so that people can reduce their domestic or workplace energy consumption.

Renewable energy is an additional element that is developing at a remarkable and positive pace. The industry tells us that that could be accelerated. I ask colleagues to add to that.

Richard Dixon: In its 500-page report to the UK Government on how to head for a 42 per cent reduction, the UK Committee on Climate Change picked out energy efficiency improvements in homes and commercial buildings and in industry, the transport sector, the decarbonisation of the power sector and doing more on heat. We are doing something in all those areas, so that is not rocket science; it is more of the same and some new measures. Some of that is techno-fix—the Committee on Climate Change comes from quite a technical-fix perspective, so it does not say much about how to help people change their behaviour, although it will do more work on that. However, in all those sectors, we can see the potential.

Duncan McLaren mentioned an example of energy efficiency in homes and how people can change their behaviour simply by having more information. We want to do big things with power stations but, like Rob Gibson, people can do something with microrenewables in their homes. In the transport sector, behaviour changes would make a big difference. If someone who commuted to work by car five days a week stopped commuting on one day a week by working from home or shared a car for one day, they would reduce their emissions by 20 per cent through just one action, their quality of life would probably be rather better and their employer might get better work from them. Simple activities can produce reasonably big reductions, in addition to the technical stuff that we need to do.

Dave Watson: We have a programme of workplace greening. That is not just theoretical; it involves a course and a range of measures that we suggest that people can take. We train our environmental reps to raise such issues with employers. Most actions require not a clever piece
of technology, but behavioural changes by people, as Richard Dixon said. Many measures could be done quickly in the public sector. When we talked about the budget, we gave examples of how the public sector could lead the way, through stopping some of the crazier relocations, dealing with travelling from the home to the office and taking an awful lot of recycling and energy measures. Those examples would also roll out into the home. All those activities would provide an initial quick hit.

I will turn the question around a little. Another issue is public credibility. To be frank, the public are not much impressed by Governments and politicians who set targets for 2050. We all know that the political cycle is about four years and does not last until 2050. It is therefore important to set earlier, more realistic targets that are achievable and which show a political willingness to make the required changes. If politicians put their reputations on the line in that way, it would be reasonable to expect the public to make the required changes as well.

15:00

Rob Gibson: But we have one hand tied behind our back in trying to deal with such matters through the bill. For example, it would have been easy for the UK Climate Change Act 2008 to say that all motor vehicles would have to do 100 miles to the gallon. It could have made that change, which would have been a win-win situation for many people. However, we cannot do that, and you expect us to do techno-fixes that are only a small part of the process. Should we say to the UK Committee on Climate Change that we must have answers from the UK about certain matters to make it easier for us to take certain actions?

Richard Dixon: That is certainly part of what you need to do, but you should remember that the bill sensibly proposes that the targets for each year are set with the help of advice from the advisory body, whether that is the UK Committee on Climate Change or a new Scottish version of that. Such a group of experts will think "Well, the EU is doing this on vehicle efficiency, the UK Treasury is doing that on the price of fuel and the Scottish Government is doing this on building bridges"—or not building certain bridges—"so this is what we think is possible over the next few years in reducing emissions from transport," to take one sector as an example.

You will therefore have advice from experts who say, "Oh, it's terribly possible to do 4 per cent next year," or, "It's quite difficult to do any more than your 3 per cent next year." You will get that kind of advice and intelligence, which will be gathered from all the other policy levers. Almost everything that produces climate change emissions has policy levers that are outside Scotland, from the EU influence on cows' farts to influences from elsewhere on vehicle efficiency.

The Convener: I thought that the other end of the cow was the problem.

Richard Dixon: It is both ends.

Des McNulty: In their answers, the witnesses have pointed to a disjunction between the strength of the levers in the Climate Change (Scotland) Bill and the expectations around it and the policy cycle that the current Government has or which the Parliament might have in its next session. Perhaps we need to consider that.

The other point that Richard Dixon raised is about the gap under the curve. The bill proposes annual point-in-time targets rather than the five-year carbon budget approach of the UK Climate Change Act 2008. The witnesses seem to suggest that we need to focus on cumulative emissions because they have a real impact on global climate change. How can we focus on the area under the curve rather than on points on the curve and get sensible consistency into the process?

Duncan McLaren: Our suggestion is that, at a practical level, the cumulative budget approach can reinforce an annual-targets approach. A minimum target of at least 3 per cent a year would be set, targets would continue to be set in batches, and the advice from the advisory body and the duties placed on ministers in formulating the targets would have regard to the cumulative budget.

We have argued strongly for 3 per cent annual reductions from the beginning because—certainly in my analysis and, I think, that of others—we will meet a safe and fair cumulative budget target only if we make rapid early progress. Clearly, a 3 per cent cut this year reduces the base for all subsequent years, so it has the biggest effect on the cumulative budget of any annual 3 per cent cut during the whole process. The longer we leave it before we start to make significant cuts, the harder it will be to get anywhere near a safe and fair cumulative budget. We therefore think that the annual-targets approach and the cumulative budget approach can work in synergy.

Richard Dixon: The big picture is made up of two things: how quickly we get moving at the start and the total area under the curve. The mechanism by which we focus is annual targets based on those considerations. Annual targets are a sensible way to let us know what will happen each year and will enable us to report sensibly—to say how we are doing and whether we need to make up for a failure—but the big picture is what they add up to over 50 years.

Des McNulty: The bill does not provide for formal banking and borrowing between reporting
years, although it allows the Scottish ministers to produce a plan to compensate in future years if annual targets are not achieved. Do you have any views on that?

Duncan McLaren: I have a suspicion that, although the bill does not explicitly provide for banking and borrowing, there is in effect a banking mechanism in the provisions for setting up carbon accounts. Under section 18, I think, the Scottish ministers could buy credits one year and not use them that year but hold them in the bank to use against future years. It is a relatively small banking mechanism, but I think that it exists.

Banking and borrowing are not necessary. We support the proposal that the Scottish ministers should produce a remedial action plan and that, in the event of failure, the plan should involve new and additional measures. We would not be satisfied with ministers saying—to paraphrase rather cruelly—"What we did last year was fine. It just didn’t work but it will this year." I think that the Westminster legislation uses the phrase "new or additional measures"; it is worth learning that lesson.

Des McNulty: If we are to ensure that the area under the curve is as small as possible, we need to consider interim targets to force the process. What kind of interim target would be appropriate? Are you content with the 2030 figure that the bill suggests? How should the interim target be constituted as an alternative?

Duncan McLaren: That has been a topic of some debate within Stop Climate Chaos Scotland. There is a view that specifying annual targets throughout the process is better than having interim targets, but we have agreed that we need a view on the interim target, and our view is clear and strong. To set an interim target for as late as 2030 is not appropriate because of the urgent need for action in the short term and because it is different from the date set by most other developed nations and blocks of nations—which have defined targets for 2020—and so is not comparable. Moreover, the level of ambition in the target is too low. Our conclusion is that, ideally, the bill should have an interim target of a 50 per cent reduction in emissions by 2020.

Richard Dixon: Since the bill was drafted, the UK Committee on Climate Change has produced its advice and proposed a target of 42 per cent by 2020 for the whole of the UK. As Duncan McLaren suggests, the UK Government expects Scotland to do more, the aspiration of ministers appeared to be for Scotland to do more and, because of our natural resources—we have lots of renewables—we have the ability to do more. That is why a 50 per cent reduction by 2020 looks like the target that we should set.

We would like the bill to specify a reduction of at least 3 per cent every year from the start. Of course, if it said "at least 3 per cent", we would get only 3 per cent every year unless we imposed some other constraints. If we said not only that we must make an annual reduction of at least 3 per cent but that, by 2020, we must reach the 50 per cent target, we would force the reduction at some point during the first decade to go slightly faster than 3 per cent per year.

Des McNulty: I want to challenge you a wee bit. You have consistently said that the bill is ambitious—as indeed it is, by international standards—but the bill is end loaded, with big changes envisaged from 2020 onwards. I am not sure whether a 50 per cent reduction by 2020 is feasible, but it is clear to me that a properly ambitious target is one that relates to the period between now and 2020 or 2025. To some extent, 2050 is politically irrelevant because it is so far in the future. Why are the organisations in the Stop Climate Chaos Scotland not saying that we should be properly ambitious and focus on what will happen in the next 15 years?

Richard Dixon: We are doing that by suggesting that there should be a tough target for 2020 and that, if we are to meet that target, we must move quickly in the first decade after the bill is passed.

If we reduce emissions at a rate of 3 per cent a year from 2010, as the SNP promised to do in its manifesto, we will achieve a 43 per cent reduction or thereabouts by 2020. Therefore, if the Government of the day delivers on its manifesto promise, it will achieve just more than what the UK Climate Change Committee is asking the UK to achieve in its toughest scenario. We have heard ministers commit to doing more than the UK is doing, and the target of a 50 per cent reduction by 2020 would drive down emissions in Scotland more quickly than a reduction of 3 per cent a year.

Des McNulty: As you said, the scenario that the Government currently proposes involves relatively restricted change between now and 2019. We cannot have it both ways: I will be happy if you are saying that by 2020 or thereabouts we need to have equalled or beaten—if that is feasible—the percentage reductions in the UK Government's toughest scenario, but I do not know whether that is what you are calling for or whether you think that such reductions are deliverable. That is what we need to know.

Duncan McLaren: I am sorry, but I wonder what you heard that gave you any other impression. Yes, we are calling for emissions reductions of at least 3 per cent a year in the first decade; yes, we are calling for a minimum reduction of 50 per cent by 2020; and yes, we think that all that is feasible for the reasons that we have set out, which include
Scotland’s advantages in delivering greater reductions on the grand scale through renewable energy and on the micro scale through interventions based on household energy efficiency and so on.

Des McNulty: Perhaps I have not made myself clear. You seem to be saying both that this is a great bill—it is fine—and that it does not deliver the objectives that you seek. I want to fill in the gap.

Duncan McLaren: I think that I know how the misunderstanding has arisen. We are saying that the principles and framework of the bill and its provisions for setting targets are okay—indeed, they are world leading in some ways—but that, if our approach is to be truly world leading, a number of things must change.

First, the level of ambition in the early years must change. Secondly, there must be a statutory limit on how much of that ambition can be deflected into buying international credits. Thirdly, the bill must from the outset include the international aviation and shipping emissions for which we are responsible. Each of those three changes would send a message to other nations that are coming up with plans for legislation and the Copenhagen climate summit. Such an approach would put us ahead of the international curve and make the bill truly world leading. That is our ambition—I think that my colleagues agree.

Richard Dixon: Yes.

The Convener: We must move on. If we are to allow time to question our second panel of witnesses, I must ask members and witnesses to be as brief as possible.

Shirley-Anne Somerville: The annual targets have to be set in bulk, and the first batch of targets will cover the period from 2010 to 2019. When they are published, you will be able to calculate a target for 2020. Is there enough in the bill to enable you to look at what will be happening in 2020 and to develop your policies and critique from that?

Richard Dixon: I would look at the issue the other way around. If we set a 2020 target, the advisory body will have a point to aim at when it sets the first decade of targets, as it will know what it must hit or exceed by 2020. However, if there is no such target under the bill—if we can have any figure for emissions as long as they are a bit lower than today’s—the advisory body will be able to flail about with any combination of reductions as long as the figure for a given year is slightly lower than that for the previous year.

If we set a target for 2020, the advisory body will know where it is going. It will then be able decide whether progress is a bit slow and a bigger reduction is needed to reach that target, whether there are things that we can do straight away or whether, because the recession has helped to reduce emissions sharply, we can cruise for a bit. If we set a figure for 2020, we will define exactly where we are going and the advisory body will give advice based on that.

We are keen to have such a number because it will enable us to know how much Scotland has to do—it may be an easy start or a tough start, but we will know where we will be in a decade’s time. A 2020 figure would signal to the rest of the world that we think that we can equal or better the performance of the UK or that we do not think that we can do as well as the UK. Regardless of whether we get the number only after annual targets have been set or whether it is set in the bill, people will look at it when deciding whether Scotland is doing something interesting or is not doing quite as well as it should.

Rob Gibson: Friends of the Earth Scotland is sympathetic to the idea of including central targets in legislation, but the bill contains no central targets. Last week, Professor Pete Smith stated:

“Having separate sectoral targets at the beginning would be unnecessarily cumbersome and reduce the policy levers’ flexibility to influence different sectors at different times.”—[Official Report, Transport, Infrastructure and Climate Change Committee, 27 January 2009; c 1371.]

How do you respond to that comment?

Duncan McLaren: I will try to be brief. There is some truth in what the professor said, but there is also a lot of truth in the concern that has motivated us to call for sectoral targets in the past. In some sectors, there may be great technical potential that is being overly constrained by worries about the sector’s political viability or public popularity, and if we are to meet the ambitious long and mid-term targets that we advocate, action close to the technical limits will be needed in all sectors.

We are not arguing that there should be highly detailed, specified sector targets—that is not the general position of SCCS—but no one at this end of the table would disagree that all sectors must play their role and that the bill must include measures, targets, duties or other enabled powers to ensure that that happens. The bill includes such powers for the waste and energy efficiency sectors but not for the transport sector.

Rob Gibson: Does the coalition have a view on land use and greenhouse gas emissions? The issue is being addressed by other committees, but are there general points that you think must be borne in mind?
Richard Dixon: Land use is a key issue in Scotland. We have a large land area for our population and a lot of peaty soils—much more carbon is locked up in our soils than in the rest of the UK. There is a statistic that suggests that the peat in Scotland contains more carbon than all the trees, bushes and leafy things in the whole of the UK, so it is important. If we treat it badly and it releases carbon and methane, there will be a problem. There has been some activity on land use—for example, the agriculture sector has a forum that is looking at climate change and agriculture—but it is clear that a lot more can be done. The UK Committee on Climate Change will look into that.

Our land and the carbon that it holds are one of the key assets that Scotland has. In future, we may find that farmers, foresters and other land users are paid through a European or even a global scheme to do or not do certain things to their land because that helps to lock up carbon or, in some cases, even hold extra carbon. We may find that one of our chief assets and ways of making money from Scotland’s land is the action that we take to safeguard carbon, so it is clear that we must start early to think about what we can do and what we are not doing. Land use is an important area, but it is one in which we already know some of the answers.

Rob Gibson: Okay. I just wanted to get that on the record.

I will move quickly on to international credits, on which the Scottish Government does not intend to prescribe a limit. What are the positives and negatives of having such a limit? By and large, the Government hopes to meet climate change targets through our own efforts.

Duncan McLaren: It is clearly right to have the ambition of dealing with climate change emissions reduction largely domestically. As a witness put it to you at last week’s meeting, by 2050 no one will have any spare credits to sell, so we need to plan for a world in which emissions reductions are made domestically.

The big advantage of having a set limit is that it would ensure that we directed investment to and encouraged investment in those technologies and sectors that could help us to make emissions reductions domestically, which would mean that we could be one of the countries that could sell those technologies and that expertise, rather than one that subsequently had to import them.

Perhaps the key reason for having a statutory limit is the accountability that it would provide. If there were no statutory limit and just an aspiration, a decade from now the minister of the day could not be brought up in front of the committee’s successor and held to account in the same way that he or she could be if there were a statutory duty. For those reasons, Stop Climate Chaos Scotland calls for a statutory effort target, whereby 80 per cent of the emissions reduction effort must be achieved domestically—in other words, not through the purchase of international credits.

Rob Gibson: Thanks. I will leave it at that just now.

Shirley-Anne Somerville: I will move on to international aviation and shipping. The Scottish Government has given assurances that international aviation and shipping will be included in the Scottish targets. What approach could be taken to formalise that position?

Richard Dixon: International aviation and shipping is probably the area in which the bill, when it becomes an act, could be most world leading and most influential in Copenhagen. The target of reducing emissions by 80 per cent by 2050 is the same as the UK’s, now that it has caught up. The UK has quite an ambitious short-term target of reducing emissions by 42 per cent by 2020; if we do better than that, it will be quite important. A limit on international credits would be quite important, too, but perhaps what is most important is that we do the right thing on aviation and shipping.

We very much welcome the ministerial commitment, which the bill team repeated to the committee two weeks ago, that ministers will ensure that the order is passed in time, so that when the bill comes into force, emissions from international aviation and shipping are included in the targets and the reporting right from the start. That is great, but why do we need a separate order? The bill team’s logic is that things need to be set up in that way so that when the international methodology for doing such calculations changes, we will have the power to make alterations, but the bill has had in it from the start provisions that are accompanied by a power to change them. For example, it sets out which greenhouse gases are included from the start and gives ministers the power to include different gases if it is decided that there are other important gases. It would send a clearer message to the international community if the bill were amended to say that international aviation and shipping emissions will be included in the targets and the reporting right from the start, and that ministers will have the power to adjust the way in which those emissions are calculated, on the basis of advice from experts, when the need arises. We are happy that there is a ministerial commitment, but we would be much happier if the bill stated that those emissions were to be included from the start.

One other technical issue, which was touched on last week by David Kennedy of the Committee on Climate Change, concerns the impact beyond
the simple CO₂ that comes from aeroplanes. Because aeroplanes fly at high altitude, they have more impact than they would have if they were sitting on the ground and producing the same emissions. He talked about radiative forcing or multiplier factors that should be applied. At the moment, in the figures that the Government has presented to you, it is not applying any multiplier. The UK Government often uses a multiplier of about 2. The message that you heard from David Kennedy was that nobody really knows the number; we know only that it is not 1—it is more than 1. He said that, when it works on aviation emissions, the Committee on Climate Change uses a multiplier of between 2 and 4.

So, although aviation is a reasonably small contributor to our emissions today—about 3.5 per cent of emissions from Scotland come from international aviation—we are underestimating it if we do not use a multiplier to reflect the extra impact of forming clouds and producing gases at high level. That technical issue is not covered in the bill or in the technical papers that you have received from the Government.

**Duncan McLaren:** The disaggregated figures for the UK are available, so we know Scotland’s share of aviation and shipping emissions under the methodology that is currently used for reporting in the Kyoto process as a memo item. So, the data are technically available and can be provided. Having those figures within the targets would also encourage actions to be taken in Scotland, perhaps through the national planning framework, to reduce aviation emissions.

**Shirley-Anne Somerville:** You say that data on aviation emissions are available, but there is more of a debate about how we can measure emissions from shipping and their impact. Do you have any comments on that?

**Duncan McLaren:** The data on shipping are not as good as those on aviation because, whereas most airliners that land in Scotland will refuel in Scotland, a ship tends not to have to refuel whenever it comes into port. The current methodology for aviation, although not perfect, captures a reasonable reflection. The current methodology for shipping is not as accurate, but it is the best place to start because it is the one that is shared internationally. A new methodology for shipping is urgently needed, but that is not in itself a reason to avoid setting up the methodology to begin with.

**Richard Dixon:** If everyone in the world did what we propose to do on shipping—which is to record the fuel that is put on ships—we would cover all the fuel that was put on ships everywhere, so we would capture everything. Although the methodology is not great—it does not really reflect our true impact—it would help to capture everything. It is a good place to start, given that we have those data.

There are international discussions in the International Maritime Organisation and there are UK discussions with the Chamber of Shipping about how we can do something more sophisticated. A range of options has been produced, but the favoured one is to look at the goods that we buy that come in a container by ship and to attribute some CO₂ to each of them. If that is a more sophisticated methodology that attributes the CO₂ to countries in a more accurate way, that is great. However, the IMO has been trying for 10 years to come up with a methodology.

So, let us do something here that will be ground breaking and not bad. Then, when the international community catches up, we will go with its methodology.

**The Convener:** I want to pick up on the issue of the multiplier in relation to aviation emissions. You say that everyone agrees that the multiplier is not 1—I assume that you mean that it is greater than 1, not less than 1—and that the UK uses 1.9 or whatever as a cautious estimate. Would it be reasonable for the bill to require the regulations incorporating international aviation to specify a multiplier? Is there another estimate of what it ought to be?

15:30

**Richard Dixon:** That would be helpful. Clearly, aviation and shipping could simply be included in the bill. The Government would say at some point how it will deal with those sectors and would have the power to change what it decided whenever it felt like doing so. In that case, there would be no obligation to include the multiplier correctly. If you were to put into the bill something that said that the Government was required to take advice on the multiplier from the advisory body, that would force the issue sufficiently that it would have to explain why it was not using 2 if everyone else thought that it should be 2.

There is a lot of scientific work going on in this area, because it is a live international discussion. As I said, the Government down south has been using 1.9 consistently for about two years. When the Intergovernmental Panel on Climate Change first raised the issue, it said that the multiplier should be somewhere between 2 and 4, which means that the Government is using something at the lower end of the IPCC’s range. As we go along, we will probably get a more refined number. However, it certainly will not be 1—it might be closer to 2 or, possibly, a bit bigger. If we were to go for 2, we would be using the best available science. However, as you suggest, there should be an obligation on the Government to take the
best scientific advice and implement it in any methodology that it uses to report and set targets.

Charlie Gordon (Glasgow Cathcart) (Lab): The committee has heard evidence that the Scottish Government has not formally asked the UK Committee on Climate Change for advice on developing the bill. Do you have any views on whether it should have?

Richard Dixon: Via the internet, I watched your session with David Kennedy of the Committee on Climate Change and I was surprised that it had not been consulted. However, I was also surprised that, when the members of that committee were asked what they were going to do for Scotland, they talked about money and said things like, “We might need more resources for that,” and, “We’ll see what resources allow.” I did not think that it was a terribly generous presentation. Some work needs to be done in that regard.

The UK act set up the Committee on Climate Change in a fashion that provides for the Scottish Government to contribute some money and formally ask for things. Formally asking for something is quite a big deal, as it involves getting something back for the money that has been put in. When the Government says that it has not asked questions formally, that is quite different from saying that it has not met members of the panel for a chat or exchanged e-mails—as we know, that sort of contact is happening.

Clearly, the UK committee is doing extremely useful work. The picture that it has generated of where the UK stands on issues such as the scale of targets, the ways in which we might meet those targets and the budgets that have been set for the two initial periods is important, but, as David Kennedy admitted to you, the chapter in the 500-page report that examined the devolved areas was a little preliminary—I think that that was his description of it, although someone in an earlier question-and-answer session was a little ruder about it and described it as being quite sketchy.

If the UK committee is to be useful to us, it needs to do a lot of work to understand Scotland and ensure that the statistics that it uses are more specifically Scottish rather than being just 10 per cent of some UK number. A lot of work must be done to ensure that that relationship will work, but I have no doubt that, even if we set up a Scottish body rather than staying in the UK body, the UK committee will still be an important body to talk to.

I will ask Dave Watson to talk about our preference with regard to whether there should be a Scottish body or a UK body.

Charlie Gordon: Yes, go on, Dave—answer my next question before I ask it.

Dave Watson: I always do that, Charlie—I have almost made a career out of it.

The answers that you got from the UK committee, to which Richard Dixon referred, highlight the problem of relying solely on the UK committee. Our view is that we need a distinctive body in Scotland. It should work constructively with the UK committee rather than being a competing committee; it should be a commission, if for no other reason than to differentiate between it and your committee; and it should report to Parliament, not the Government.

We were not impressed by the answers that you received last week on the issue of the establishment of a non-departmental public body, not only because we are supposed to be reducing the number of such bodies but because I have never met an executive or chair of an NDPB who offered fearless criticism of any Government of any colour at any time, which is what we want the commission to do. NDPBs are under ministerial direction and, if they say something a bit naughty, the civil servants get on the phone and say, “Why are you doing that?” As that happens under all Governments of all colours, an NDPB model is not helpful.

Why should we have a separate body in Scotland? First, we will have a different legislative framework from that of the UK—if, as we hope, the bill is enacted—so it will be difficult for the UK Committee on Climate Change to juggle with that. Secondly, most policy areas that impact on climate change are devolved issues on which the UK committee would not be of much use. Thirdly, an important point is that we have not only different public bodies but different structures. Advice on how public services in England might respond to climate change will need to be different from the advice in Scotland, where we have a different type of public service structure.

Essentially, our view is that we should have a distinctive body that can provide independent advice, primarily to Parliament but also to Government. If members are unsure about that point, they need only look at the words of the chair of the UK Committee on Climate Change. When asked about Scotland, he said that, frankly, he did not think that he would be able to support Scotland, for the reasons that I have indicated. The UK committee is sceptical about whether it could do the job. We think that there is a case—we have no scepticism on this point—for having a separate Scottish body.

Charlie Gordon: Do you believe that there is enough scientific expertise in Scotland to staff such a commission? Given that you are presumably talking about appointing not just a commissioner or tsar—as you know, we are not too keen on tsars any more—is there enough
Des McNulty: I want to make an analogous point. The UK Committee on Climate Change suggested that the UK impacts report will be a key mechanism. Presumably, that report will be used to inform the adaptation plan here in Scotland as well as elsewhere. However, as I understand it, there is no mechanism in the UK impacts report for key Scottish bodies to be asked for their view in a formal way. Is that a problem? Should the Scottish Environment Protection Agency, Scottish Natural Heritage and other relevant bodies be required to make a formal contribution to that process, if that is the road that we are going down?

Dave Watson: Yes. We see that as part of the reporting mechanisms under the bill. Frankly, those reporting mechanisms need to be tougher and more meaningful than those that are currently sketched out in the bill. Yes, we agree that the First Minister should be required to make an annual statement to Parliament. Yes, there should be an annual report and a response by the independent Scottish commission, but other bodies should also have the opportunity to be involved. Probably, the Public Audit Committee should have a role in scrutinising that annual report by asking SEPA and other regulatory bodies to comment on the approach that had been taken. The kind of reporting mechanism and accountability that would be created would be tougher and more meaningful than the approach set out in the bill.

Duncan McLaren: I understood David Kennedy last week to be slightly more sanguine about what would happen if resources became available. He was talking about dedicating one or two more people to Scotland. That suggests that the estimate in the financial memorandum of the cost of a Scottish committee might be a little exorbitant—it seems to believe that we could function only with the full equivalent of the UK committee, which has 25 to 30 members of staff. So the costs of financing a Scottish committee might be less than estimated and, from David Kennedy’s perspective, the costs of getting advice through the UK body are probably more than has been estimated, making them more comparable.

The Convener: Following on from Dave Watson’s comment on the duties on ministers to report to Parliament and the structure for reporting, I wonder whether the other witnesses have any views, not only on existing duties but on the proposal that ministers should meet the conveners of parliamentary committees once they have laid their report before Parliament. I should clarify that unless the Parliament’s standing orders are changed in some way, that process would be off the record and would not form part of the Parliament’s formal, recorded decision-making
process. Could that process be improved in some way or the discussions put on the record?

Richard Dixon: The proposal for ministers to meet the Conveners Group clearly shows the Government’s good intentions about bringing the Parliament up to speed and involving key committees in the process. However, as you pointed out, the fact that the meeting will be off the record means that it will not form an appropriate part of the scrutiny of this very important legislation. Whether it means forming another group that happens to have the same people in it—which means that it does not need to fit in with standing orders and can be defined in the bill to ensure that its meetings are recorded and the minutes put up somewhere on the internet—or finding some other mechanism, we must deliver on the Government’s intention in an open and transparent way and ensure that any discussions are put on the record.

Dave Watson: I have already set out our proposals, which will also be included in our written evidence.

The Convener: Rob Gibson has a question on adaptation.

Rob Gibson: Other committees are considering various aspects of part 5, but do the witnesses have any views on the bill’s adaptation provisions?

Richard Dixon: We are in favour of treating the issue of adaptation seriously. The bill’s proposal that a programme and reports be laid before Parliament is sensible, but we would like the timescale for such reports to be formalised. We feel that adaptation is the second most important issue in the bill—the most important is reducing emissions—but, given that the climate has already changed and that, even if we stopped all emissions in the world today, it would continue to change, it is clear that we need to plan for a different future. We are reasonably happy with the provision, but, as I said, we need to look at the timescales for reporting.

Duncan McLaren: It is probably reasonable to say that we are reasonably happy with the proposals. Our key request is that we ensure that adaptation is carried out in compliance with sustainable development outcomes, no matter whether they are defined as a high-level duty in the bill or whether they are attached to these particular sections. Obviously, certain adaptations would be very damaging to other social, economic or environmental interests while others would have very positive effects.

15:45

Cathy Peattie: The panel will be aware that this is not the only bill going through Parliament that is concerned with climate change; a member’s bill is coming forward. What is the panel’s view of Sarah Boyack’s bill?

Richard Dixon: I should start off, because we have been involved with the thinking behind Sarah Boyack’s proposed bill, so obviously we are keen on its intent. Clearly, the Climate Change (Scotland) Bill is an opportunity to deliver the same things in a more joined-up way. We have been talking to Sarah Boyack about how the two might come together, and I gather that she has been having productive discussions with the Cabinet Secretary for Finance and Sustainable Growth about how that might be done. It is up to her to decide whether enough is being offered in the delivery of the Government’s bill.

We are happy with the principles of her bill. What she intends to do is extremely sensible and would make a good contribution to reducing emissions and tackling fuel poverty. I hope that those principles progress, whether through her bill or through the Government’s bill.

Dave Watson: The trade unions strongly support Sarah Boyack’s bill. It is a good example of the practical measures that need to be put in place. There is a lot of theoretical talk about high targets, but Sarah Boyack’s bill is a good example of practical measures. Those of us who represent energy industry workers think that the bill has merit. We are relaxed about how you do it, but it is a good initiative.

Des McNulty: I understand that the Westminster Government’s adaptation plans must be consistent with the principles of sustainable development and that they will be independently assessed by the UK Committee on Climate Change. Could the adaptation provisions in the Scottish bill be similarly strengthened by including a sustainable development duty? Should independent scrutiny of adaptation plans be written into the bill?

Duncan McLaren: As we have noted, there should be a duty for the whole bill to be in accordance with sustainable development. That would apply to adaptation. Indeed, it would be preferable if Scottish ministers were required to seek independent assessment of progress made towards implementing the adaptation programme, and if there were appropriate assessment of the impact of climate change in Scotland, not just a UK assessment with a Scottish dimension.

The final thing to say about adaptation is that Scotland should also seek to support adaptation work to address the impacts of climate change on vulnerable communities and ecosystems in developing countries that are already being directly affected.
The Convener: Before we close this panel, do you have any points to raise that have not come up in questioning?

Duncan McLaren: I am afraid that I have one; I am sorry to add to time.

One of Stop Climate Chaos Scotland’s headline asks is that the bill incorporates strong enforcement measures to ensure that its provisions come to fruition. We are particularly concerned to ensure that the bill is clearly justiciable, so that the decisions of ministers and other competent actors on setting targets or activities, plans and programmes that might lead to the missing of targets in the future can be challenged in the courts, and that the courts can make a direction on that in compliance with the Aarhus principles that access to justice should be timely, affordable and merits-based. Those principles should apply in Scotland at the moment, but we do not believe that they are consistently applied and this is the point at which, either in the bill or in the debate, ministers should commit to the bill’s provisions being challengeable in that way, as are those of Westminster’s 2008 act.

We are also clear that effectively enforceable duties should be imposed on public bodies.

Finally, there might well need to be more incentives to ensure that ministers and other public bodies deliver on their duties. One option for that is to set up a system of financial incentives or sanctions, but there might be other options, and we would welcome the opportunity to explore those at greater length.

The Convener: I thank all three witnesses for their time. If you have further evidence to give, the deadline for submitting written evidence is 27 February.

15:50
Meeting suspended.

15:56
On resuming—

The Convener: I welcome our second panel. Chris Hegarty is advocacy manager at the Scottish Catholic International Aid Fund, Gavin McLellan is head of Christian Aid Scotland, and Judith Robertson is head of Oxfam in Scotland. I am sorry that we are starting this part of the meeting a wee bit later than we expected. We will try to ensure that there is adequate time for questioning.

You represent organisations that are involved in international development. What are your reasons for participating in the process of the Climate Change (Scotland) Bill? Why is it important for you to devote resources to the issue? Why is it important that developed countries work towards ambitious reduction targets for greenhouse gas emissions?

Gavin McLellan (Christian Aid Scotland): I will kick off with a soundbite that came from one of our partners in India:

“Climate change will make poverty permanent.”

We have put a lot of resources into making poverty history. Members will recall that in 2005 the G8 summit took place in Scotland—you might have marched in the streets at that time. All that work is at risk, because increasing frequency and severity of disasters are sweeping away a lot of development gains that we have been working on for the past 50 or 60 years. From a humanitarian point of view, and in the context of sustainable development, we want to protect and preserve the development gains that have been made. We also want to encourage communities to be resilient and to adapt to changing circumstances.

It is important that we highlight other issues to our constituencies and there is a moral obligation to act. Some 75 per cent of carbon emissions have occurred during my lifetime and the industrialised north has been responsible. Members know the moral arguments well. There is a moral issue about who is responsible and who is suffering, as we witness the impacts of climate change on developing countries. All the witnesses could talk about field reports; for example, about communities in Bangladesh that have had to move rapidly, salination of fields, threats to food security, frequent and severe droughts and famines, and so on.

Those are the main issues, but we also need to ensure that there are proper compensatory measures for communities and countries that are suffering. We need to ensure that there is a proper global agreement that gives space to countries that are trying to get on to a clean development path, and we need to ensure that countries that have the main responsibility for contributing to climate change pay for adaptation in developing countries. I am sure that my colleagues on the panel will want to add to what I have said.

Judith Robertson (Oxfam in Scotland): I agree with Gavin McLellan. The fundamental issue is the human impacts of climate change now and during the past 20 or 30 years. People are becoming poorer because of climate change, and that will not stop happening. I could not endorse Gavin’s words more.

We see in some places daily evidence of the devastating impact of climate change. Climate change is a global issue—it is not just for Scotland. My role, as the representative of Oxfam in Scotland, is to emphasise to the committee that climate change has such strong global impacts
that we cannot afford to ignore it or the contribution that the Scottish Government makes to it. The issue is important and urgent. Furthermore, it is important for us not only to be seen to behave responsibly, but to behave responsibly so that developing countries can build trust in the rich countries in relation to climate change, which is of such human importance. We are talking about effects on the lives of hundreds of millions of people that will happen soon and develop over time. For us, 2050 seems to be very far away, but it is nothing for the children of the people with whom we work and, indeed, for their children.

16:00

Chris Hegarty (Scottish Catholic International Aid Fund): I will quote somebody called Javier Gomez, who is a beneficiary of the SCIAF partnership in El Salvador. When asked what he would say to people in developing countries whose lifestyles might contribute to the change in climate, he said:

“Stop using so much energy. It’s impacting on our lives. It’s killing us.”

That explains powerfully why we are all sitting here. To an extent, we represent the Javiers of the world.

The Convener: What are the witnesses’ views on the bill’s consultation? Did it give your organisations sufficient opportunity to help shape the bill ahead of its introduction?

Judith Robertson: I am reasonably happy with the consultation, which engaged the participants. We chose to join Stop Climate Chaos Scotland because we felt that we could add another dimension to that important discussion, and that coming together in a collective effort would have more impact. We feel that participating in this process today, too, will help.

Gavin McLellan: I have nothing to add.

The Convener: An issue that arose previously in discussing the consultation was whether it focused sufficiently on creating positive reasons for people to participate in the climate change agenda as opposed to just consulting on the bill, and whether the bill needs to go forward by building on public engagement or outlining how the Scottish Government will create such public engagement. Do the witnesses have views on that theme?

Gavin McLellan: I would highlight our expertise in galvanising the public in that regard. There has been a lot of discussion in the past two hours about capturing hearts and minds. As I said, my agency has experience in mobilising people through campaigns such as make poverty history. If issues are spelled out to people well and there is a sense of urgency, they will want to act. The climate change problem is so big and people can make so many different responses to it, but they are not being guided.

However, we can start harnessing spheres of influence. For example, the eco-congregations network, which is a member of Stop Climate Chaos Scotland, has 200 communities of interest that have come together to work out their responses, but they will need to see big movements and incentives out there. The bill can work towards creating those and can push the investment choices and the mix of interests to make something happen. People feel slightly powerless about what they can do and feel that there are limits to it, but acting together gives real encouragement. In that regard, we can bring expertise in galvanising people.

Chris Hegarty: The challenge that we face as NGOs is to explain to our constituencies why we are working on climate change issues. In that regard, SCIAF is sending out to our constituency about 150,000 packs on climate change issues. That shows that the work is already happening on the ground. I am sure that my colleagues here are involved in similar processes. We are doing our bit, if you like, and we encourage you to do yours.

Judith Robertson: I want to address two dimensions in this context. First, the public will engage when they see leadership that they can trust. For example, the UK Government’s decision to have a third runway at Heathrow has an impact on public engagement with climate change, as does the decision to have at Kingsnorth a new coal-fired power station that will not have carbon capture built in from the start.

It is clear that the public will follow where the Government leads, although not always. The Government must be honest in dealing with issues such as climate change, in respect of which individual action will play a huge role in determining the outcome and success of processes. It must say that it will make and commit to targets, it must take the hard decisions that Duncan McLaren and others talked about earlier and it must show leadership to the public. It must show that it has to engage in the matter, ask the public to engage in it, and take responsibility. Public engagement is a huge dimension.

More practically—if what I have just outlined could not be said to be practical—Oxfam has been involved in sustainable development education for many years, which is one reason why Dave Watson gets harassed to death in schools by young people who know what questions to ask people in power. They know how to hold people to account because they understand the issues that are at stake. We need to continue to ensure that
young people in our schools are taught about the impact of their actions on climate change. The bill could at least support that education, as could wider Government action, to ensure that not only the public of today are engaged in the issue, but that future generations will know why hard asks have been made of them, why reduced energy use is being sought, and why we do not use our cars daily.

Children and young people should be able to hold their parents to account. My friends who have children tell me every day that they have been harassed in the morning because they have bought something with extra packaging, something that is not eco-friendly or something that puts detergents into water. Children’s pester power should be used for outcomes that we favour, rather than for buying Mars bars.

**The Convener:** I have a couple of questions about Scotland’s opportunity to influence matters beyond the domestic agenda. Obviously, the Scottish Government does not participate directly in international negotiations, but it has been put to us that the bill could have an impact by being an example of world-leading legislation. To what extent is it a realistic objective for us to pass world-leading legislation to set an example for other Governments or countries? What opportunities does Scotland have to help low-carbon development in developing countries and to help them to skip the dirty stage of development by developing in cleaner and greener ways?

**Chris Hegarty:** I would not underestimate the power of Scotland’s precedence in this. We all recognise that Scotland by itself will not solve the problems of climate change, but it stated its intention of going to an 80 per cent emissions reduction target while the UK still had only a 60 per cent target. I would not underestimate the impact that that might have had as a political factor in the UK’s moving to an 80 per cent target. By the same token, the UK’s 80 per cent target may have been an influence on the United States of America, which now has an 80 per cent target.

Richard Dixon talked about the various ways in which the bill could lead the world. At the moment, it is fair to say that we are slightly reserved about the number of areas in which its proposals lead the world, but Scotland could genuinely lead the world if we imposed immediate annual targets of 3 per cent, had firm commitments on getting 80 per cent of our reductions from domestic efforts as opposed to buying our way out through credits, included aviation and shipping from the start, and made funding commitments for adaptation in overseas countries explicitly, over and above existing aid commitments.

The other aspect is timing. Whether it likes it or not, Scotland has put itself in a position in which it will be examined at a time when many big decisions will be taken in the Copenhagen processes. If consideration of the bill concludes before the summer recess, as has been suggested, we will be in a good position to influence international processes because the hard negotiations on the United Nations Framework Convention on Climate Change towards the Copenhagen summit will take place from June to September.

**Gavin McLeLLan:** I echo many of Chris Hegarty’s points, but I want to put extra emphasis on the need for 80 per cent of our reductions to come from domestic effort and the need for a 20 per cent cap on emissions trading so that we are not reliant on it. We could make the bill a world leader in many respects. At present, it is potentially world leading: it is important that we make it so and that we give international leadership by ensuring that we achieve 80 per cent of our reductions through domestic effort.

We need real trust to be built up at Copenhagen. Any legislation that will create a lot of political will and a belief that there is real will in the north to achieve emissions reductions would be a good thing. It would be great if the bill achieved that. Ambitious climate change legislation in advance of the Copenhagen conference will send a strong signal, so we are calling for that.

As members will know, the traded sector in Scotland covers about 50 per cent of our emissions. It is therefore particularly important to cap trading so that there is a real incentive to decarbonise—particularly for the power industry—and to send out the right kind of investment signals to ensure that that action happens. That would be a world-leading and important message that could be sent out ahead of the Copenhagen conference.

The convener also asked about what Scotland can do on adaptation and to assist developing countries. I will pass the buck slightly and say that I think that Judith Robertson has done some work on that.

**Judith Robertson:** We have not done an analysis of industry in Scotland to show what could be applied in the context of developing countries. However, there is no doubt that, if we decided to invest in developing renewables and low-carbon processes to generate energy, those developments could be used and adapted overseas. Patrick Harvie’s point about jumping stages in the process is important. The bulk of that work will be done in small communities of people who are already very poor.

We dealt briefly with adaptation, which is a complicated process. The development agencies and the World Bank estimate that it will cost 50
billion annually to put in place adaptation processes that make developing countries secure from the negative effects of climate change. That is a huge investment that needs to take place overseas, on top of the investment that is needed in Scotland and other rich countries to support new industries, new ways of operating and the development of low-carbon processes. Our strong view is that Scotland has a role in supporting the adaptation process. We could add to our international development policy to make it clear that we want to provide resources to support adaptation processes. That is part of our international responsibility, which is not just to reduce our emissions in the future, but to deal with the effects of our past emissions. Those are important dynamics that we have to consider.

On the impact that Scotland’s leadership could have, if the bill will hold the Government of today and Governments of the future to account, that will be read and understood by Governments globally, such as the Indian and Chinese Governments and all the Governments that are trying to get off the hook in this difficult situation in which we find ourselves. In some ways, every Government is trying to do that. If, through the bill, we do not let ourselves or the Government off the hook, that will show India and China—which potentially will emit far more than we ever will—that action can be taken. That would be inspiring and responsible and would show commitment to future processes.

We cannot let developing countries not develop—we cannot say that it is not okay for them to get rich, to be successful economies or for people to have cars. It is not okay for anybody to say, “You can’t have what we’ve got.” The bill is a really important part of that process. It is inspiring that Scotland can take such action and it is exciting that we will be one of the first countries to do so. I would love to go to Copenhagen and say, “Look what we’ve done—you can live up to this.” rather than say, “Well, we could have made some changes, lobbied harder and done a better job.” We do not have to do that. We have the chance to make the bill really strong, good and powerful.

16:15

Chris Hegarty: It will be all very well to create world-leading legislation, but we will then have to become much more evangelical. If we place Scotland’s carbon footprint in context, we might think that we cannot contribute all that much; however, we can encourage people in all political parties—regardless of their position on constitutional issues—to push the idea really hard. That will be the next step after we get world-leading legislation in place, as I hope we will.

SCIaF is campaigning on climate change as part of a coalition of equivalent aid agencies in something like 170 countries. If we get a clear example from Scotland, the first thing that I will do is present it to 170 countries, so that they can use our example as an international precedent.

Des McNulty: I note what Judith Robertson said about the international development strategy and the possibility of our processes being adapted. Do skills issues also arise for the international development agencies in Scotland that operate in other countries? Should those agencies get more access to climate change technologies that can be applied in other countries, so that they can encourage those technologies to be used more quickly and more effectively, where appropriate?

Judith Robertson: It would depend on the level at which you want to operate. There are plenty of skills overseas; most communities in developing countries know what they need in order to adapt effectively.

We have limited ability to change weather patterns in the short term, but we can adapt crop production and water schemes. For example, Oxfam can help to lift communities off the ground so that, when tidal disruption and floods happen, people and their goods are still safe and secure. With a bit of support, most communities can have the skills to do that. Asked whether Scottish NGOs are engaged in that sort of work at the moment, I would say, “Mm—possibly to some degree.” However, that does not mean that Scotland should hold back, and it does not mean that there is not plenty of potential for developing programmes of work and relationships on the ground overseas.

Des McNulty: I want to ask about targets. What is your view of the approach that has been adopted in the bill of setting batches of annual targets, rather than setting carbon budgets, as has been done in the UK’s Climate Change Act 2008?

Judith Robertson: Oxfam in Scotland agrees with the approach that has been advocated by Stop Climate Chaos Scotland. We believe that we have to make annual commitments to a minimum of a 3 per cent reduction. That will allow us to monitor our present reductions and plan our future reductions.

We have heard plenty promises about future targets—the millennium development goals are a fantastic example of that. A wide range of targets for developing countries were set by the United Nations and by global systems, but no accountability mechanisms were built in and no stepping stones were put in place at which Governments could be held to account.

Oxfam in Scotland and the other international development NGOs that are part of Stop Climate Chaos Scotland heartily welcome the notion of annual targets, but we would set them at 3 per cent—we would not leave things to chance. We
would not wait for a Government to decide, on the basis of advice, that it was enough just to do 0.1 per cent more than we had done the previous year. It will not be enough. It will not allow us to achieve our goals. If the committee wants us to, we can provide more evidence of where targets are not being reached. We have to hold ourselves to account for what we commit ourselves to.

Gavin McLellan: I would like to amplify that. One of the reasons for what we are doing is the urgency and scale of the problem. Judith Robertson has just given us a helpful critique of the millennium development goals framework, which has not been delivering anything like as quickly as was originally envisaged. There is a lot to be learned from that. We would not wish to fall into a trap as we go into the negotiations in Copenhagen at the end of the year.

There is an opportunity to show that Scotland is responding to that urgency. If we are committed to the annual target, we should ensure that accountability is strong. That is one of the messages that we can put into the international framework as it gets negotiated: we are serious about our response, and we are dealing with it urgently. We are not going to prevaricate too much about the framework—we want to get started.

Chris Hegarty: I wish to touch on the reasons for front-loading our response, as opposed to end-loading it. Climate change is not some sort of abstract concept that might happen over the next 20 or 30 years. UN figures show that, throughout the first five years of this decade, 262 million people have been adversely affected by climatic events, and 98 per cent of them live in the developing world. We are well positioned to stress the urgency of the situation, and the fact that we cannot afford to sit around for another 10 years just sorting out some infrastructure projects. We really must start taking action sooner rather than later.

Des McNulty: Let us consider the emissions track that the Scottish Government has suggested. It seems not to be front-loading, but end-loading, which is exactly the millennium goals position that you described previously. Targets are being set for a significant distance into the future, which either avoids our having to take action now, or allows the rate at which action is taken now to be slowed. Is that a reasonable parallel to draw? Is it your view that the Climate Change (Scotland) Bill as drafted, with its long-term targets focused on 2050, potentially avoids the early action that you see as necessary? Is that similar to problems that you have experienced in your specialist areas?

Judith Robertson: We support what was said by the earlier panel—we wish the effort to be made in Scotland. We want responsibility for managing what we emit and how we deal with it. We should be a process whereby we can hold Government to account against delivery of the targets.

The reason for that—apart from urgency—is that we need not just to deliver first on the easy things, but to invest for the future. We must ensure that the investment is made, and that Government is aware that, if it does not invest now, action will not be deliverable in five, eight or 10 years. Under the bill as drafted, we are not committed to a three per cent annual target until after 2019. That is too far away. We need to bring that date forward. We need to bring the provisions into current-day activity. We should encourage the general public and private and public sector bodies to act.

Des McNulty: Again, there are interesting parallels here. The bill does not include formal banking and borrowing arrangements between emissions budgets. Do you have any views on that approach, or any experiences from your activities in the international development field that give you pause for thought?

Judith Robertson: We support what was said by the previous panel—that a target of reducing emissions by 50 per cent by 2030 will not necessarily lead us to a reduction of 80 per cent by 2050, because that does not fit in with the other ways in which targets are being set. We advocate an annual minimum target of 3 per cent, which will bring us a potential reduction of 42 to 50 per cent by 2020.

Chris Hegarty: I will tie that in with our earlier conversation about how Scotland could lead the world. Irrespective of whether we set annual
targets of 3 per cent or an interim target for 2020, we would, in setting a target for 2020 that is tougher than any existing target anywhere in the world, create another area in which we could—and should—lead the international discussions.

I reiterate what Gavin McLellan said about developing countries’ lack of trust and cynicism about what richer countries will deliver being one of the biggest sticking points in relation to the Copenhagen discussions. Offering a further example of a developed country that is stepping up to the mark and taking its responsibilities seriously will help that process.

Des McNulty: So a target of 42 to 50 per cent by 2020 would be more meaningful, relevant and ambitious.

Chris Hegarty: The different targets that are set—by the EU and the IPCC, for example—tend to be for 2020, so it would be difficult to make comparisons if we set a target for 2030. The most helpful thing that we could do is simultaneously set a target for 2020 and make it the most ambitious in the world.

Gavin McLellan: It would be more responsible to set a target for 2020. As we are trying to deal with climate change urgently, it is important that we send the right signals to the Copenhagen negotiations, and that we bring our target into line—we do not wish to appear to be laggards. It is important that we set a target for 2020.

Judith Robertson: However, if we have 3 per cent annual targets that we meet, we will get where we need to be by 2020, 2030 and 2050. That is our objective.

Rob Gibson: The bill contains no sectoral targets. Should it?

Gavin McLellan: I echo the answer that previous witnesses gave with regard to the technical difficulties around sectoral targets. I am not sure that, between us, we have the expertise to comment further.

Judith Robertson: Sectoral targets could be part of either secondary legislation or the guidance that accompanies the bill. If the bill has an annual minimum target for emissions reductions of 3 per cent, work will have to be undertaken to hold the different sectors to account in relation to supporting the Government in meeting that target. Delivering against the target is not completely within the hands of the Scottish Government.

It is not that we do not require sectoral targets, but if the bill contains binding 3 per cent annual targets, sectoral targets will not necessarily need to appear in the primary legislation.

Rob Gibson: I am interested in taking that a little further in relation to food and transport. Food has not been mentioned, but the idea is that we cut down on the amount of CO₂ emissions that arise from importing food and build up our self-reliance through producing basic foodstuffs here. We have reached a self-sufficiency level of 57 per cent in terms of what is sold over the counter. Ought the food sector to appear in the sectoral targets?

Judith Robertson: We have not examined that issue in detail, but if we seek to use sustainable development principles to underpin the way in which the bill is delivered, we must be careful about the impact of the activities that you recommend on developing countries.

The structure of developing countries’ economies is very different from that of rich countries’ economies. We are 57 per cent self-sufficient because we import the remaining 43 per cent, much of which comes from developing countries whose economies are based solely on crop production and the exportation of primary products. Our cutting that chain will not support the international development process that we seek; it will undermine the development of countries’ economies—it has the potential to do fundamental damage. That does not mean that there is no merit in your argument that examining what happens to other countries as a result of our decisions and take responsibility for that.

16:30

Rob Gibson: I do not want to touch directly on the issues of shipping and aviation, but there seems to be a contradiction in what you are saying, because there is no doubt that bringing food from other places is causing us to create more emissions than we otherwise might. Other members may want to ask you about that, but I invite you to comment on the issue now.

Chris Hegarty: These are complex issues. This discussion exemplifies to us why the principle of global sustainable development should underpin the bill—it could be included in the long title, for example. Some of the contradictions to which you refer will have to be thrashed out in the context of global sustainable development. Having that as a principle would help to frame those discussions.

Rob Gibson: Do you have a view on the different approaches that the Scottish Government and the UK Government have taken to international credits? The UK Government has set a limit on the use of international credits, based on advice from the UK Committee on Climate Change, but the Scottish Government does not intend to prescribe one. Which approach is better?
Gavin McLellan: To make the bill world-leading legislation on climate change, we should prescribe a limit of 20 per cent. The previous panel spoke about the renewables resources that are available in Scotland. We have a great opportunity to cap international credits at a lower level and to create a framework for better investment choices that will release investment into those resources.

Judith Robertson: Having a cap is important, because it means that, ultimately, we invest in effort in the necessary places. I assume that you understand that argument.

Rob Gibson: I do.

Judith Robertson: Effort should be focused on Scotland, and we should invest to ensure that that happens. The Scottish and UK Governments should not assume that constantly buying credits from overseas will do the job.

Rob Gibson: The point of a cap would be to reduce the amount that is tradeable.

Judith Robertson: Exactly.

Rob Gibson: We know that. You must agree that sourcing credits outside the European Union to offset our activities is extremely damaging to the developing world.

Judith Robertson: It depends. There is no doubt that some developing countries’ economies could benefit in the short term from finances raised by carbon trading, but we would have to be really careful about who we traded with and how. We agreed to a limit of 20 per cent because there is potential for financial investment from carbon trading to support developing countries’ economies. However, if we invest that money overseas, we are not investing it in activity in Scotland—that is the real issue.

Rob Gibson: What do you see money from carbon trading being used to fund in developing countries?

Judith Robertson: Public sector provision of health and education.

The Convener: Is there a need to specify not just the extent to which international credits may be used but their nature? We have heard conflicting opinions on international credits—sometimes they are good, but sometimes they are bad. Is it sufficient for us to set a limit on the extent to which international credits are used? Should we say something about their nature, to maximise the development benefit of those credits that we permit to be used?

Gavin McLellan: In June, the Parliament passed a motion that said that carbon offsetting does not substitute for policies to reduce carbon emissions. In that context, the role that credits play is transitional. That said, standards need to be applied to ensure that projects are genuinely beneficial to overseas communities. As the convener rightly says—and current awareness levels show—not all schemes are particularly beneficial.

I will give some examples that build on what Judith Robertson said. There can be health improvement impacts, but we must not assume that everything rests with us; work is already happening in countries such as China and India. One example is the west Bengal renewable energy development agency, which has links with Christian Aid partners and has provided power to poor communities on Sagar island to enable small businesses to run into the evening. That project has also boosted literacy rates. That is an example of a gold-standard project enabled by adaptation funding and the mechanisms that we are discussing. It is important to consider the quality of projects.

Des McNulty: I understand the argument for making an 80 per cent minimum domestic effort. We should not simply export to other countries our responsibility for carbon saving. That said, how can we make more than a 100 per cent contribution to help other countries to deal with the carbon issues that they face? Are you interested in exploring that form of development support?

Chris Hegarty: There is room for all sorts of responses to the challenges. Earlier, you linked the issue with the Scottish Government’s international development policy. Although we are keen to tie together the two issues, we are also keen not to conflate the two budgets. I hope that that makes sense. The last thing that we want is for a precedent to be set under which people tap into existing aid budget commitments for purposes that, in essence, should come under the polluter-pays principle. We should sort out the mess that our pollution causes and tackle problems of global poverty. That is our clear position.

Des McNulty: I am very aware of the issue. Nonetheless, the question whether a contribution could be secured in that way is an interesting one.

Judith Robertson: The bill makes no provision for international adaptation; it does not mention it. It would be good to build in the potential for international adaptation. The Government may want to explore that strategy, either as part of the bill process or by other means.

Over the course of developing as a nation, we have polluted the atmosphere. The principal price of that is being paid not in Scotland but internationally. Unless things change drastically, that will remain the case. In some instances, the human impact of pollution is devastating.

Gavin McLellan spoke of building trust. As part of that process, and if we are to show off our work
on the world stage, it is important for us to integrate the kind of approach that Des McNulty describes, even if it makes only a small contribution to a £50 billion pot. Again, doing that would provide evidence of a recognition that the impact is global.

Des McNulty: I turn to an entirely different issue. How will the arrangements for the EU emission trading scheme be affected by a minimum domestic effort requirement? What are your thoughts on that?

Gavin McLellan: What is the question specifically about?

Des McNulty: How would a minimum domestic effort requirement of 80 per cent work with the arrangements in Europe—the EU emission trading scheme and the various aspects of carbon trading within Europe?

Gavin McLellan: Several points arise. We have discussed them, but I will re-emphasise what we have said.

We must not ignore the ETS sector. As we stated, the sector approximates to 50 per cent of Scotland’s emissions. We have to ensure that a cap is put in place. That will incentivise investment in decarbonisation—I am thinking of the power sector in particular. If we do not follow through to the logical conclusion, people will end up with no incentive to reduce emissions. It is important that we do that. We can also make the economic argument that we can develop our expertise, become a market leader and ensure that we send the right signal in investing in the renewables sector, given the cap on emissions trading.

Alex Johnstone (North East Scotland) (Con): I would like to develop an issue that Rob Gibson touched on a moment ago, which is aviation and shipping emissions. We see in the news every day that when we suffer a recession, protectionism raises its head. How do development organisations reconcile an imperative to reduce emissions from aviation and particularly shipping with the importance of opening up our market to developing economies for trade, particularly the trading of their products into our market?

Chris Hegarty: I go back to the point that I made about framing this discussion in the context of global sustainable development. You are right to say that there are contradictions. If we address climate change from the perspective of doing everything we possibly can to reduce our emissions, we will end up with slightly unhelpful policies, such as the one that says that 10 per cent of certain fuels must comprise first-generation biofuels, which does not pay sufficient attention to the social impact in developing countries. That is an example of framing the issue in the context of global sustainable development.

It might also lead to the kind of advice that has been given to the Government on these issues. It is quite interesting to look at the make-up of the UK Committee on Climate Change. The chief executive has some experience in the World Bank, which some might classify as experience of international development, but there is no international development expertise on that committee, which is a gap. If Scotland created a similar committee, using people with international development expertise would help to flesh out the arguments, so that the overall response would be in the context of global sustainable development.

Judith Robertson: There is something about effort in the argument. One of the reasons why we are so keen to include aviation and shipping emissions is because of the scale of their contribution to global climate change. I have not done the analysis, but I am sure that it is available. If we source aviation and shipping emissions, we will find that the vast majority originate in the rich northern countries, not in poor developing countries. We could prioritise the way in which we examine that. We could look at taking responsibility for the emissions that we create, as we talked about earlier in our discussion about shipping and where fuel is put on ships. We are talking long term.

One of the reasons for engaging in the climate change debate and enacting legislation is that we want to take responsibility for what will happen in future. The same applies to the structure of global economies. We are not in a sustainable global economic structure—it does not exist. The economic structure is extremely iniquitous, which is why the sustainable development dynamic is important.

The issue is not just about addressing climate change and aviation and shipping emissions; it is about the way in which we impose on developing countries’ economies and restrict their growth and development. That is why it is so important to come back to the point about effort. We need to take responsibility for what we emit. Most emissions come from the rich countries in the north, and we need to factor that into the conversation. More important, we should not use that as an excuse for not including aviation and shipping emissions in the conversation.

16:45

Alex Johnstone: What issues arise as a result of Scotland being the only place so far to set targets that include emissions from international aviation and shipping?

Judith Robertson: There is no doubt that, if that approach is taken globally, the whole process will become much easier. However, if that
approach is not taken elsewhere, it is unlikely that those emissions will be reduced at all. It is important that Scotland is leading the charge, because it means that we can go to Copenhagen and say, “This is on the table in Scotland. We are holding ourselves to account for those emissions and we need you to do the same.” It makes the arguments for including those emissions much stronger.

**Alex Johnstone:** Are you confident that, at this stage, the information that we have is sufficiently robust to enable us to include aviation and shipping in legislation?

**Judith Robertson:** It seems that the information is limited—I am trusting colleagues who gave evidence earlier on the matter. It seems that some information is robust, but more work needs to be done.

**Charlie Gordon:** Is the UK Committee on Climate Change model replicated anywhere else? How does scientific analysis feed directly into political negotiations at international level?

**Judith Robertson:** I am not sure that we can answer those questions. I am sorry.

**Chris Hegarty:** We have been told that where we do not have technical expertise we can rely on our colleagues from the previous panel to provide written evidence to the committee, if that is helpful.

**Charlie Gordon:** It would be helpful to receive such evidence in due course.

What is your view on the idea of a Scottish commission on climate change? Mr Hegarty, I think that you endorsed the Dave Watson view.

**Judith Robertson:** I hesitate to call it the Dave Watson view, not because I have a problem with Dave Watson expressing that view, but because the view is held not just by him but by all the organisations in the coalition.

**Charlie Gordon:** Yes, but Mr Watson’s holding that view is not necessarily a disadvantage for the coalition.

**Judith Robertson:** I absolutely agree. It is worth saying that we very much endorse the idea of an independent commission that can hold Scotland to account on its own terms. We are concerned that the UK committee will not have the capacity to do that—indeed, that is not just a concern but the reality.

The issue is the reporting process and the accountability process. A witness on the previous panel talked about the role of the Conveners Group—that group is not an appropriate end point for the reporting process. We suggest that Audit Scotland should have responsibility in that regard and should present an analysis to the Parliament. A commission could be the first port of call in supporting the development of an annual report, which would consider progress on the target to reduce emissions by 3 per cent annually. It is all part of a package—the Dave Watson package, if you want to call it that. The accountability and reporting process, of which a commission would be part, is an important dynamic that would support the legislation to deliver on its ambition.

**Des McNulty:** I am not sure that your argument applies to advice in the same way as it applies to accountability and reporting. Your particular concern seems to be about accountability and reporting and the measurements in Scotland. It is perfectly possible to envisage a Scottish accountability and reporting mechanism that draws on UK-based advice. Have you separated the two issues in your consideration?

**Judith Robertson:** Both are important. A Scottish commission would be able to advise from a Scottish perspective and would understand the Scottish context better, for example because it would be closer to local government and would understand how it works and what it does. There is no doubt that we could draw on scientific expertise that is held at UK level. The process could operate in different ways.

On the reporting and accountability process, the important point is that a commission would be independent. The independence of not just advice but monitoring and support for the reporting process is important.

**Shirley-Anne Somerville:** Is it feasible to measure and report on emissions that are generated elsewhere from goods and services that are used in Scotland? Is that happening or being planned anywhere else in the world? The first panel discussed that matter. Do you have any alternative or additional views?

**Gavin McLellan:** We do not have an alternative view. We support what Richard Dixon said. Data that help to show our overall global impact are already available. Last year, Christian Aid campaigned on targeting some companies that were registered on the stock exchange, because there was a lot of talk about the UK’s contribution to global warming being only 2 per cent, but the figure went up to 12 to 15 per cent if wider, indirect emissions from companies that were registered on the stock exchange were taken into account. We used the campaign to tell the public that we have a moral responsibility in that context. It is important that the Government has access to such figures and that members of the public know what they are so that they have a far broader sense of their moral responsibilities in relation to the emissions that we are creating.

**Judith Robertson:** During the earlier discussion, it occurred to me that there is quite
interesting experience from the private sector. For example, when Procter and Gamble analysed not only the emissions from producing its soap powder but those from its use, it found that the biggest emissions came from washing that was done at 40°C. As a result, it now advertises a brand of Ariel that can achieve the same cleanliness by washing at 15°C. There is a reason for that: the company did the analysis, designed its product and targeted its marketing in a different way. That may not be a perfect example, but it shows that the private sector is leading some of the thinking. We could learn from that.

Cathy Peattie: The Scottish Government has proposed introducing secondary legislation to place climate change duties on public bodies. Do you have any suggestions about what those duties might be?

Judith Robertson: Doing that could potentially support 3 per cent reductions in annual emissions. Public bodies could develop their own strategies or learn from guidance from our independent climate change commission. Public sector buildings contribute hugely to public sector emissions. Investment in energy efficiency measures and the use of renewables in those buildings would clearly be beneficial in contributing to meeting the targets.

Gavin McLellan: Such duties would strengthen procurement and commissioning practices, for example, and help us to meet the targets, as Judith Robertson highlighted.

Cathy Peattie: It is clear that there would be targets if there were a duty to mainstream the tackling of climate change, but how would that be monitored? Sometimes we talk about local authorities taking on duties, but often we are not absolutely clear about what those duties are and how they will be monitored. How would we know that local authorities were doing what they needed to do? Do you have any expectations in that context?

Gavin McLellan: We have called for annual reporting, which could boost local accountability. Perhaps local communities, community councils and local hearings could have a role. We have already mentioned work in schools. Lots of things are happening across the sectors to boost monitoring, and many mechanisms could be put in place.

Judith Robertson: I presume that Audit Scotland would have a role to play, too. If addressing climate change were among the objectives of local government and it had a duty to deliver on that, it would have to report against that duty. It would have to monitor its progress against its objectives, and Audit Scotland would have a role in assessing progress.

Cathy Peattie: So targets that can be audited should be set.

Judith Robertson: Yes.

The Convener: I want to follow up on one small aspect. Gavin McLellan mentioned procurement. For the past few years, it has been possible for sustainable development to be taken into account in procurement decisions, although that has been done patchily. To what extent do those who are involved in public sector procurement take account of the international context of sustainable development? Would a public sector duty improve matters?

Gavin McLellan: I am sure that our coalition members could provide a written view on that. I think that we already have the analysis.

Rob Gibson: I want to clear up something that Judith Robertson said. She said that the World Bank estimates that the cost of support for adaptation will be 50 billion annually. Is that pounds or dollars?

Judith Robertson: I think that it is dollars.

Alex Johnstone: There is not a lot of difference at the moment.

Judith Robertson: Yes—that is becoming less important as an issue.

Rob Gibson: I am glad that my colleague was able to make the joke that I was going to make. I simply wanted to clarify that. Do you have a view on the adaptation provisions in the bill?

Judith Robertson: They will not meet international responsibilities and they will not deliver. From our perspective, the bill does not take responsibility for adaptation.

Rob Gibson: I picked that up from your previous comments.

Cathy Peattie: I have a final question on Sarah Boyack’s proposed member’s bill, which relates to climate change. What is your view of that bill? Will it enhance the work of the bill that we are considering?

Chris Hegarty: I refer to the answer that our colleagues on the previous panel gave.

The Convener: I thank the witnesses for their time in answering questions. Are there any final issues that you intended to raise but which did not come up in questions? If there are none, I remind you that, if you want to provide further written evidence, the deadline is 27 February.
Advance note from Duncan McLaren, Friends of the Earth Scotland and Stop Climate Chaos Scotland. The notes below reflect key positions adopted by SCCS on which FoES has specific views or expertise. It is not a complete list of SCCS or FoES positions.

- The SCCB is the most important piece of legislation to come before Holyrood so far, and is very welcome. As it sets a framework for four decades of action we believe it is essential to get it as good as possible now.

- The **objective of the Bill** must be to play a fair role in preventing dangerous climate change (more than 2°C warming) by reducing Scotland’s emissions in a sustainable manner.

- The **2050 target** of at least 80% is in line with current scientific advice, but may well need to be further tightened or achieved earlier. The advisory body must be empowered to advise of when and whether long term targets should be tightened.

- In setting **annual targets** Ministers should be subject to the ‘minimum floor’ of at least 3% per annum from the beginning (including the 2010-2019 period), and also required to be compatible with a **fair and safe cumulative budget** to be identified by the advisory body.

- The **interim target** of at least 50% reductions should be met by 2020, not by 2030, to ensure early and rapid action in line with scientific advice, and deliver a fair and safe cumulative budget.

- For reasons of equity and sustainable economic development, a target should be imposed that at least 80% of the effort to reduce emissions on an annual basis must occur within Scotland, with **international trading** minimised. **The net account** must therefore be constrained to reflect this. It also needs parallel consumption accounting to ensure that Scottish emissions are not reduced by off-shoring economic activity.

- **International aviation and shipping** emissions should be included in Scotland’s account from the outset using existing Kyoto reporting methodologies, with powers to amend the methodology in line with international practice.

- The Bill should include the necessary enabling powers to provide effective **financial incentives** for delivery (such as a public sector climate fund) and provide clarity that **access to the courts** to ensure justiciability over targets and their delivery will follow the principles of the Arhus Convention.

- A **duty on public bodies**, to reduce emissions in line with national targets, and report appropriately, should be imposed and resourced from the outset. The Bill must ensure it is enforceable; and establish powers to amend it, or specify more detailed duties to help deliver targets.

- **Energy efficiency** measures should be placed within a statutory energy hierarchy which promotes sustainable energy management and supply, and the objectives of the action plan should be in line with those in the Housing (Scotland) Act – to ‘improve’ efficiency, not just ‘promote’ it. The powers to regulate building improvements should be extended to all buildings, and include powers to require all identified recommendations to improve operational ratings.

- The Bill should include a requirement to take such steps as necessary to deliver sustainable supply of **renewable heat**. The definition of renewables should
exclude mass-burn incineration technologies, and prioritise heat management, efficiency and biogas from anaerobic digestion, in line with an energy hierarchy.

- The waste management measures included in the Bill are all welcome, but fall short of a comprehensive approach to zero waste which would prioritise waste reduction, and seek to phase out incineration, and minimise energy-from-waste in preference to reuse and recycling which save more energy.

- The proposals for joint venturing by the forestry commission are welcome, but those on leasing the estate are of questionable value. Measures to maximise climate benefits from forestry and upland land-use should be addressed in an integrated manner in a land-use strategy for Scotland. The Bill could usefully require Ministers to bring forward such a strategy, compatible with the CCB targets.
UK Committee on Climate Change (Col 1457)

Are you aware if the UK Committee on Climate Change model has been replicated elsewhere?

We are not aware of any other country that has an advisory body that is directional rather than informative. As far as we know, the UK Climate Change Act is the only piece of legislation that has a formal requirement that the Secretary of State (or equivalent) must take advice from the Committee on carbon budgets and targets and must follow that advice. The EU, for example, has an EU Committee on Climate Change which has a purely advisory function and the EU is not bound to follow its recommendations.

How does scientific analysis feed directly into political negotiations at an international level?

The Intergovernmental Panel on Climate Change

The international negotiations under the 1992 United Nations Framework Convention on Climate Change (UNFCCC) and the subsidiary 1997 Kyoto Protocol are primarily advised by the Intergovernmental Panel on Climate Change (IPCC). The IPCC was set up by the World Meteorological Organisation and the United Nations Environment Programme in 1988 and they say this about themselves:

“The IPCC was established to provide the decision-makers and others interested in climate change with an objective source of information about climate change. The IPCC does not conduct any research nor does it monitor climate related data or parameters. Its role is to assess on a comprehensive, objective, open and transparent basis the latest scientific, technical and socio-economic literature produced worldwide relevant to the understanding of the risk of human-induced climate change, its observed and projected impacts and options for adaptation and mitigation. IPCC reports should be neutral with respect to policy, although they need to deal objectively with policy relevant scientific, technical and socio economic factors. They should be of high scientific and technical standards, and aim to reflect a range of views, expertise and wide geographical coverage.”

The IPCC’s constituency is made of:

- The governments: the IPCC is open to all member countries of WMO and UNEP. Governments participate in plenary Sessions of the IPCC where main decisions about the IPCC work programme are taken and reports are accepted, adopted and approved. They also participate the review of IPCC Reports.
- The scientists: hundreds of scientists all over the world contribute to the work of the IPCC as authors, contributors and reviewers.
- The people: as United Nations body, the IPCC work aims at the promotion of the United Nations human development goals.

The IPCC is a scientific body: the information it provides with its reports is based on scientific evidence and reflects existing viewpoints within the scientific community. The comprehensiveness of the scientific content is achieved through contributions from experts in all regions of the world and all relevant disciplines including, where appropriately documented, industry literature and traditional practices, and a two stage review process by experts and governments.

The IPCC produces numerous technical reports and guidance on measurement and reporting methodologies but their major products are the Assessment Reports which summarise the latest state of knowledge on climate change science, current and predicted impacts and

3 http://www.ipcc.ch/about/index.htm
possible responses. The fourth Assessment Report was published in four volumes in 2007.\textsuperscript{4} The fifth report is expected in 2014. These Assessment Reports also include a short Summary for Policymakers.\textsuperscript{5}

The work around these reports is done through three Working Groups on:

- the physical scientific aspects of the climate system and climate change.
- the vulnerability of socio-economic and natural systems to climate change, negative and positive consequences of climate change, and options for adapting to it.
- the options for mitigating climate change through limiting or preventing greenhouse gas emissions and enhancing activities that remove them from the atmosphere.

The reports of IPCC have to be accepted by all the member governments and the Summary for Policymakers has to be approved word for word by all these governments.

The IPCC Assessment Reports are the absolutely definitive scientific statement on climate change when they come out. The first report in 1990 was crucial in creating the Framework Convention signed almost all the world’s governments in 1992 and the subsequent reports have all be very influential in determining what level of cuts are being discussed and which issues are at the table at the annual UN conferences on the Convention and the Kyoto Protocol.

However, the Assessment Reports have also been criticised for being out of date and overly conservative. Because the review process is lengthy there can be 18-months’ worth of more up-to-date scientific studies published on a particular issue by the time an Assessment Report comes out. For instance, by the time the Fourth Assessment Report was published in 2007 there was already a scientific consensus that the Arctic ice cap is melting faster and the sea levels will rise by more than predicted in the Report. Because the Summary for Policymakers is signed off by all the governments involved there is also plenty of room for watering down the messages by those governments which do not wish to acknowledge the scale of climate change.

The IPCC can also be vulnerable to direct political interference. A leaked memo from oil giant ExxonMobil to the Bush administration led to strong US lobbying to remove Dr Robert Watson as the chair of IPCC in 2002. Nonetheless the IPCC reports are the principal source of scientific input to the political negotiations.

Other sources
At the UN conferences and intervening working group meetings government officials will come to the negotiating table with knowledge of further scientific studies, in addition to the work of IPCC. For instance, the UK’s Hadley Centre produces updated models of future global climate in time for the annual UN meetings, and NGOs will publish their own scientific work or publicise that of others in order to inform debate on specific issues.

There has never been a set of international negotiations as well informed about the science of their issue as is the case for climate change. Of course it is the political process which needs to rise to the challenge of agreeing sufficiently rapid and radical action.

Public sector procurement (Col 1460)

To what extent do public sector procurement systems take into account of the international context of sustainable development?

As the Convener stated, sustainable development can be taken into account in public procurement decisions, but it has only been done in a patchy way. We would obviously like to see this being fully implemented across the public sector. One reason that it is patchy is perhaps because in many aspects of procurement it is up to the procuring public sector body to decide how far it goes in pursuing sustainable development objectives via procurement, and there are concerns about what is allowed. Not enough has been done to promote the

\textsuperscript{4} \url{http://www.ipcc.ch/ipccreports/assessments-reports.htm}
\textsuperscript{5} \url{http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf}
Transport, Infrastructure and Climate Change Committee, 2nd Report, 2009
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fact that this is possible, while complying with Best Value and European procurement rules. Some areas of procurement are stronger than others, for example school catering procurement, following the The Schools (Health Promotion and Nutrition) (Scotland) Act 2007.

We are not sure whether the Convener was questioning what international environmental/sustainable development standards are part of current procurement work or whether he was seeking to find out what international factors are currently taken into account, such as sourcing of products from fair trade suppliers. It is certainly possible in catering contracts to make specifications around fair trade options being welcome in a tender, and indeed, for example, to specify that fair trade products should be supplied for certain functions. (The specifications cannot be framed in terms of 'social' fair trade requirements.) We are unaware at present of the extent of any major efforts to look in depth at a range of international sustainability factors in procurement, but it is possible this is happening in some areas and we would certainly support it.

As regards international standards/specifications, the Public Contracts (Scotland) Regulations 2006 make reference to some international/European environmental standards, for example European quality assurance standards or environmental management standards or eco-label specifications.

Cabinet Secretary, John Swinney, said in May 2008\(^6\) that the forthcoming Scottish Sustainable Procurement Action Plan would “advocate a whole organisation approach which flows from top level support, and a public statement of intent, down to buy in at all levels of the organisation and supported by appropriate training. This should lead to sustainability being built into public sector requirements at ground level, rather than expecting procurement staff to define sustainability towards the end of the process.”

This is welcome, but we still believe that it should be underpinned by the general climate change duty on public bodies that SCCS has been advocating, to ensure that procurement and commissioning practices, as regards sustainable development, fit with the entire approach of each body to mitigation and adaptation work on climate change.

Do you believe a public sector duty would improve the current system?

We do believe that a public sector duty would help dramatically improve public bodies’ action in procurement by focusing, through the duty and through subsequent guidance, on the urgent need for cuts in greenhouse gas emissions, with the public sector playing a key part. We would expect the detailed guidance to include reference to the importance of sustainable development and practical examples of how this could be applied. The duty would encourage the spread of best practice because public bodies would have a strong incentive.

Please see our Briefing Paper 6 ‘Duty on Public Bodies’ for more information.

\(^6\) The Scotsman 25/5/08
Scottish Parliament

Transport, Infrastructure and Climate Change Committee

Tuesday 10 February 2009

[THE CONVENER opened the meeting at 14:01]

Climate Change (Scotland) Bill: Stage 1

The Convener (Patrick Harvie): Good afternoon, everybody. I welcome everyone to the Transport, Infrastructure and Climate Change Committee’s sixth meeting this year. I remind members and everybody else that all mobile devices should be switched off. I record apologies from Rob Gibson, for whom we hope Alasdair Allan will attend as a substitute, and from Alex Johnstone.

We have just one agenda item, which is continuation of our stage 1 scrutiny of the Climate Change (Scotland) Bill in our fourth evidence-taking session. We will hear from three panels today. The first consists of representatives who will talk about surface transport. Following that, we will have a panel of representatives who will talk about aviation and shipping. Finally, we will hear from Transform Scotland, the GreenSkies campaign and Sustrans.

We expect to continue to hear oral evidence until March, when we will hear from the minister. We have also issued a call for written evidence, the deadline for responses to which is 27 February.

I will crack on and welcome panel 1. We have Chris Austin, the head of public affairs at the Association of Train Operating Companies; Marjory Rodger, the director of Government relations in Scotland for the Confederation of Passenger Transport UK; and Derek Halden, the director of Derek Halden Consultancy. I welcome you all. Would you like to make brief introductions?

Chris Austin (Association of Train Operating Companies): Would you like a few words by way of background or an opening statement?

The Convener: If you would like to introduce your organisation briefly, that would be fine.

Chris Austin: The Association of Train Operating Companies represents franchised passenger train operators throughout Britain. We are a trade association and we provide the facilities to support members through national rail inquiries and the rail settlement plan process, which allocates revenue among companies. We also take the lead on fare and ticketing issues and on other passenger-related issues for passenger train services throughout Britain.

Marjory Rodger (Confederation of Passenger Transport UK): Thank you for the opportunity to come to the meeting. Members know what the CPT does, so I will skip describing that. The contributions that we feel bus transport can make and the assistance that we need can be delivered without further legislation, so we have limited our written response, to which I have nothing to add at this stage.

Derek Halden (Derek Halden Consultancy): The agenda says that I am here as the director of a consultancy, but a large part of the reason why I am here, rather than somebody else, is that I chair Scotland’s transport think-tank, the Scottish Transport Studies Group. We have, in the past couple of years, held three debates on climate change and transport that covered a wide range of views and which have been written up. As the chair of those debates, I hope that I can give the committee an overview of the views that are out there.

We are a networking group, and as such we never respond to consultations, or take a view on them. Our members include many of the bodies that will present their own evidence here today, and that evidence will contain differing views. I will give my views as chair of STSG.

The Convener: Thank you for that clarification.

I will open with a general question. From a passenger transport perspective, what are your views on the proposals in the Climate Change (Scotland) Bill?

Marjory Rodger: The bill is welcome and CPT supports the proposals. Something has to be done and, as we have shown in our submission, transport has already started—in our premises and our fleets—to try to reduce emissions and make our contribution.

Chris Austin: ATOC is in the same position. Rail has a major contribution to make to tackling climate change, by reducing the impacts of carbon emissions. Rail is inherently efficient in terms of emissions per passenger kilometre.

The submission that we circulated last week points out that, in considering the bill’s effects on transport, targets must be set for the transport sector as a whole. It would be perverse to set targets that would constrain the growth of rail through taking a share from car and air, thereby preventing a shift from an environmentally less friendly mode to an environmentally more friendly one.
Derek Halden: I have quite a few points to make, but I will just make a couple as an introduction and then perhaps come back to the others when we go into more detail.

Clearly, the Scottish Government has to do something, because international and United Kingdom Government targets have been set. The proposal of a more ambitious target for Scotland presents both risks and opportunities. Transport is a slippery sector. What if everybody started to go south of the border to fill up with fuel, so that it did not count? The way things are counted could lead to all sorts of unintended consequences.

Because transport is such a slippery sector, the main point that has come up in our discussions is the need to keep things really simple. We have to stay focused on what can be changed. We are never going to count everything, but if the view of carbon emissions in Scotland is not comprehensive, people will dodge targets. The inventiveness of businesses in finding ways of avoiding particular aspects could actually cause damage through increased emissions.

I will give a classic example of a problem that can arise with a target for transport. A company such as Tesco might decide to have fewer warehouses if its warehousing emissions, but not its transport emissions, were in the traded sector. The company might therefore end up producing more emissions, because if its warehouses were further apart, its lorries would have to drive further. The issue is very complicated. The wrong targets might, rather than trigger positive action, be a trigger on a blunderbuss that causes as much damage as it creates benefit.

We could talk more about the details, but those are the sorts of general issues that have to be considered now, during the bill process.

The Convener: Has the transport sector been given sufficient opportunity, through formal consultation or through informal dialogue with the Government, to influence the development and shaping of the bill before its introduction?

Marjory Rodger: CPT has certainly been consulted. We responded back in September or October, and have since responded again.

As my two colleagues on the witness panel have suggested, a lot will depend on what happens when we get down to the details. The powers are broad, and further consultation will be required when we consider how the powers will be put into practice. It is good to know that it is very likely that we will be consulted again.

Chris Austin: I echo those views. ATOC has had the opportunity to make representations, both directly to the Government and through this committee. As Marjory suggests, the devil will be in the detail and it will be important to continue the consultation when we reach that stage.

Derek Halden: Some of the wording could be tweaked—at the moment, it is a bit processy. The bill states that people must demonstrate action, rather than that they must ensure delivery, so I would like to tighten up the wording throughout. We will never be able to measure everything, so let us measure what we can change. If we can secure and deliver something, the bill should be used as a trigger for that.

The Convener: I have a question specifically for the CPT. You cited examples of best practice in depots and offices. How are they rolled out in the rest of the industry? How are those lessons learned?

Marjory Rodger: We gave the committee examples from the two biggest groups—First and Stagecoach—because between them they cover about 70 per cent of bus services. We also gave one example from Lothian Buses, although not in relation to depots. We did not provide examples for all operators, but all of them are developing best practice in their own ways. If you have been to a lot of bus garages and depots, you will know that they are big, cold and draughty places, so there is a big incentive to run them more efficiently. We have been discussing the issue—I could have cited examples from Arriva and others. All the knowledge that is gained from the money that the industry spends on research and development of vehicles and new technologies is shared.

Cathy Peattie (Falkirk East) (Lab): Is there scope to include in the bill engagement targets to encourage the use of public transport?

Marjory Rodger: That is an attractive thought, but it could be difficult to measure engagement. Modal shift and use of public transport can best be encouraged outwith the bill, provided that we get real buy-in from local authorities under the concordat with the Convention of Scottish Local Authorities. I am speaking for bus, coach and light-rail operators and there is a lot that we could do in working with single outcome agreements to improve access to health care and encourage modal shift. There is an onus on the industry to come up with information and other incentives to make public transport attractive.

Cathy Peattie: Are you saying that the industry does not think that the bill is necessary?

Marjory Rodger: Not at all—but the bill covers an awful lot more than transport.

Chris Austin: The same is true of rail use. There is every reason to encourage its use, and the track record over the past 10 years demonstrates that that is entirely achievable.
Throughout Great Britain, the number of rail passenger journeys has grown by about 50 per cent. It is now at the highest-ever recorded peacetime level, despite the fact that the network is a lot smaller than it used to be. Over the past 10 years, our members have demonstrated that there is an appetite for people to shift to rail, and that they have done so in large numbers. Over the same period, we have been able to reduce CO₂ emissions per passenger kilometre by around 25 per cent. Continued reductions of that order will be needed if the targets that the bill will set are to be met. That makes encouraging a shift to public transport very important.

**Derek Halden:** I am slightly concerned about talking about individual modes. There have been various reviews, the most high-profile of which was Sir Rod Eddington’s review of transport systems, which have led to major reorganisations of the transport sector, such that we should stop thinking about modes and start thinking about end-to-end journeys. Divisions in the Scottish Government and Transport Scotland have not been reorganised in the same way as those in London departments have been. Down south there is now no such thing as a rail department; it is all about regions and localities—it is about who plans end-to-end journeys.

Once we start to talk about modal shift, we get into a complicated arena because, at the end of the day, people choose to go by bus to the shops and to drive to other places—destination and mode choice are bundled up together. We are trying to encourage sustainable places, environments and choices. Bus and rail are clearly essential elements within that, but it would be inappropriate and counterproductive for the bill to set targets for particular modes, because the unintended consequences could be far greater than any benefits.

**Stagecoach** conducted research in Cambridge and in the South West Trains area, which are pretty affluent areas. Brian Souter had the idea that his growth in those two areas was down to, as he put it, the “green welly brigade”: people were thinking with their consciences and switching to public transport, so he conducted a pretty hefty piece of research. It is interesting that it found that the top reason for switching to public transport was health—people were tired of stress and problems, so they switched to public transport. The green agenda came second. A range of influences play their parts and using them together we can make a shift.

**Derek Halden:** That finding echoes research that my firm did for the Scottish Government back in 2003, so there is nothing new about that.

The key point about winning hearts and minds is that climate change is a very high-profile agenda, but there is a lot of scepticism about whether what we do will make a difference. We must consider where the money is spent on transport and who spends it. Government currently spends about £2 billion a year while consumers and businesses spend about £20 billion a year. If we want, as a country, to change transport in Scotland, we should be more focused on the £20 billion than on the £2 billion, but we often plan how we can optimise the £2 billion that Government spends rather than the £20 billion. That relates to what was said about hearts and minds. The question is this: how do we get the purchasing decisions of the public to change? It is about enabling people to do more. The bill is much too top-down and it seems to envisage a command and control economy; I would far rather see a carbon-free or low-carbon economy develop according to Barack Obama’s language of growing new jobs in the low-carbon economy. Can we do that with the current wording of the bill? It is possible, but measures would need to be implemented to back it up.

The measure that I will highlight, which has come out of our think-tank discussions, is that we need something like a Scottish carbon trading scheme. The UK Climate Change Act 2008 offers that prospect. Such a scheme could include on a common footing all modes of transport and it could, for example, let a large business that finds carbon reductions difficult invest in low-carbon buses. Marjory Rodger and her colleagues have conducted research on such issues, but where will the billions of pounds come from to invest in new cars?

Billions of pounds will probably also be required to roll out a network of electric plug sockets across the country. That will take place in the next 10 years, but it seems—as far as I can see—to have been completely missed in strategic funding decisions. People will be buying plug-in cars in
mass volumes from next year, or even this year. How will such massive expenditure programmes be funded? I cannot see the funds coming from public expenditure, but I could see them coming through a Scottish carbon trading scheme, which would enable people to invest and engage, and would enable businesses and the public to purchase from one another. That is a long answer to the question, but that is the sort of future that I would like to see. Such a scheme is perhaps not addressed specifically in the bill, but it is about what we do with the regulations under it and under the UK bill.

**Chris Austin:** Our experience in rail has focused particularly on business travel. The themes of the Climate Change (Scotland) Bill and the UK bill before it have been reflected in the approaches that businesses have taken to corporate travel plans and corporate social responsibility.

One of the reasons why Eurostar has done a lot of work in the area and has worked hard to become a carbon-neutral railway is that its customers—especially business customers—have been demanding it. Virgin Trains has a carbon calculator on its website so that the effect of a journey can be calculated, which is important to people within the corporate culture in their travel decisions. Such considerations have become important and appear to have induced a modal shift—both Virgin and National Express East Coast have gained market share from air travel over the past year. Change seems to be working through in that practical sense.

**The Convener:** Is there evidence to back up the assertion that that is what has caused modal shift—if it is happening—rather than its being caused by other aspects of what makes air travel convenient or inconvenient? For example, security changes will have had an impact on aviation.

**Chris Austin:** That is absolutely right. I cannot point to research that pins that change to environmental issues, but it appears to be one factor that is clearly marked in Eurostar’s marketing campaign and in the results that it has achieved.

**The Convener:** Perhaps we will also explore that question with a future panel.

I have a subsequent question on the wider issue of engaging with individual decisions—whether we call it hearts and minds, public engagement or whatever. Does the Scottish Government need to address prices in public transport? One could say that the operators need to make a better offer, but there is also a question about by how much Government is willing to subsidise public transport to make its prices genuinely attractive. In some cases they are attractive and in others they are not. Does the Government need to start changing the financial incentives alongside introducing legislation?

**Chris Austin:** I will start by answering for rail, which is, as you know, less contentious. It is important to recognise that more than 60 per cent of passengers are already travelling on a regulated fare and that about 80 per cent of them are travelling on some form of discounted ticket. As is the case for air fares, the range of rail fares is broad. As I mentioned, the proof of the pudding is in the success of rail having grown its market by 50 per cent over 10 years. That would not have happened if we had got the pricing hopelessly wrong. It might not be perfect, but it has certainly generated a lot of growth in business and that seems to be a major success criterion.

**The Convener:** It has not been enough to stop road traffic growing at the same time.

**Chris Austin:** Yes, but road traffic has not grown as fast. Rail growth has outstripped growth in road traffic and domestic air travel for some time now, which is good if you work for the railway. That is partly reflected in the pricing policy and the amazing degree of very low, advance-purchase fares that are available for long-distance journeys—I have been talking principally about long-distance journeys. That pricing policy has been successful and offers fares that would have been unimaginable five years ago—for example, £16.50 and, I believe, £12 on one offer for travel to London. We are talking about very cheap fares as against much more expensive business fares.

As I said, the proof of the pudding is in the eating: the successful growth of rail business over the period and the resilience of the rail industry in response to changes in economic demand. I am not saying that the economic slowdown has not had an effect on rail—of course it has—but it has not been as marked as one might have expected.

**The Convener:** Are there any other views?

**Marjory Rodger:** Yes. Eighty per cent of the bus industry is still totally commercial and in the cities the figure rises to 98 and 99 per cent. We are going through a three-year review on one of the major sources of public funding—concessionary travel. The review is reaching its conclusions, however, and I do not want to pre-empt them.

We are also working with Government on the bus service operators grant and will put in place a new environmental BSOG linked to emissions and engine quality.

I come back to what the industry is doing, which has to be funded when fares are set. The last thing we want to do is put fares up unnecessarily because every time we put fares up, we lose fare-
paying passengers. That is where I am coming from.

In relation to climate change, we are spending a lot on research and development. One example is the Stagecoach biodiesel buses that are running in Ayrshire, but at a loss. There is no public money to help us out in that. We are trying to see how it works. We are one year in, so it is early days, despite the fact that 30 tonnes of recycled chip fat have been brought by the residents of Stewarton.

I can speak for the bus manufacturers, too, when I say that huge investment is required to get, for example, low-floor vehicles for wheelchair access to coaches. We have had major problems with balancing comfort with accessibility. The industry is funding those things with no Government help, and the costs have to be fed through.

Most of our bus fares are very good value for money. If there are problems, we need to talk about them in local partnerships and local bus forums, which are part of the bus action plan, and address them case by case.

**Derek Halden:** We need to start thinking about end-to-end journeys and people getting to places rather than about individual modes of transport. If we want to offer a tariff that is appropriate for an elderly person who is going to hospital, whether by bus or taxi, for example, the Government must ask whether it is regulating a system of fares that ensures that all the options are available. For example, is it possible to buy those fares? The bus industry is probably right to say that most of the time, the public would not buy the regulated fare, and that it can provide a more competitive fare. Individual bus and rail companies would be the same. The Government should make sure that people have the option to buy those fares. That links closely to what I said about the tradable credits that we envisage being used under climate change legislation. There are new ways of funding the bus and rail industries for the trips that are particularly efficient.

**The Convener:** Let us move on to examine some of the specifics of the bill.

**Alison McInnes (North East Scotland) (LD):** At the beginning of the session, Mr Halden said that we cannot measure everything. I have a couple of questions to explore that a bit further, and I would welcome comments from other members of the panel.

The bill uses the Intergovernmental Panel on Climate Change and the report of the UK Committee on Climate Change as a scientific benchmark. How robust are the figures on emissions from public transport in Scotland?

**Derek Halden:** Public transport figures are probably okay. I envisage that the biggest problem will be with the car fleet, which is the biggest consumer of energy. As we move through the next 10 years, a substantial proportion of cars—15 or 30 per cent; the figures are disputed—will be plug-in. Section 29(4)(a) of the bill refers to “gross electricity consumption”, which is clearly inappropriate. We want to encourage people to move towards zero carbon, which will involve their plugging in their cars at night. At the moment we waste electricity, which is why we have night storage radiators—they use largely free electricity that we could use to charge up our cars. If we want to encourage that, it seems counterintuitive to discriminate against it by counting the amount of electricity that we burn.

My overall comment is therefore that we do not want such detail in the legislation. We want the generic provisions on carbon, but it should be for the advisory body and the committee to get the detail right so that we do not end up with counterintuitive scenarios such as the one that I described.

The same point applies to buses. We could have hydrogen buses that recharge at a hydrogen store at, say, First Glasgow’s Victoria depot. The hydrogen buses that are in use in London cost about £2 million each. That is expensive but, if we could afford a fleet of hydrogen buses, we could charge them up overnight from free night-storage electricity, build up a hydrogen store and run them during the day on hydrogen. The bill discriminates against that.

14:30

**Marjory Rodger:** Those vehicles will come to Glasgow, but there is another problem as well as the initial outlay. As is the case with the biodiesel vehicles, there are questions about the lifetime of the vehicles—we do not know what problems we might encounter after even just one year. Issues with biodiesel vehicles have already arisen. For example, in summer they get fungus if you do not keep the tank cool and in winter they wax. There are things to learn with any new system. For example, we had to learn to add Adblue to diesel to enable it to cope with changes in temperature.

We do not know what will happen with the vehicle’s engines over time or what the situation will be with replacement parts. We will have to go through a generation of each of the experimental vehicles to understand fully what using them means and how much it costs the industry. That is why I am wary of being tied to figures at the moment.

**Chris Austin:** As my two colleagues have said, it would be useful to keep some flexibility in the
legislation to take account of technical changes. In rail, there is a move away from measuring electricity consumption through the supply points and towards train metering. That will allow a much more accurate assessment to be made within a geographical area, a company or group of services. The legislation probably needs to reflect the fact that, as the technology changes, we will be able to be much more specific about electricity consumption.

**Alison McInnes:** That is helpful.

When the United Kingdom Committee on Climate Change carried out some sectoral-based work on transport, it concluded that surface transport could reduce its emissions in the UK by between 5 million and 32 million tonnes. Can any of you shed any light on why that range is so broad?

**Derek Halden:** Julia King's review of low-carbon vehicles envisages that, by 2050, land-based transport will produce zero emissions. That seems like a sensible view, which means that the increase in emissions from transport that we are looking at will arise largely from aviation.

I would like to think that, because of the more ambitious targets in Scotland and the fact that we are working to a shorter timescale, we can reach the point at which land transport produces zero emissions faster than elsewhere. However, that can take place only in the context of the electric future that we are talking about, which involves renewable or zero-carbon energy and people charging up cars and buses. That is what we are working towards, and we need to ensure that the bill sets challenging targets year on year so that it can happen.

There are major instabilities in the area that we are discussing. For whatever reason, the international carbon trading schemes now seem to include aviation and international shipping. For years, the UK Government took what I think is the right view, which is that either all forms of transport should be included or no forms of transport should be included. The French argued that aviation should be included. They saw it as a way of getting a competitive advantage because the UK is an island and—this is particularly true of Scotland—dependent on aviation. After all of the usual European negotiations, aviation has ended up being included. That is significant, because there is an instability in transport markets that could cause all sorts of catastrophes. We could end up inadvertently encouraging one mode of transport instead of another: the system could end up being good for aviation or bad for aviation. No one has any idea what could happen.

There is a lack of consistency in the treatment of international tradeable credits. I hope that we can remove that instability and use policy regulation to ensure that the credits that the Scottish Government buys through the international trading schemes score fairly for all modes against its climate change targets. It is a difficult issue that probably needs more consideration than we can give to it now. Members of the group that I represent or other firms could look at it—there is a real analytical task to be done.

**Marjory Rodger:** I offer a slight caveat. Much of the research was done in a healthier economic climate. I worry about the impact that the depth and length of the recession will have on the cost of the changes.

**Chris Austin:** To some extent, the variation will depend on how many miles are run by electric traction and how many are run by diesel, as electric traction is more efficient in terms of carbon usage. However, everything depends on generating policy—the proportion of electricity that comes from renewables and the proportion that comes from fossil fuels. Rail can offer carbon-neutral travel, as Eurostar does, but that depends on the source of the electricity.

**Alison McInnes:** I would like to ask a general question before handing back to the convener. Do you have a view on the 2050 and interim targets?

**Derek Halden:** I contributed to the Scottish Council for Development and Industry response, which said that we can achieve the targets, even with renewables, but that we had better get our skates on if we want to do so. We could have moved faster in the past few years.

**Alison McInnes:** If we need to be encouraged to get a move on, do you think that the interim target is set at the wrong date?

**Derek Halden:** I do not have a view on that.

**Chris Austin:** In our view, the dates are far enough away to enable us to make the significant changes that are needed. I come back to my original point: targets need to be set for the transport sector or more broadly. If they are set for rail, growth and transfer from less friendly modes to rail will be inhibited.

**The Convener:** I assume that there is broad comfort with the long-term target; that gives us some confidence that you regard the target as achievable, rather than just necessary.

The policy memorandum to the bill suggests that, prior to 2020, annual emission targets will be lower than 3 per cent—perhaps 1 per cent—and that we will build towards targets of 3 per cent a year after 2020. Can the transport sector achieve cuts of that order? Are cuts of a more ambitious nature achievable? When the intention to publish the bill was announced, it was intended that there should be annual cuts of 3 per cent.
Derek Halden: There is a lot of freight and air transport, but 85 per cent of personal travel is by car or on foot—and one of those modes is effectively zero carbon.

We work with retail developers. Why are they the only people to have installed public electric charging points for cars—at Silverburn and at the St Enoch centre in Glasgow? Is everyone else asleep? The Norwegian Think car is now on the market; Golf and Focus plug-ins will be on the market within six to 12 months. Every car manufacturer is working on the issue, but where are the charging sockets? It will take a decade to install the infrastructure. Why are we asleep?

If we take out the 85 per cent of trips that are made on foot or by car, of course ambitious short-term targets are achievable. It really depends on whether consumers will find it attractive to buy the new products. The Germans are trying to keep their car industry moving by giving people £2,000 if they replace an old, inefficient car with a new one. Perhaps Government should use such levers to kick-start movement in that sector, so that we can meet the ambitious targets that have been set.

The Convener: Should Government be willing to consider not just technology change but demand management? We have said little about the role that demand management could play in reducing emissions.

Derek Halden: Demand management is something that we do all the time—for example, by choosing not to have a road between one place and another. It is in our decisions about the infrastructure that we build; it is inherent in everything that we do. In my view, we need to determine our management criteria.

Demand management is important. In most places, profits in the shops go up when we pedestrianise town centres. It is obviously important to manage demand in town centres so that people find shopping there more attractive. We should look at the criteria and what we are trying to achieve. Talking about demand management in the round—as a means of reducing car travel—does no more than pay lip service to Government policy. Government depends on revenue from car taxation to afford everything that it does, and councils depend on car parking revenue to fund a huge proportion of local services. We depend on the car to fund our current lifestyle, so changing the taxation system would have major implications.

The Convener: I invite the other witnesses to comment on whether the annual target should be 3 per cent up to 2020 or less than that.

Marjory Rodger: According to current figures, buses are responsible for about 3 per cent of emissions, and I am confident that the 3 per cent target can be achieved in the short term. Under disability discrimination legislation, all single-decker buses must have low-floor access by 2015; for double-deckers and coaches, the target dates are 2017 and 2020 respectively. That means that buses will have to be replaced. When they are, we will move from having vehicles with Euro 1 engines to having vehicles with engines that comply with the Euro 3 or Euro 6 engine emission standard, which are a lot cleaner.

That is the interim phase. We cannot switch over to hybrids and biodiesel-fuelled vehicles overnight as we must see how they work in the longer term. After that, the manufacturers must jig up—it is not a quick fix. However, clean diesel engines will be introduced in the short term. They are coming in now, and that process will accelerate.

Chris Austin: I would not like the timescale to be any tighter, partly because of the point that Marjory Rodger just made. That is accentuated in the rail industry, given the long lead time for investment in new technology.

The Convener: Taking account of the point that you made earlier, I make it clear that we are talking not about a specific target of 3 per cent for rail but about a target for transport. Do you believe that the transport sector as a whole can achieve annual reductions of 1 per cent up to 2020? Could it achieve reductions of closer to 3 per cent?

Chris Austin: I do not think that it can do better than that because of the lead time for replacing vehicles and equipment, whether bus or rail, and for the changeover to electric cars that Derek Halden described.

Des McNulty (Clydebank and Milngavie) (Lab): Patrick Harvie's question was about improving efficiency in the transport sector. I will put the reverse question. Should we ensure that new housing and retail developments are transport accessible—in other words, that there is a rail or bus connection within walking distance? One of the big problems that we face is that a great deal of development is permitted in places where people's access to services—places of work, schools and hospitals—is entirely dependent on cars. Do you have a view on that aspect of the issue, as well as on the reductions that you can deliver through your operations? If we organised ourselves in a different way, we could make much greater use of public transport and avoid putting people in a position where their only option is to use the car.

14:45

Marjory Rodger: My strong view is that I would love to see that happen. Planning is essential, and it is a huge mistake that transport has, historically, been involved far too late in planning decisions.
That still happens. The tools are available and the research and development has been done—any postcode can be put into the Traveline Scotland database. For example, if the national health service looked at three sites for relocation and decided that, as everything else was equal, it should consider the transport connections, some different decisions might have been made. I agree with any proposal that leads to transport being included in planning decisions, because you do not change habits retrospectively. The industry would offer incentives for all modes of transport—we would give free travel and lay on services—if we could get in at the start of the process. I would welcome that.

**Chris Austin:** That has to be right, but it has taken a long time to reach those conclusions. There has been a lot of retrospective action in respect of rail, in that new stations have been built to serve new developments. That has helped, but I agree that that is not a substitute for planning it all from the outset.

**Derek Halden:** I come back to the point that I made at the outset. It is about door-to-door journeys. We have had Sir Rod Eddington’s review and Cabinet Office reviews that have come to conclusions about making the connections, joining things up and planning access rather than transport modes. All those conclusions are clear, but it worries me that we still invest the money separately by mode. Although we might talk the talk about planning access and connections, we do not walk the walk, because we still fund rail, bus and road through separate delivery mechanisms. Until we change our approach and put the money behind improving access and connections, we will not achieve those aims.

**The Convener:** I have one more question on targets. Beyond the targets in the bill, will other European, UK or Scottish targets that the transport sector is having to meet impact on transport’s ability to make greenhouse gas emission cuts? The European targets on renewables or reducing energy use might be examples. Are there others that impact on transport’s ability to make the transformational change on climate change that we seek?

**Chris Austin:** I am aware of one such target, which is the restriction on the sulphur content of diesel. The sulphur emissions target means that our freight colleagues in particular have to burn more diesel to achieve the same mileage, because the chemical composition of the clean fuel is different. That demonstrates that, unless you are very careful, you can set conflicting targets and solve one problem but create another. That is a practical example that stems from European Union rules.

**Marjory Rodger:** Another practical example is that the cleaner our engines get, the heavier they get and the more fuel they burn. We are therefore producing fewer emissions but using more fuel.

**The Convener:** In order to try to be cleaner.

**Marjory Rodger:** Yes. We are getting there, and that trend is being slightly reversed, but that has definitely been the case.

**Derek Halden:** The problem is so serious that unless the bus industry gets its loadings up or rationalises its service, it could become worse than the car in respect of emissions per passenger kilometre. I would be the last person to want to knock buses: we must increase the bus loadings dramatically so that we get the benefits. However, that has been the impact of the change that Marjory Rodger described.

My conclusion is that we must unlock the power of consumer expenditure. Consider what is spent on bikes, cars and the purchase of tickets. That is where the big money is out there. To come back to my first point, the changes that will be made by, for example, Tesco in warehousing and distribution, in the way that it packages products and sells them, and how much is charged for car parking and so on will be the drivers of change.

Whether the targets are right or wrong seems such a detailed academic question. I know that I am at the committee representing a study group, but I would turn round and ask, “Why, academically, does it matter?” It does not matter. The important thing from a research perspective is that we know that setting targets acts as a trigger for action. The problem is that the mechanisms for action—the delivery mechanisms—are not there yet. We might pull the trigger and then find that we go bursting off in all different directions because we do not have a barrel that will send the bullet towards the outcomes that we want.

I mentioned a figure of 85 per cent for car and walking. I should have clarified that I was talking about shopping trips. Of course, public transport achieves a much higher modal share on work trips. Workplaces tend to be more usefully situated than shops—a lot of the really poor interaction between land use and transport has involved shopping centres and out-of-town developments.

I wanted to get the facts clear, because someone is writing all this down.

**The Convener:** They are giving it a go, certainly.

**Shirley-Anne Somerville (Lothians) (SNP):** The strategic transport projects review suggests a saving of 100,000 tonnes to 150,000 tonnes of CO₂ equivalent if all the projects in the review are delivered, relative to business as usual. Do you think that that is an equitable contribution for the...
transport sector to make in pursuit of the 80 per cent emission cuts?

**Derek Halden:** The strategic transport projects review has had a difficult job to do because the strategy is not clear and you cannot do a strategic review unless there is a strategy. I cannot therefore make a lot of sense of any of that. I do not think that any of its conclusions look crazy; they all look perfectly sensible. You can get to the right answer in lots of different ways. I would not want to be critical of the review, but I think that we need a strategy that does more than the national transport strategy, which says, more or less, "We need to reduce emissions somehow."

We need to sort these things out and decide what we are going to do—our options include the things that I have been talking about, such as powering cars from electric plug sockets or using some sort of future biofuels for aviation. Once we have that strategy, we will inevitably have different figures from those that the strategic transport projects review used.

The detail of the specific schemes will be interesting in that regard. Some schemes will increase carbon dioxide emissions and some will reduce them. Therefore, we should focus on delivering quickly those that reduce carbon emissions and perhaps think about what can be done to those that increase carbon emissions to make that less of a problem. The aggregate figure is much less interesting than the detail.

**Marjory Rodger:** The strategic transport projects review document is a massive read, but to me it is simply 29 projects. Until they are prioritised, have funding streams attached and we have some idea of how they will move ahead, I will find it hard to comment on the figures.

**Chris Austin:** I am not an expert on this but, to the extent that the review includes projects that will increase capacity for public transport, which will encourage modal shift, it must be good. Allowing the shift to rail to take place is key to the issue that we are discussing. That shift is constrained at the moment by the existence of a number of pinch points around the network. Enabling communities that are no longer rail connected to access the network is also important, which is what some of the new rail projects will do.

**Marjory Rodger:** One quick fix would be integrated ticketing, which would not cost much to introduce. Anything that makes public transport simpler for people to use, such as better information, would make a valuable contribution.

**Shirley-Anne Somerville:** Given the challenging targets that are proposed in the bill, do you think that there needs to be a change in the emphasis on emissions reduction in the Scottish Government’s transport policy? Is so, what should that change be?

**Marjory Rodger:** I will be parochial and talk about buses. We are already working with the Scottish Government on ways of ensuring that the BSOG grant conditions include an environmental target. What we are talking about would be pretty challenging for the industry to meet.

**Chris Austin:** The same may be true of rail. There are a lot of initiatives that the operators are taking and which they have been able to justify commercially, either because the initiatives reduce energy consumption and cost or because they attract more passengers. That said, we do get to the point at which, if we are to take things further, further investment is needed. That is the point at which Government needs to come in.

**Derek Halden:** I will bang on at the point that we have transport because we are trying to do economic and social activity; that is why it is there. It is not sensible to try to set targets for transport that are independent of those wider activities. We cannot carve off transport and say, "This is why it is different." One of the biggest emitters is the entire machinery of freight transport in Scotland. What to do about that is a difficult optimisation decision. Do we build more warehouses and hold stuff for longer or have fewer warehouses and run more trucks around the country? The choice is between warehouses and trucks, and only one of those is a transport decision. The idea that we can set emissions targets for only the transport sector is wrong. People will just shift sectors and we might achieve efficiency gains, or we might not. It is not sensible to try to set targets only for the transport sector.

**Des McNulty:** It may not be your central interest, but what are your views on the inclusion in the bill of emissions targets for aviation and shipping?

**Marjory Rodger:** No sector can be excluded. I am not qualified to say whether the targets are appropriate, but everything must be included.

**Chris Austin:** That is right, particularly given the environmental performance of aviation. If we are to make significant change, modal shift will be involved—at least on domestic journeys. If we do not include or measure aviation, it will be difficult to achieve such change.

**Derek Halden:** It is simply a question of following the issue from the European Community, to the UK and then to Scotland. The fact is that international aviation and shipping will be traded, while other modes will not. We have inherited a situation about which we can do nothing. We need to try to deliver differently for international aviation and shipping, so they must be in the bill and they have to be dealt with separately. Trying to redress the unfortunate imbalance that the EC has created
by trading only some sectors is a major issue for this committee and the Scottish Government.

Des McNulty: I will concretise things: my next question is on surface transport links to airports. Should surface transport links be improved in order to deliver maximum emissions savings? At the outset, Derek Halden made the point that this is all about end-to-end journey planning. Should aviation emissions be considered in the wider context of airport access links?

Derek Halden: Yes.

Des McNulty: Do you want to expand on that a bit?

Derek Halden: Well—

Des McNulty: The committee is about to publish the results of its inquiry into the potential benefits of high-speed rail services, as part of which we have considered high-speed rail as an alternative to aviation, particularly for journeys within the UK. Should we think about aircraft emissions in the context of planning journeys to airports? Should aircraft emissions be included in the equation for rail and air and consumer alternatives?

15:00

Derek Halden: Yes, but I do not know what decisions consumers would make. One huge area—everyone has highlighted it—is the market’s failure to get out information on the issue. We need think only of the Government’s decision to put a health warning on cigarette packs, in which it said, “This could seriously damage your health.” It did that for reasons of health and social care.

There is no reason why, when people can receive journey plans on their mobiles or PDAs, information on carbon cannot be included. Many websites already contain carbon calculators, and such information could be standardised across all systems. The Government would have to pay for that, because there would be no commercial benefit for airline or rail companies—even though Virgin already provides such information. In order to achieve the social and environmental benefits, it would be up to the Government to ensure that the information was available to consumers. Would consumers then choose high-speed rail or would they choose air? We do not know. However, big money will come from such markets, and we will have to develop them and provide people with information. The future of transport will be completely unstable as long as consumers—or, as you would regard them, voters—do not understand transport. We cannot make any progress until we tackle the information agenda.

Marjory Rodger: Can I come back on this point? I definitely did not talk about market failure in information. I said that we had to keep improving and enhancing the information. At the minute, for example, we are talking about getting comprehensive journey planning and individual travel plans from Traveline Scotland to people’s mobiles via SMS texting.

While we are still talking about surface transport to airports, I will say that we have some excellent bus partnerships. Shuttle buses can provide a door-to-door service, and that service is very good in Edinburgh. There are good partnerships in Glasgow too.

If there are gaps in services, we can enhance those services easily, cheaply and flexibly.

Derek Halden: I am sorry, I did not want to imply otherwise—I do not disagree with anything that Marjory said there. I agree entirely. The Government’s stake in Traveline has been to fund components with social and environmental benefits, whereas it has been the bus industry that has financed information on journey planning.

Chris Austin: A lot of action has been taken on providing information on the National Rail website, which provides local onward travel information, links to Traveline, and local maps showing where buses stop. That provision of information has been revolutionised over the past 12 to 18 months. A lot more local information is provided in order to enable people to plan their door-to-door journey.

There is still more to be done. The provision of train information via SMS texting, which Marjory mentioned, has revolutionised people’s travel experiences. People are no longer left wondering where the train is; they can see from their mobile phone what has happened to it.

Airports are such big travel generators that the management of surface travel to airports is really important. Across the piece, people have been turning to higher-volume public transport modes such as bus, tram or rail, all of which have a part to play. The number of trips generated will depend on the size of the airport. Transport systems that use low-carbon vehicles—or, in the case of electric trains, vehicles that emit no carbon at the point of use—have advantages.

ATO has been working on station as well as airport travel and access plans. Stations are major travel generators too. Most of the large stations in the country carry far more passengers daily than the airports. They employ large numbers of workers too, in train crew and station staff. It will therefore be quite important to make travel information available so that people can make informed choices on how they can reach the station without automatically jumping in the car. That will work on a commercial level too, because congestion and restricted parking around stations may mean that people will not choose rail for their main journey. If people realise that they can reach
the station by bus or on foot, it will influence their travel choice.

Marjory Rodger: I would like interchanges to be improved. We must spend money on making interchanges much easier and on providing better facilities. My quick fix win to pay for that would be to treble car parking charges.

Des McNulty: BAA is coming in behind you, so to speak—we have a BAA witness on the next panel. I will put the same question to him. The airport car parks at Glasgow and Edinburgh airports seem to get ever bigger, while the airport buses seem to run empty. Is that visual impression wrong? In terms of surface transport links to airports, is bus patronage increasing relative to car usage? It seems to me that more people are using the car to get to the airport. For example, Edinburgh airport has not only the official BAA car parks but an outer ring of private car parking provision.

Derek Halden: We do quite a bit of work with property developers. Parking is a very nice revenue earner: the developer of a typical shopping centre is making a lot of money from car parking. We have been trying hard to get shopping centre developers and operators to do partnerships with the bus industry so that public transport operators can share in the increased profits that attracting new business in that way can bring. We cannot drive up modal shift from car to bus unless the people at the destinations work with the public transport providers in business partnerships. At the moment, most trip attractors—including airports and shopping centres—are making money only from car travel. They are businesses, so of course that is what they will do. We will see no change until we find a way to unlock the potential of partnerships between public transport operators and trip attractors. Success in that regard is key to all this. If we do not get modal shift, we will see further increases in car parking at most of the key trip attractors.

Marjory Rodger: Bus partnerships with airports make money. They must be carrying passengers. The Edinburgh shuttle, which was launched as an experiment, broke even and then went on to make money much more quickly than people anticipated. Park and rides are exceedingly important in this regard. They work.

The Convener: Perhaps we can explore in writing the question whether we have any statistical information on what proportion of journeys are made by car and what by public transport. That would be helpful to know.

I turn to the advisory body that may be established under the bill. The UK Committee on Climate Change will take on that role, at least in the first instance. There is the option to set up a Scottish advisory body to carry out the same functions. Will the UK Committee on Climate Change understand the Scottish context well enough to carry out its functions in relation to the Scottish act, as it will be, the Scottish Government and the Scottish economy, or is it more appropriate to have a stand-alone Scottish body?

Marjory Rodger: Could a secondment not be made? Perhaps two people from Scotland could be seconded to the UK committee?

The Convener: I believe that the UK committee is looking at how it will take on the function.

Marjory Rodger: I do not have a strong view on the matter.

Chris Austin: As we said earlier, in the main, the devil will be in the detail. The Scottish national perspective needs to be heard. From Scotland’s rail network’s point of view, the detail is important. I do not have a view on how this is done—whether by way of secondment or separate committee—but the information flow needs to be there.

Marjory Rodger: I agree.

Derek Halden: This is about hearts and minds. The public needs to have an identifiable figure that they can relate to; a visible champion. I am not sure whether that could be done from London, particularly given the more ambitious targets that are being set in Scotland and the huge potential of our renewables capacity. I have looked at the two options. My view is that what is proposed may all be too top heavy. That is part of my top-down concern in terms of delivery. It does not really matter which option is taken, but we need a presence in Scotland; an identifiable person who will champion the agenda on behalf of Government. Without a key champion figure, the public will have no one to relate to. People may end up believing that nothing will happen.

The Convener: We are not going to say the tsar word, are we?

Derek Halden: If someone is called a tsar, it is a symptom of top-down failure. The tsar-type way of doing business does not work because it is so top down. The top down and the bottom up have to meet. Tsars do not work for the simple reason that they are called tsars.

The Convener: Has the transport sector engaged with the UK Committee on Climate Change to date? Does another forum exist for that sector to feed in views on the climate change agenda?

Marjory Rodger: I know that my London colleagues have fed in CPT views. Briefing papers have been submitted. That is all that I can say about that.
Chris Austin: We have fed in views, too. There is also quite a dialogue through the Department for Transport, which we would regard as our sponsoring department.

The Convener: But not with the UK Committee on Climate Change.

Chris Austin: We have been involved in input to it.

Derek Halden: I am, like many others, a consultant who works on projects. Most of the information is out there in reports that my colleagues and I have done. We have produced the evidence. I hope that those we have done those projects for—whether lobby groups such as the CPT or public authorities—submit that evidence. We would not get involved in that. I am happy to talk as the director of a consultancy, albeit one that works mainly for English clients.

Cathy Peattie: The CPT does not believe that sectoral targets would be workable, but is there a case for developing a mechanism for reporting on the emissions from the surface transport sector?

Marjory Rodger: If we go ahead with the proposal to allow for duties to be placed on public bodies. What duties could be placed on public bodies to drive towards a lower carbon transport system?

Derek Halden: I would go for big hits again. Even now, planning permission should not be given for new housing developments without our having clearly thought through what to do. We may need slightly off-street mini-multistorey car parks, for example, to free up streets for other uses, such as for people walking about. There could be common charging points. We need a different way of thinking.

The duties that are placed on public bodies will be related to a range of changes. The climate change agenda is big, and many changes in practice are needed. Duties will need to be placed on those bodies, but the bill should not prescribe them. We are talking about levels of detail. If we lock such things in, we will end up in a mess. The bill should be kept really simple. The aim is to reduce carbon emissions and create an enabling framework for lots of good things to happen.

Marjory Rodger: I echo that.

Cathy Peattie: Would local authorities benefit from having to report annually? Derek Halden talks about not being prescriptive. If we are not prescriptive, how can we measure local authorities’ achievements? How can we give them something to work towards, now and in the future?

Derek Halden: Earlier, I referred to international carbon trading schemes. The same sort of mechanism could be used. Why cannot there be carbon equivalent reductions? Projects could be rewarded. People could say, “Okay, if you do and do this good project, that'll be equivalent to a carbon emission reduction of X.” However, it would not currently be viable to trade that CER in an international market—it is much cheaper to buy credits in India, which I have real concerns about. The right to buy cheap credits overseas should be balanced by responsibilities to buy credits at home. That is the sort of practice that I would like the Scottish Government to develop. We should say that we will put our own house in order, as well as trade in international markets. We should consider that type of certification mechanism, how to audit it and whom we should get to do the certification. Primary legislation is not needed to deal with such details; the UK Climate Change Act 2008 empowers the Scottish Parliament to pass regulations to deliver such things.

Cathy Peattie: But the UK act does not place a duty on public bodies to deliver.

Derek Halden: No, it does not—sorry.

Marjory Rodger: Requiring public bodies to deal with the energy efficiency performance of public buildings would be a good start in getting the mindset focused on delivery. If they can get good practice examples and roll them out, that would be a good start.
mechanised transport, but I cannot trade with anybody if I walk to Princes Street from here, so therefore nobody is making any money and there is no mechanism to deliver. However, if we set up a framework around footfall and driving up the number of walking trips that replace car trips, local authorities can deliver a carbon reduction and that will create a financial funding framework within which those sorts of things can happen. That is the type of progressive trading that I am arguing for. If we want to deliver, we need such tools because, otherwise, all the reductions will have to be delivered with a top-down approach, for example, by trying to have more and more renewable energy and making transport as clean as possible. It is probably a lot easier just to have people walking from A to B a bit more.

Marjory Rodger: My keep-it-simple suggestion is that a transport plan should be in place before planning permission is given for any development of a reasonable size, residential or commercial.

Chris Austin: I certainly agree with Marjory Rodger’s point. The only other point that occurs to me is that we need to reflect the approach in the various objectives that are set for transport operators on regulated activities. I was going to say that climate change is relatively new, but I do not mean that—people have been thinking about climate change for some years. I mean that the implementation of measures to tackle climate change is relatively new and is not yet embedded in everybody’s thinking, and certainly not in objective setting. That might be considered. However, as Derek Halden said, that does not have to be specified in the bill; it can be dealt with downstream in the light of advice from advisory committees and through delegated powers.

The Convener: Finally, we have a question from Alison McInnes.

Alison McInnes: My question was covered in the earlier discussion about hearts and minds, so I am happy to leave it there.

The Convener: Okay.

Are there any outstanding issues that the witnesses intended to raise with the committee but which have not come up in questions?

Marjory Rodger: No.

Chris Austin: No.

The Convener: In that case, I thank you for giving up your time to answer our questions. I suspend the meeting briefly to allow for the changeover of witnesses.

15:18

Meeting suspended.

15:20

On resuming—

The Convener: I welcome the second panel of witnesses. Gordon Dewar is the managing director of Edinburgh airport and represents BAA Scotland; Robert Ashdown is head of the technical division at the Chamber of Shipping; Gordon Wilmsmeier—I hope that I pronounced his name correctly—is senior research fellow at Napier University’s transport research institute; and Dr Alice Bows is a researcher at the Tyndall centre for climate change research in Manchester.

I will start with a general question about aviation and shipping. Why are they often singled out in the climate change agenda and in relation to the proposed legislation?

Robert Ashdown (Chamber of Shipping): It is important that we decouple aviation and shipping. There is no reason why the two industries should be treated as one, and both can be dealt with on their own merits. Historically, they have been lumped together primarily because they are both international industries—they straddle national borders—that are out with the current Kyoto climate change protocol and do not pay tax on bunker fuels. To my mind, those are the key elements that link aviation and shipping.

Gordon Dewar (BAA Scotland): I do not disagree with that. Aviation and shipping present different issues and face different challenges. It is fair to say that BAA wants aviation to be included in carbon trading but, because of the issues with international boundaries, which were well recognised in the consultation on the proposals for the bill, the best place for it to be dealt with is within the EU emission trading scheme.

Dr Alice Bows (Sustainable Consumption Institute for Climate Change Research and Tyndall Centre, University of Manchester): I agree with what Robert Ashdown said about separating the two industries. They are quite different. One reason why the Tyndall centre started examining aviation and then shipping was that they were two of the sectors with the fastest-growing carbon emissions.

Gordon Wilmsmeier (Napier University): I also agree with what Robert Ashdown said, but it is important to acknowledge that shipping is one of the most international industries in the world—perhaps even more international than aviation in its workings—and is hard to control. The main controlling body for anything that happens in international shipping is the International Maritime Organization. It is an important body to support because, although many countries have not signed certain agreements, they still flag ships. There is a global issue.
The other important matter is domestic shipping—not only coastal shipping within the UK, but ferry services in Scotland. Those services are not covered by the bill, which is an important point. They are also part of public transport but were not mentioned when public transport was discussed earlier.

The Convener: The bill gives the Scottish ministers the power to include aviation and shipping—I will try to put a pause between them—in the Scottish targets and they have indicated their intention to include both sectors fully in the targets from the very first batch. What is your view on that decision? Do you accept that it gives Scotland the opportunity to lead, rather than follow, the debate on how the targets on greenhouse gas emissions will be pursued?

Gordon Dewar: We certainly understand and welcome the leadership and commitment that the Scottish Government has shown in pursuing this critical agenda. Our concerns are more about the practical aspects and the risk of unintended consequences from dealing with the issue at the national level, so we are waiting to see what will come out in the detail. I think that an earlier panel of witnesses expressed similar concerns.

We support the ambition to ensure that we do the best that we can, but we believe that, to make a difference, the European emission trading scheme will be the right forum because the European level is the minimum level at which aviation operates. The unintended consequences that we are concerned about would make Scotland uncompetitive. Any measures that try to limit aviation or, indeed, to impose costs on aviation are likely only to move emissions from Scotland to somewhere else rather than reduce them overall. Therefore, such measures would be ineffective and would place Scotland, which is already a peripheral nation on the north-west fringe of Europe, at a distinct disadvantage.

Gordon Wilmsmeier: The ambition to include shipping is good, but I would extend it to include not only international shipping but domestic shipping and ferry services.

On the competitiveness issue, maritime transport in Scotland, which is basically an island country, is underdeveloped in comparison with maritime transport in nations with a similar gross domestic product or population. The strategy of moving towards modal shift might lead to greater use of shipping. The important question is how you ensure that measures do not impact negatively on shipping developments; otherwise, shipping might become uncompetitive in comparison with other transport modes. In that respect, it is important to consider level playing fields for transport modes. How do you get the infrastructure charges right? How can you promote shipping to make it competitive in comparison with other modes? In particular, how do you switch from moving freight by road transport to moving it by shipping? Doing that would perhaps bring efficiency gains.

Robert Ashdown: It is not a question of desirability but of practicality. It would of course be good if the Climate Change (Scotland) Bill was entirely holistic and dealt with every aspect of every sector. The problem is how that could be done. How can Scottish shipping be defined, and how can Scotland’s contribution to global international shipping emissions be taken into account? Let us be clear that we are talking about international shipping, not domestic shipping, at this stage. I make it clear, too, that the Chamber of Shipping advocates bringing shipping into a global carbon emissions reduction scheme and that we have gone out for an emission trading scheme.

We stress the global element because shipping is an international industry, and the policy levers that are available to nation states, let alone devolved nations or regional bodies such as the European Union, are so weak that it is almost impossible to enforce the delivery of desired actions. Therefore, we end up with unintended consequences that might result in modal shift, which would increase carbon emissions. If Scotland included international shipping in the emissions calculation and put a target and cost on that, what would a commercial ship operator do? He could call at a Scottish port and pay a fee, or he could call at an English port, pay no fee and let another body drive the goods up across the border. We must be careful to separate out our laudable ambitions from the practical effects of the actions involved.

Dr Bows: From a practical point of view, if the bill aims to avoid so-called dangerous climate change—whatever that means—the science behind that means that all sectors must be included because the climate obviously does not identify which sectors you do or do not choose to include. Obviously, taking action involves practical issues and can have unintended consequences, but we must also consider the consequences of climate change. A recent paper that Kevin Anderson and I had published at the Royal Society illustrated that we have very few years left in which to start to reduce emissions globally in real terms, because we are heading for a 4°C temperature increase by 2100, which is significant climate change. In the absence of a global cap, which we do not have and which is not likely to be agreed by the end of the year, any mitigation action that we take in the meantime will be positive in the context of climate change because the quicker we reduce emissions, the less challenging the situation will be in the future.
The issue concerns cumulative emissions—we cannot focus only on the 2050 target, because it matters what we do in the early years. The less that we do in the early years, the more stringent that target will have to be in the future.

15:30

The Convener: It has been suggested that one way in which we can account for emissions that are associated with international industries is to examine consumption rather than production—to measure and report on the emissions that are associated with the production of goods or services that are consumed domestically. Would you support that? Is it a reasonable way forward?

Dr Bows: In each sector, there is a combination of producer-based and consumer-based approaches. Some sectors could argue that, essentially, double counting is taking place. The electricity power sector, for example, is in the emission trading scheme, and consumers are also being pushed to improve their energy efficiency by turning their lights off and their televisions off standby. Because the challenge is so great, I advocate the use of both consumer methods and producer methods where they are most appropriate.

We are currently working on a method for aviation, which will involve the allocation of regional aviation emissions on the basis of a producer-and-consumer approach. It is difficult to use one or the other and come up with something that is relatively equitable, or as equitable as we can get.

The Convener: Is it possible to take that approach in relation to shipping, given the complexities?

Dr Bows: I would like to do more work on shipping. It is a more complicated issue: the travel that is involved is less of an A-to-B route, and more actors are involved. We are trying to carry out more research on that at the moment.

The Convener: Are there any other views on the options for the producer and the consumer?

Robert Ashdown: It is not quite clear from the terminology that you use how you define the producer and the consumer. Perhaps you could explain that further.

The Convener: One aspect involves having a duty to measure and report on emissions that are created elsewhere but associated with imported goods.

Robert Ashdown: There are numerous ways of measuring emissions from ships. Looking at imported goods is one way to do that, although it, like all the other ways, has its problems. To be clear, the comments that I made in the COS submission about the difficulties that the shipping sector faces in relation to national legislation for what is an international industry relate solely to actual reduction targets rather than to measurement, because measurement provides no incentive to try to avoid, in a legitimate way, additional costs or charges.

Cathy Peattie: I will begin with some questions on the aviation sector. Does Gordon Dewar agree that early action is required to reduce greenhouse gas emissions in order to avoid dangerous climate change?

Gordon Dewar: I am not an expert on the science, as you can imagine, but there is certainly enough evidence, which is growing and becoming more compelling, that we need to take action. The only debate that we need to have is on the appropriate action to take. The aviation industry is viewed by many as a significant problem—it is viewed as a greater problem than is suggested by the reality of the situation, given that it currently accounts for only 1.6 per cent of global emissions.

However, it is true to say that the sector is growing quickly, and therefore we cannot sit back and take the situation lightly—we have to act. Many developments are already occurring in aviation, such as new technologies and improvements in engine efficiency. We have also made efforts in relation to our own building emissions at an airport level, and consideration has been given to surface access, which we heard a lot about from the earlier panel.

Our track record on putting the matter at the core of what we do is important, but, fundamentally, that does not entirely address the fact that the sector is growing and that the technology of using kerosene in jet engines is an issue going forward. That is why we think—and the Stern report makes it clear—that the right answer is to consider emissions trading as the way forward. A trading scheme would balance the economic benefits and the wider benefits of aviation and many other transport modes, including shipping, with the ease of addressing the issue.

Global emissions are important, no matter where they are produced, and that is why trading—at least at a minimum European level, if not at a world level in the future—is the right place to start. It preserves the model of advocacy and leadership, which the developed world needs to take firmly on its own shoulders, but it is not so fundamentally damaging to our own economy that we undo the good. I am constantly reminded that people will only follow good leadership—they will not follow stupid leadership.
Dr Bows: Globally, aviation emissions are quite small, but, globally, most people do not fly. In the UK, we have a slighter higher proportion of emissions from aviation than a lot of other European nations. Our aviation emissions are about 6.4 per cent of our total emissions, but in the EU aviation emissions are closer to the 4 per cent mark. Emissions trading is okay—in aviation, emissions are likely to grow in the future, while other sectors will find it easier to reduce their emissions—but at the moment, the cap is not strong enough to be in line with the standard on avoiding dangerous climate change within the EU’s emission trading scheme. I hope that it will be strengthened in the future. We are concerned that we should do something sooner rather than later.

On the evidence that links economic growth to the aviation sector, we have been doing new research by looking at the documents that say that there is an economic benefit to having an aviation industry. There are areas of economic benefit, but some of the research and indicators in the data are dubious. We would like to do further research to try to bottom out some of the links that are being cited but which are not really backed up by the evidence.

Gordon Dewar: It is not me who is saying that there are such benefits—you might think, “He would say that, wouldn’t he?” The bodies that are advocating that aviation growth should continue in Scotland are the SCDI, the chambers of commerce and local authorities. Those bodies have no axe to grind for the specific benefit of the aviation industry; they are motivated only by what they believe provides added value to the Scottish economy.

Cathy Peattie: Could the environmental impact of the aviation industry be better understood and reported? Aviation is the first thing that people look at when they are discussing climate change—they throw their hands up in horror about aviation.

Gordon Dewar: I would really welcome our having an informed debate for a change about the impact of aviation in this sphere. If we all stopped flying tomorrow, it would not make that much difference environmentally, but it would do a huge amount of economic damage and would raise a variety of social issues. We talk glibly about improving domestic rail travel. There are still not too many options for travelling from the central belt in Scotland to London and back to do a day’s business. You certainly cannot do that journey by train in a day from the Western Isles, the northern isles or even Inverness or Aberdeen. We have to consider transport in the round. Scotland is a relatively isolated nation within the EU. We are more reliant on transport than just about anybody else.

The Convener: Has anybody seriously suggested that we all stop flying tomorrow?

Gordon Dewar: No, nor did I suggest that they had.

Cathy Peattie: BAA Scotland cites a report that concludes that technological advances, operational efficiencies and the use of low-carbon fuels could see aviation emissions fall back to 2000 levels by 2050. When could we expect to see tangible progress in those areas? Are we likely to see such developments accelerate in an era of rising energy costs? There is a lot of ambition, but when will progress be made?

Gordon Dewar: The process is on-going. Engine technology has moved on significantly in the past 20 years. I think that we have seen 40 per cent reductions in emissions. People say that we should be driven by the data. When Willie Walsh addressed the business community in Scotland just before Christmas, he made the point that, in terms of passenger kilometres, his fleet was more efficient than a Prius car. That is an interesting comparison. I want to have an informed debate about the best choices available, albeit that we will have to rely on emission trading to get the balance right. Remember that we are not arguing for growth regardless; we are saying that we would grow only when we could remain within a cap and within a trading scheme.

Dr Bows: One of the problems for the aviation industry is the maturity of the engine technology. There have been new developments lately in open-rotor engines, for example, but there are always trade-offs within the aviation sector. When you are trying to reduce noise, for example, you increase the weight of the aircraft and, therefore, increase the emissions. One of the key issues that we have considered is growth. We have efficiency improvements of the order of 1 to 2 per cent at the moment. That situation is likely to continue, given the maturity of the technology and given that there are not going to be radically different air-frame designs within the next 10 years or so. While growth rates are higher than efficiency gains, emissions will increase, so we must not think only about how we can further incentivise technology developments.

Alternative fuels are interesting and the debate about them has progressed in the past five years. Much more research and development on alternative fuels is taking place and that needs to be accelerated. All such measures need to be accelerated, but we also need to keep an eye on the growth rate. No matter how much we improve efficiency and alternative fuels, if the growth rate is high and kerosene is still used, we will have increased emissions.
Shirley-Anne Somerville: I will press Mr Dewar on his answer to Cathy Peattie’s question about emissions falling back to 2000 levels by 2050. I appreciate that giving exact timeframes is difficult, but that timeframe is very long. Saying that the position will develop over time to 2050 does not take us much further forward on whether emissions will fall in 2049 or in five years’ time. Can we have a bit of an idea about the cumulative emissions from aviation?

Gordon Dewar: I do not pretend to be an expert in all the various developments that are behind the reduction. Could I provide information in writing?

Shirley-Anne Somerville: That would help—thank you.

Your evidence cites the IPCC’s estimate that aviation will contribute 5 per cent of the world’s total human contribution to climate change by 2050. Given that emissions are already above the worst-case scenario that the IPCC scoped, what contribution should aviation make to getting us back on track to the central point that the IPCC discussed?

Gordon Dewar: My plucking out arbitrary forecasts of our share of those emissions would not add an awful lot to the debate. What is important is managing sensible caps in sensible trading schemes in the round. We have argued for several years to bring the aviation industry in line with others, which has not been easy. Many in the industry saw emissions trading as a threat, but there is now almost consensus that we should not avoid, but embrace that.

By 2012, we will be in the European emission trading scheme. That will allow us to recognise in an efficient way the fact that our emissions are growing. To allow that to happen, we must fund research and the buying of credits from other people. We will therefore give all the other industries incentives to invest in the new technology that will start to drive down emissions overall, which is the point of the scheme.

Shirley-Anne Somerville: In previous weeks, witnesses talked about the problems of emissions at height, which have more impact. What does the industry think about that? Will you explain a bit of the theory behind that?

Gordon Dewar: Again, it would probably be better for me to write to you. Suffice it to say that we acknowledge that emissions at height contribute more, as do some different combinations of chemicals that are up there. We acknowledge that multiplier effects will need to be applied to some emissions from the aviation industry. Science must be used to best effect in ensuring that we are as close to consensus as possible when we consider trading overall. I am happy to provide references to several scientific papers that go into the matter in much more detail than I can aspire to give.

Dr Bows: I dislike the use of multipliers, because emissions are different—for example, some are localised and last for short times. One mistake that was made in the past—I made it when I started, too—was that people often used multipliers to project into the future. They just multiplied the CO₂ in the future by some multiplier, but multipliers change, because different emissions will emerge, and the CO₂ does not go away, unlike some other emissions. The situation is more complicated.

We should concentrate on CO₂ for trading and perhaps consider oxides of nitrogen emissions, which increase some greenhouse gases and reduce others. However, we should think about and treat the condensation trail issue separately.

Shirley-Anne Somerville: We have heard that BAA is reducing emissions at its airports; that is separate from emissions from flights. What successful measures has BAA employed, or does it plan to employ, to reduce its emissions?

Gordon Dewar: We have set ourselves energy consumption reduction targets for all our airports, on which I would be happy to give the committee more detail. Reducing emissions also involves behavioural aspects. Surface access is a big driver of our emissions footprint and has a wider reach.

We have schemes such as the public transport fund, where we take an average of 20p from every parking activity for which we collect revenue and reallocate it for investment in public transport. Marjory Rodger talked about that earlier. We give start-up funding to some of the more developmental initiatives; indeed, we prop up some of the less commercial bus networks that operate around our airports.

15:45

We are also mindful of the fact that even different types of transportation by car have a different impact. The worst form of car access to an airport is kiss and fly, where someone gets dropped off, because that generates two return trips to the airport. Only one return trip is generated if someone leaves their car at the airport.

We have a hierarchy within our transport strategy that tries to encourage people. It uses pricing mechanisms to manage the situation and makes the person who benefits pay so that we get the best possible mix.

You will be aware of some bigger projects. The tram project is on-going in Edinburgh, and there will be a fixed-rail line to Edinburgh airport in the
not-too-distant future. Similarly, Glasgow airport rail link is undergoing development work. We have contributed land and financing to those projects and are helping to make them happen. We are trying to increase our modal share of public transport, which we know is more effective. However, that is not to say that we think that we can do away with car access. For many people, the car is the only credible option for them to get to the airport.

Shirley-Anne Somerville: There is a bit of scepticism because parking provides an excellent revenue stream for the airport, so perhaps it is not in your interests to discourage people from parking. Can you try to convince me that that is not an issue?

Gordon Dewar: I will not try to convince you that that revenue is not important. However, we try to achieve a balance. We have a sensible structure, and people recognise the facilities that we provide. For example, we make sure that anyone who uses the bus is not exposed to having to support the costs of providing car parking. It would be a double disincentive if someone paid a bus fare and then had to meet such costs. We are trying to get the balance right.

We have to remember that we are a privately financed business, which is quite unusual in Europe, and yet we are national assets that get no public funding whatsoever. Every penny that we take from non-airline sources—for example, by charging people less to land—will mean that we can grow the attractiveness of our networks. Although we are talking about climate change, I will not pretend anything other than that we believe that growing our network and increasing our connectivity, particularly for direct flights that avoid the need to hub through other airports, is at the core of our business, and it is worth accommodating that within a wider climate change agenda because of the economic benefits that it provides.

Des McNulty: What has been the annual increase in your parking revenue during the past three years, and how many additional vehicles does that represent on a year-by-year basis?

Gordon Dewar: Having reflected on a question that was asked earlier, I think the best response would be to give you a breakdown of modal share for the past few years to show you the trends, if you would be happy with that.

Des McNulty: I would be quite interested in that, although I am sure that you know what the figures are for the year-on-year increases in your parking revenue. I would be very surprised if you did not.

Gordon Dewar: Again, I do not think that giving you an absolute number would give a lot of context. I would be happy to share some idea of the proportion of our income that parking revenue represents, and contrast that with our public transport share, which is growing strongly.

The Convener: I would like Dr Bows to clarify something. You argued that, in looking at the additional damage caused by aviation emissions, the contrails issue should be considered separately. How should it be considered? In what way should it be taken into account?

Dr Bows: If you want to avoid forming a contrail, you might want to change altitude, which might increase the fuel burn. If you were to ground an aircraft tomorrow, its CO$_2$ emissions would still be there for the next 100 years, whereas the contrail disappears very quickly.

Given that the contrail is localised and lasts for a matter of minutes and that CO$_2$ emissions last for 100 years, the science and policies that might address them are very different. I would not want to say how we should go about considering them, except to note that it would be difficult to trade a contrail.

Alison McInnes: I come back to a more general question, which I should perhaps have asked earlier. Do any of the panel have a view on the 2050 target and the interim targets in the bill?

Dr Bows: Focusing on 2050 and having it as something that is frequently spoken about means that people think very long term. The important thing is the emission pathway that you travel down to get to your aspiration in the future—the 2050 target. The target is likely to change depending on how much emissions increase in the short term. If they increase more now than you think they will, the 2050 target has to drop.

I would advocate an emission pathway. The interim target seems to be along the kind of emission pathway that we want to follow, but we must also think carefully about where we think emissions will go in the next five, 10 or 15 years. The 2008 UK act suggested that emissions in 2008 would be somewhat lower than they were. That mistake has been made already over only a few months, which means that emissions in the future will have to be reduced by more.

Alison McInnes: Would you prefer interim targets to be brought forward?

Dr Bows: Yes.

Robert Ashdown: From the shipping perspective, ships are very long-life assets. A ship will last for 20 to 25 years, so we are only two or perhaps three generations of ships away from 2050. Ironically, that makes it easier for us to meet the 2050 targets than the 2020 targets, because we are already locked into the technology that we have.
Shipping is a mature industry that has been around for a very long time, so many technological advances have already been implemented. We are looking for step changes in technology—fuel cells, solar power, hydrogen and that sort of thing—to help us to meet the longer-term targets. It is difficult to see those coming on stream in time to have a real impact by 2020, which is not to say that I underestimate the importance of early action—it is all about the area under the curve—but for our sector the longer-term targets are more achievable than the medium-term ones.

Gordon Wilmsmeier: It is important to enhance technical development and evolution in shipping. Something has been done but, for a long time, shipping was neglected because it was argued that nothing could be done because it is a global industry. There have been a lot of gaps, so it is necessary to get a grip on them and start innovation. There has not been huge pressure on shipping to innovate. In certain trades, there has been innovation in paints and hull shapes. We can also improve the loading capacity for certain ships. We must introduce incentives to strengthen technical innovation within shipping. We should also transfer from certain types of fuel to marine diesel oil, which contains fewer other air pollutants. CO$_2$ is an important issue for shipping, but we must consider all the air pollutants. It is important to find a way to incentivise that push. In shipping, it is obviously difficult to push technological development from just a Scottish perspective; there is no national flag in Scotland, so how can you push technological development? The matter needs to be discussed at international level.

Robert Ashdown: I agree that the shipping industry would benefit greatly from greater investment in research and development. It is not right to say that we have had no incentive. Fuel costs are approximately 30 to 50 per cent of voyage costs, so we have always had the strongest possible commercial incentive to reduce fuel consumption. Indeed, every generation of ships has been cleaner and more efficient than the last for purely commercial reasons.

We have not benefited from other high-end aspects. In the aviation industry, for example, military technologies and the space race have allowed cutting-edge technologies to filter down to civil aviation. We do not really see that in the marine world, which does not have a high-end, non-commercial sector to drive technical innovation, so R and D would be welcome.

I disagree with the point about moving to distillate fuels, on which the International Maritime Organization has just had a long, two-year debate. I will spare you the details, but the decision was made not to move to distillate fuels. Distillate fuels are about 3 per cent more carbon efficient than residual fuels, but to produce distillate fuels in the volumes that are necessary for the international shipping industry, refinery production would have to increase to such an extent that there would be a net 15 per cent gain in carbon emissions. Distillate fuels are not the answer to reducing carbon emissions from shipping.

Alison McInnes: I want to explore that further. I had intended to come on to the issue later, but it is appropriate to pick it up now.

It is clear that we have not seen the innovation that we should have seen in the shipping industry. You have given us some of the reasons why that is the case, but that pushes me towards favouring regulation, as self-regulation does not seem to have worked. The previous panel told us that the bus industry was investing in measures to reduce carbon emissions on a commercial basis. I do not think that the international shipping industry has invested as much as it needs to, which does not give me comfort. Can you give me some comfort as regards the IMO’s commitment to bringing about international action in the near future?

Robert Ashdown: Absolutely. At the next meeting of the IMO committee that deals with such matters, we hope that a mandatory energy efficiency design index will be introduced, which will give new ships a rating, from A to G, such as one finds on white goods. That will allow owners and charterers—we must not forget the importance of charterers in the shipping industry—to choose the cleanest ship for their transport purposes. We hope that that measure will come into force quickly.

Gordon Wilmsmeier: It is important to bear in mind that the IMO regulation might solve certain problems that we have in Europe, but many countries have not signed the IMO agreement, so we might just be pushing problems towards other regions of the world, which is not a solution. It is not a solution to achieve high standards in Europe by sending ships and aeroplanes to be used in other regions.

We see that happening in Scandinavia, which has been quite proactive in imposing differentiated environmental port charges and fairway charges. All the ships in that region now have newer technology and the ships with older technology have moved out, but they have not disappeared. If we want to get rid of the old technology, we must ensure that the ships that use it disappear and are not just shifted geographically.

Des McNulty: Gordon Dewar and Dr Bows mentioned that aviation is to be included in the EU emission trading scheme, which will mean that aviation emissions will have to be measured and reported on anyway, so will including aviation in
the bill make any difference, or is it simply symbolic? What is your view on that?

**Dr Bows:** I come back to the idea of consumer and producer-based approaches and the analogy with the power industry. Because of the challenge that we face on climate change, we need to push every button that is available. The inclusion of aviation in the emission trading scheme does not mean that other policies should not be brought on board. Most sectors are subject to a suite of policies, but the aviation sector does not appear to be subject to quite as many policies on carbon emissions and energy efficiency. Robert Ashdown mentioned the energy efficiency ratings for ships, which might come to the fore, but no such ratings exist for planes, and there are no regulations on CO2 emissions from airports, although there are regulations for other emissions. My view is that it is a good thing for aviation emissions to be included in the bill.

**Gordon Dewar:** As I said at the outset, we are concerned that including aviation emissions in the bill might end up having unintended consequences. From the point of view of effectiveness and equitability, action on the issue should be taken at the level of the European market as a minimum.

However, we understand the political necessity of addressing the issue and I guess that we are supportive of the proposal in principle. It was interesting that, when we spoke to the Scottish Government as part of the consultation exercise, it made clear that it regards the provision as an enabling provision that will give us time to get into the emission trading process by 2012. There is a gap of three years or so in which to get there. If that is the approach that is being taken, I would be quite supportive of including aviation emissions in the bill, as long as we are mindful of that endgame. I have no difficulty with the idea that we should be pushing on all fronts, but we must maintain equitability and not hamstring ourselves in an extremely competitive environment.

I echo my shipping colleague’s comment that there is no doubt that it is not the case that unilateral action will lead to no change. We have already lost large numbers of flights because airlines have chosen to fly from other European airports to gain the most marginal or fringe commercial benefits. We make such changes at significant risk of fundamentally changing the attractiveness of Scotland as a market.

16:00

**Des McNulty:** Pursuing that a tiny bit further, I want to pick up the point that Dr Bows made about the advantage of having a suite of regulations. The different sets of regulations should not try to force or produce different kinds of behaviour. If aviation emissions are included in the bill, how do we establish a system of monitoring in Scotland that is not only consistent with the European approach but potentially adds something to that approach? I am asking not just about the principle of including aviation emissions but about the practicalities of doing so and how we might add value.

**Dr Bows:** The cap on the emission trading scheme is currently so loose that the scheme is nowhere near aiming for a 2°C target. One way forward might be for Scotland to use the same method of allocating aviation emissions but with a more stringent cap. Scotland could use basically the same approach but just do things more stringently over the course of the few years before the emission trading scheme starts. If the emission trading scheme is still not in line with a 2°C target when it starts, Scotland could continue with its previous approach until we have a global cap that will avoid dangerous climate change rather than just act as a mechanism to get people used to emissions trading.

**Gordon Dewar:** I am 100 per cent opposed to that argument. That is exactly the approach that would make a fundamental difference to us. If we impose additional costs only in Scotland, all that will happen is that aircraft will be reallocated to other airports in Europe, so we will lose the economic benefit without making a jot of difference to overall emissions.

**Dr Bows:** I should add that I would give the same advice to the UK, French and Dutch Governments. In other words, all nations are considering tackling climate change through using targets. The assumption must be that, if we want to avoid dangerous climate change, everyone must eventually come on board. Some countries might move earlier than others but, at the end of the day, everyone will need to follow. Scotland will not be able to do that alone.

**Des McNulty:** One point that Adair Turner makes when talking about achieving a low-carbon economy within the framework in which we must operate is that we should separate out interim targets from intended targets—I am talking about targets more generally—based on our commitments at Copenhagen and our European commitments. If we go for the idea of having a harder target rather than a weaker target, how would that translate in aviation terms? The suggestion is that the target might be for a 42 per cent reduction rather than a 34 per cent reduction, although the figure depends on which base year one starts with.

**Dr Bows:** Including the aviation sector in a trading scheme will not necessarily require aviation to reduce its emissions because it will be able to purchase emissions from other sectors. If
the overall cap has two different levels for the intended and interim targets, all the sectors under the cap will be affected. The only effect on aviation might be that it will need to pay a little bit more for the emission permits that it purchases. Including aviation does not necessarily mean that aviation growth will be reduced significantly, particularly at the moment when the cap is so high that the carbon price is very low.

Des McNulty: I want to pick up what Dr Bows said about aviation needing to pay more. Who in aviation would need to pay more?

Dr Bows: My understanding is that the costs are likely to be passed on to passengers. That is my understanding from various interviews with the aviation sector about what would happen if the airlines had to pay an additional charge.

Gordon Dewar: I support that point. Inevitably, the user pays in the end.

Des McNulty: If Scotland or the UK goes down the route of including aviation emissions, can we quantify what the implications of that would be for aviation prices, or can that not be calculated at this point?

Gordon Dewar: I do not think that there is enough certainty about the price of carbon or how the interaction will go. It will depend on how people respond to the need to reduce carbon overall. There is certainly recognition that the cost of emissions will increase over time, and I am sure that there will be a lively debate about the appropriate cap to be set. It seems likely that the only direction in which carbon costs will go is up. The aviation industry is well aware that that means that its costs will increase and that, ultimately, prices will increase.

Des McNulty: What is the best method of organising that? Is it through what is, in effect, a taxation scheme, or is it through other approaches that bear more on the industry?

Gordon Dewar: Trading will be a far more efficient method of recognising the true cost of emissions, because it is about creating a market in something that allows people to respond. In the past, we have had taxation. For example, we have air passenger duty, which is a significant burden on the ticket price. In many cases, APD taxation accounts for more than half the ticket price. Unfortunately, it is a blunt instrument and the money has not been reinvested in new technologies or in the ability of other industries and sectors to reduce emissions. It might have reduced travel at the margins—in fact, it certainly has—but it has not had the spin-off benefit of money being reinvested in the longer-term gains that trading will allow.

Des McNulty: That gives me the industry’s point of view, but I am also interested in the impact from the consumer’s point of view. What is the difference for the consumer between a trading arrangement and a taxation system?

Gordon Dewar: An efficient system should allow the consumer to make sensible choices. If the aviation industry buys credits to allow it to offer a service that people still pay for, in effect, they are getting that efficient choice. A traveller might have a choice between travelling by train, flying, or perhaps not travelling at all, and they will take an informed view by considering all the options that are on the table. The best way in which to make sure that that is an efficient option for them is to ensure that we have a true recognition of the price of carbon. The trading scheme should allow that to happen.

Des McNulty: I will change tack a wee bit. In response to an earlier question, you said that Scotland is in a relatively isolated position in Europe. That is undoubtedly the case. We are part of an island that is remote from the European continent. Presumably, that partly explains why aviation usage and emission rates are higher in the UK. The central belt of Scotland is 400 miles from London and 500 miles from the Channel tunnel, so we probably do not have the surface alternatives that other people in Europe—or perhaps even people in the south-east of England—have. If we want to do business with other parts of Europe or travel there for leisure, we are at a comparative disadvantage geographically. If we are the ones to wear the hair shirts—if I can put it in that way—in capping our systems, are there any issues in that for Scotland?

Gordon Dewar: There are—that is what we are saying. We need to be aware of why we are doing things differently—why we are setting higher targets, or using the mechanisms differently—and we should bear in mind the unintended consequences.

As I said, people want to follow wise leadership. It is right that the developed nations take a leadership role on emissions and climate change. To my mind, there is no justification for pulling up the ladder behind us. However, we need to know that we are setting a path that other people will want to follow because, ultimately, we want to persuade everybody else to join us.

We should not impose artificial costs on our accessibility to markets. Let us not forget that we are talking not just about people who fly off on holiday but about people who fly into Scotland for tourism, which is our biggest industry. VisitScotland recognises the importance of that. We are also talking about getting to markets, including world markets such as the far east, where we know our wealth of the future will be
based. If we start to make it more expensive or difficult to travel, we will do ourselves a disservice and will not show leadership or set a path that anybody else will want to follow.

**Dr Bows:** At the end of the day, if there was a cap for all sectors, the choice could be made to allow aviation to consume the entire budget. In that scenario, there would be a reasonable amount, or perhaps a significant amount—I do not know, as I have not done the numbers—of growth in aviation in Scotland. That would be a choice that would be made. The other issue is the shipping industry. If it was included in the cap and the target, there is a long-term issue with technology, as has been stated. Given the lead time that is required to reduce emissions, it is likely that emissions could be reduced in the long term, but not in the short term. Thought would therefore have to be given to which of the sectors would be allowed, or chosen, to use up the biggest part of the budget. Ultimately, the cap will have to be in line with a climate change target.

When I interview people from industry, I hear that their sector wants to be able to consume the majority of the budget, but not all sectors can do that. We have published a paper that shows that, ultimately, emissions trading cannot reasonably happen after 2030 if we are to avoid a 2°C rise. However, setting stringent caps and allowing the sectors that wish to use up more of the emissions to do so within a trading scheme is the way to go. There will still be some growth in the aviation industry in Scotland.

**Gordon Wilmsmeier:** Des McNulty’s question takes us back to something that was said earlier. Why is aviation singled out? What about co-modality? In Germany, the route between Frankfurt and Cologne, which is just less than 300km, was traditionally done by aeroplane, but it is now done by train. Lufthansa flights and all other flights between the two cities were cancelled because the train was competitive in terms of speed. Even though Scotland is on the periphery, if high-speed rail was delivered, there would be sufficient links within the UK to allow the consumer to choose other modes of transport. The time is right for that. We should not forget the issue of security in aviation. It is much more convenient to get on a train at the station than to go through all the hassle at an airport. We must also consider the point that was made by the previous panel about complex travel time. The travel time by air is not just the one-hour flight to London, as people need to get to the city centre. Even today, with relatively slow trains to London, the train ride from Edinburgh to London might already be more attractive, particularly given that people can use their time better, which is especially important for business.

We need a clear statement from the Government that it is willing to invest in modern technology. That will not come about in a couple of years, because it is a long-term investment. Spain and Germany have made a long-term investment in high-speed rail. Such investment would not have an effect tomorrow. On certain routes, there is an option to move towards a co-modality approach. That takes us back to issues to do with convenience for travellers, such as integrated ticketing and just getting off the plane and getting on the train.

**Des McNulty:** That takes me neatly on to the point that I was trying to get to. Is the argument that, rather than have a cap or an arrangement that takes into account international aviation, we should take into account aviation as a whole? If the overall objective is to reduce or control aviation emissions, should we consider how to reduce aviation use where there is a feasible alternative? That approach could permit more international aviation where there is no alternative. Should we consider that policy issue?

**Gordon Dewar:** I believe fundamentally in consumer choice. I would have no difficulty if the Government wanted to invest in a high-speed rail link. That is long overdue and it would be a great asset for the country to pursue. People will then vote with their feet and their wallets—that is important. At present, it does not cost the Government any money at all to have the aviation industry providing links to London or anywhere else, because all the money is private. However, high-speed rail will have a significant cost. As well as the infrastructure cost of any new high-speed rail links, in most cases rail franchises receive a significant on-going subsidy for running costs. That is a decision for the politicians. There is not an either/or situation—it is important that people have a choice. I am reminded that there are still six flights a day between Brussels and Amsterdam, which are less than 100 miles apart and which have one of the best high-speed rail links in Europe. People want choice and the different modes offer different levels of service.

16:15

**Dr Bows:** If we had the right cap for climate change, the trading scheme would be all that we would need. While we do not—and I do not envisage us having the right cap for some years, although maybe it is different in Scotland—we have to consider suites of policy measures, particularly for sectors that already have a large proportion of emissions or sectors whose emissions are likely to grow significantly in the future. That would send the right signals.

In a set of interviews that I did about four years ago, manufacturers in the airlines told me that,
other than fuel efficiency—and the price of fuel was low at the time—there was no added incentive from anywhere to drive up fuel efficiency and look at alternative fuels. That situation has changed because of current fuel prices, but we need additional buttons to press to send the right signals.

**The Convener:** Gordon Dewar said clearly that people should continue to have a choice, even if there are high-speed rail alternatives at some point in the future. He also said that he expects the aviation industry to grow. We all understand that such growth will not necessarily be matched by efficiency improvements, so the conclusion is that aviation emissions will continue to grow rather than reduce. How much slack should the rest of the economy take for aviation growth?

**Gordon Dewar:** That should be decided through emission trading. Regardless of the conversation about whether the cap is set at the right level now or should be tightened or about what it will be in the future, it is sensible to leave it to the emission trading scheme so that people can value the cost of emissions, factor that into investments and use the money that they receive from trading to invest further in their ability to improve the overall emissions level. If we presume that we can concentrate on one set of emissions rather than another, we will penalise a sector unnecessarily and might create unforeseen outcomes. More important, we will not offer the best incentives to people to invest where we can make overall emissions reductions.

**The Convener:** Surely that same criticism applies if there is no focus on reducing emissions in one sector—if aviation does not have to make urgent changes—and we just expect every other sector of the economy to be penalised.

**Gordon Dewar:** But growth will not happen except within the overall cap. If aviation cannot buy its share of what it thinks it needs or wants, it will not be able to grow—that is the point of the cap under the emission trading scheme. Therefore, growth can happen only if the trading scheme is effective.

**Alison McInnes:** In its written submission, the Chamber of Shipping highlighted the difficulties that it foresees in measuring accurately Scotland’s share of international emissions and Robert Ashdown has spoken about that today. The chamber also said in its submission that including international shipping in the bill could be a retrograde step that might hinder international negotiations on emissions reduction in the sector. What are the chamber’s concerns on those issues?

**Robert Ashdown:** Broadly speaking, there are two ways to measure emissions from ships: they can be measured on physical activity or on economic activity. Depending on which way Scotland chose to measure its emissions, that measure could be in conflict with the proposals from the IMO. I am not sure about the interrelationship between the Scottish and English Governments, but the line that the UK Government takes within the IMO might be curtailed by decisions that you take in Scotland.

**Alison McInnes:** Are you aware of any contact between the Scottish Government and the IMO on the matter?

**Robert Ashdown:** The IMO is made up of nation states, so only the UK has a seat and, of course, shipping is not a devolved matter.

**Alison McInnes:** No, but clearly shipping is being considered in the bill, so I wondered whether there had been any discussion about it.

Official national atmospheric emissions inventory figures have now been published that allocate emissions from shipping to Scotland, based on the Department for Transport port movement data. How robust are those data?

**Robert Ashdown:** I doubt that they are robust at all. We have several ways of measuring emissions from shipping but, unfortunately, they are all inaccurate. It is an exceedingly difficult sector to measure because unlike aviation, ships can carry enormous quantities of fuel; they do not need to refuel every time they touch a port. A ship can come into a Scottish port and then disappear; it might take on no bunkers or 100 per cent of bunkers. It depends entirely on its voyage patterns and the bunker capacity of the ship.

**Alison McInnes:** I note from your joint letter with WWF to the Committee on Climate Change that “the two organisations … have committed to working together … to assist the UK government to quickly develop a methodology for measuring the carbon emissions from ships”.

What progress have you made on that?

**Robert Ashdown:** It is very early days. The Climate Change Act 2008 came into force only in December last year. We acknowledge the Committee on Climate Change’s recommendation for the Government to take account of international shipping emissions, for measurement purposes only—that is key. We fully endorse that position. We need to be able to measure the industry to set an accurate baseline, so that we can make reductions in line with targets and achieve a position under the level of the cap. I do not disagree with any of that philosophy.

The question arises how to measure that. We have teamed up with WWF to deliver quickly the most robust and accurate measurement that we
can, so that the UK Government has a handle on what shipping's share is. However, what does that actually mean? Are we talking about UK-flagged ships, ships that operate in UK territorial waters or the UK's contribution to international shipping emissions? To a large extent, the volume of shipping measures world trade—the plot lines are broadly parallel going up the graph—so perhaps we could do something as simple as taking Britain's share of global GDP and declaring that we are responsible for that share of international shipping emissions. There are a number of ways of doing that. We think that the economic measurement is the most appropriate way.

We are meeting representatives of the Office of Climate Change on 3 March to discuss further the letter that I have appended to our written submission, and we very much hope that, with work from our three organisations, the Office of Climate Change will be able to make a firm recommendation in its report in September.

Gordon Wilmsmeier: I completely agree with Rob Ashdown. The issue is difficult, and we should probably be measuring the trade flows. Different ships are used, and it is hardly possible to get data on what ship a container might have used on the five legs of its journey to Scotland. Ship details and technical data on ships could be obtained from the IMO, but freight data would need to be linked to the ship that delivered the goods to the Scottish port. If we consider things from a Scotland-only perspective, a lot of cargo is brought into ports in the south of England and then moved north by truck or train. You should not just consider the shipping aspects; you need to examine the whole transport chain. There is scope to reduce CO₂ emissions through increasing the length of the maritime leg of the whole voyage. That might be of benefit—it could contribute to a reduction in carbon emissions—but just taking the shipping leg into account is not sufficient.

Alison McInnes: You said earlier that we have weak policy levers to influence what happens in shipping, which I understand. What can the Scottish Government do to assist the shipping industry to reduce its emissions, including those caused by ships in harbours?

Robert Ashdown: A lot of the focus today has been on caps, trading and so on. The important thing in the longer-term carbon debate is to lock in carbon savings. That means infrastructure. If we want to move to electrically powered, fuel cell ships, they will need to be able to plug in to recharge in ports.

At the moment, we are running at about 98 per cent of port capacity, which is a dangerously high level. That causes a lot of congestion. Ships might arrive and have to wait for a week, burning fuel, because they need to provide their own power in fairways. If we had greater port capacity and better port infrastructure in this country, we would save a lot of carbon emissions. If the hinterland infrastructure for lorries bringing goods into and out of ports was improved, we would reduce the carbon burn of the lorries that provide co-modality.

Governments can act positively in a number of areas to reduce overall carbon emissions from the shipping industry.

Gordon Wilmsmeier: One thing that is relatively easy is cold ironing, which is when ships use the electricity supply on the quay so that they do not use their engines while they are in port. If the energy generation is right, there is a reduction not only in CO₂ emissions but in NOₓ and SO₂ emissions, which act very locally.

The United Kingdom has a specific port operation scheme. The trust ports have not been the most positive in their approach, because they have not really contributed to port development. The UK has some of the least developed ports in Europe, because the trust ports have not made the right decisions—they sometimes find housing more attractive than port development. That is an important issue, because it means that maritime interests are not developed, and therefore ports are not attractive for some shipping services.

This is the Scottish climate change bill, and ferries are a Scottish issue. The ferries that operate in Scotland are old. They have served their time and should be replaced. That is an issue on which the Scottish Government can act directly by strengthening technological change.

Shirley-Anne Somerville: The evidence from the Chamber of Shipping states:

"Any reductions in ships' carbon emissions must therefore be achieved in a way that permits growth in the volume of goods shipped by sea."

How can that be achieved in the timescale that the scientists tell us is necessary to stop climate change?

Robert Ashdown: In three words: market-based instruments. The growth of the industry is the result of the growth in global population and world trade. As I have said before, shipping is a service industry. We mirror global trade, and we know that our emissions will grow—they are likely to grow more quickly than technological innovations will enable us to decrease them. We recognise that we may have to invest in other sectors so that they can make the carbon reductions that we cannot make until we reach that step change in technology.

Shirley-Anne Somerville: I was about to ask you about the changes in technology and energy efficiency. Will you describe the successes to date and give us a rough idea of what is achievable in the next 10 or 20 years?
Robert Ashdown: Without wishing to sound facetious, it all depends on what you call an existing ship. If you call an existing ship a ship that is 15 or 20 years old, it might be possible to make a 30 or 40 per cent reduction by using a brand new ship from the yard. If you call an existing ship a ship such as the high-end, high-spec Queen Mary II, which was launched last year, if you threw absolutely everything at that ship, and cost and passenger comfort were not an issue, you might make a 5 per cent saving. Technological savings can be made, but they are increasingly hard to achieve.

We cannot address the carbon issue in a vacuum. A number of years ago, we had very good hull coatings based on TBT—tributyltin oxide—paint, which harmed marine life. Quite rightly, such hull coatings were banned, but the efficiency of ships decreased. Similarly, there is the issue of addressing air pollution resulting from oxides of nitrogen and sulphur—NO\textsubscript{x} and SO\textsubscript{2}. If you look at the curve of ships’ carbon emissions between 1912, when the first oil-burning ship was launched, and 2005, there was a steady reduction. That has now flattened, because the trade-off for cleaner NO\textsubscript{x} emissions is increased carbon emissions. We are perpetually trying to juggle all of those issues to deliver net environmental benefit. Unfortunately, we are constrained in what we can do to deliver clean carbon technologies, because we have other factors to consider.

Gordon Wilmsmeier: Sails have been used successfully on container ships crossing the Atlantic. Such good examples should be strengthened. However, from a Scottish perspective, that requires an industry that can innovate. You need research to support such innovation. Scotland could contribute by investing in research and innovation.

Shirley-Anne Somerville: You said that shipping requires a global deal, in order to overcome the problem of double counting. However, could this Scottish bill be world leading, if it includes international aviation—pause—and shipping? When we get to Copenhagen and are considering a global deal, we could be leading, and the bill could play a part in shaping the deal. We should not wait; we should take the initiative and lead the rest of the world.

16:30

Robert Ashdown: As I said before, the issue is not desirability or ambition but practicality. You have to ask yourselves how policies would be implemented. The bill is about Scotland taking legal responsibility for carbon emissions, but you wish to take legal responsibility for something that you simply cannot control. If you impose reductions on United Kingdom ships, those ships will simply not go to Scottish ports. A great deal of north European traffic heads through northern Scottish waters, but if you try to take responsibility for emissions from those ships, you will find that, because of the rights bestowed by the United Nations Convention on the Law of the Sea and the rights of free passage, you can do absolutely nothing to restrict their movements. I hope that our written evidence explained the situation more clearly than I am doing now, but it is extremely difficult for any nation state or any regional body to regulate the international shipping industry.

Shirley-Anne Somerville: Let us leave aside the issue of regulation and consider simply the measurement of emissions for inclusion within Scottish targets. Should such measurement be included in the bill, to ensure that the picture is holistic? The industry could then get behind the bill and help to ensure that Copenhagen results in positive changes.

Robert Ashdown: You might briefly have been out of the room when I said that my comments were solely about reduction targets for international shipping. As long as the administrative burden is not completely horrific, measurement should be possible, although it would be complicated. Committee members will have seen the letter to the Office of Climate Change in which we address those issues. However, measurement would be possible. The real difficulty would arise only if you imposed reduction targets on international shipping. For reduction targets to be meaningful, they will have to bite; if they bite, they will have a commercial impact and cost; and if that is the case, operators, as commercial businesses, will legitimately seek to avoid those costs where they can.

Measurement provisions can, of course, be included. Indeed, the Climate Change Committee recommended that UK climate change legislation should include them. If you wished to do the same thing in the Scottish bill, you would have to ensure that you did not double count under the UK legislation, but that would be a positive move and the Chamber of Shipping would seek to work with you. If you established a climate change committee north of the border, we would seek to work with it to define the most accurate and robust measure that we can.

Shirley-Anne Somerville: My apologies for missing part of your evidence earlier—I had to attend another committee briefly—but I am back now.

Gordon Wilmsmeier: I would like to answer the question and to underline Robert Ashdown’s points. Measurement is extremely important. We cannot consider one mode, because we have to consider modal shift. Only if we measure modal shift can we see whether we have actually...
achieved anything. You cannot leave something out and not measure it. There is no point in saying that you have reduced shipping if you do not measure whether movements are now taking place by air or by truck. You need to measure all transport modes.

You will not be able to impose legislation on certain things, but you should look on your own doorstep, as I said earlier. I know that I keep hitting on the same point, but ferries and coastal shipping are on your doorstep. They are what you can influence, and they are what you should focus on. That is where you have legal powers to change things and to drive innovation. For example, you can have influence over and drive innovation in ports. You can offer incentives and advice on carbon emissions at international shipping level, and you can measure those emissions, but it will be important for you to show leadership in what is happening in Scotland, so that you can say that you have tried this and this, have put this and this in place, have renewed your coastal shipping fleet and your ferry fleet, and have improved your ports, equipping them with up-to-date technology. That can be achieved independently of others.

Cathy Peattie: I would like to pursue the issue of measurement. When responding to my colleagues, you seemed to accept that measuring emissions, especially around the coast, is important, but I do not understand why there is a commitment to measure emissions if there are no targets. If there are no targets, how can we monitor what is happening?

Robert Ashdown: Our answer was predicated on the fact that you cannot change behaviour purely by measuring emissions. We argue that any change of behaviour would be negative: ships would simply stop coming to Scottish ports and go to English ports, and the cost of goods would be driven up. However, measurement is important, so that Scotland knows what its responsibilities are. If the trajectory curve already includes some measurement of shipping, it will not come as such a great surprise if and when—in three or four years' time—the IMO or the European Union imposes a climate change scheme on shipping. That is why we think that measurement is beneficial but we draw the line at reduction targets.

Cathy Peattie: If the other European countries got involved in measuring and setting targets, surely there would be an advantage to Scotland in having led the way?

Robert Ashdown: I am not aware of any other European countries that are taking unilateral action in that fashion, primarily because they are equally convinced of the arguments for global or, as a second-best step, regional legislation. I cannot see what advantage would accrue to Scotland from setting targets that will almost undoubtedly be subject to international bargaining once the issue reaches more international forums.

Cathy Peattie: So setting targets for emissions would be bad for Scotland.

Robert Ashdown: The ports represent a significant amount of the Scottish economy and provide a significant number of Scottish jobs. Anything that harmed their commercial competitiveness would be bad for the Scottish economy.

Cathy Peattie: Ministers have a policy commitment to aim for 3 per cent year-on-year emissions cuts. How well placed is the international shipping sector to deliver such cuts, even if they are not included in global targets? You have probably answered the question by indicating that there is a lack of commitment to deliver cuts, but I am still interested in hearing your views.

Gordon Wilmsmeier: To tell you the truth, the question is difficult to answer. Let me put it this way—the consumer can contribute to reducing emissions from shipping. If you stop buying kiwi fruit from New Zealand and buy it from Italy, you contribute to CO₂ reduction, because the goods are not moved a long distance. It comes down to what consumers use. If they go back to using locally and regionally produced food, CO₂ emissions will be reduced. If people continue to eat strawberries from the Canary Islands or from Chile, it will have a huge CO₂ impact. However, eating Scottish salmon instead of Chilean salmon, even though it is a little more expensive, has a positive impact on CO₂ emissions. It may be a good idea to address the issue through the shipping industry, but consumers need to be aware of the CO₂ emissions that they produce as a result of their consumption.

Cathy Peattie: Are you saying that the shipping industry is not really responsible for CO₂ emissions, and that they are an issue for someone else?

Gordon Wilmsmeier: It is responsible in so far as it can achieve technological efficiency, but the demand for shipping is generated by us.

Cathy Peattie: I know what you are saying.

Robert Ashdown: The Chamber of Shipping recognises fully that we, along with all other sectors, have a responsibility to reduce our carbon emissions in line with societal expectations, and we do not shy away from that. We are keen to deliver carbon reductions in an efficient and robust manner, so that we can deliver real carbon savings. As we said earlier, this is not a zero-sum game. By getting it wrong and penalising shipping—which is the most efficient form of
transport—we might drive carbon emissions up. We must be careful how we approach the issue and ensure that we put the right policies in place.

I disagree slightly with Gordon Wilmsmeier, because, unfortunately, it does not help to buy goods locally. The food miles argument was debunked a couple of years ago. Lamb that is imported from New Zealand has a lower carbon impact than lamb that is grown in Wales, because shipping is so efficient and the farming in New Zealand is much less carbon intensive. The sums just do not add up. The same goes for tomatoes that are grown in poly tunnels. Tomatoes that are grown in Spain over the winter and shipped here are less carbon intensive than tomatoes that are grown in heated poly tunnels in the UK. The argument for local produce reducing carbon emissions is a complete non sequitur.

The Convener: I hope that you agree that the statement that you have made is not absolute. You say that local production does not reduce carbon emissions in every circumstance, but it is inappropriate to say that it never does. Do you agree that, if potatoes are grown in 10 different countries, they might as well be grown within those countries, rather than be whirled around the world a few times before they are consumed?

Robert Ashdown: I am sure that there are one or two instances in which local produce is more carbon efficient.

The Convener: Yes, I am sure that there are one or two.

A moment ago, you said that the shipping industry takes its commitment and obligation to reduce its emissions seriously. However, five or 10 minutes ago, you said that it is important that we allow for the possibility that shipping emissions will increase. Which is it to be?

Robert Ashdown: Both.

The Convener: The level of emissions will go up and down at the same time?

Robert Ashdown: No. The increase will be at the global fleet level; the decrease will be on a per-ship basis.

The Convener: I see. So you have an obligation to reduce the emissions per ship but no obligation to reduce emissions overall.

Robert Ashdown: We would like to see a cap on global shipping emissions, but shipping must be allowed to trade above that cap; otherwise, you will constrain the world economy.

The Convener: My final question, before I hand over to Des McNulty, is to both Gordon Dewar and Robert Ashdown. Your two sectors are telling us that their contribution to the economy is so important that their emissions must be allowed to grow in absolute terms. Food and housing are essential to life, and health services are essential to the economy. If every sector of the economy came here and told us that it understood that climate change is real, that it is human induced and that it threatens human survival, but that their sector was too important to be included within an ambitious timetable for emissions reduction, we would not have a chance, would we?

Gordon Dewar: I do not think that there is any conflict between what I am saying and what you are saying. We are saying that, according to current forecasts, we will increase our usage of the allowable cap, but that will happen only if other sectors reduce their usage and we can buy their share of it. If others, in all sectors, do not reduce their usage, we will not be able to buy their share and we will not be able to grow. We are saying that, within an efficient trading scheme, there should be the opportunity for that growth. However, no sector can be certain of that growth, because it relies on an overall reduction in other sectors.

The Convener: That still implies that, in an efficient trading system that we might have at some point in the future, every other sector of the economy will have to shrink dramatically in order to allow your two sectors to continue to increase their emissions.

Gordon Dewar: And they will do that only if they get a better return from their emissions trading than from the alternatives. Again, it is all predicated on there being more efficient ways of reducing carbon emissions than putting individual caps on sectors such as aviation and shipping.

The Convener: We note that it is heavily based on that assumption.

Des McNulty: I have one final question for the shipping representatives. We have heard that there is an EU emission trading scheme for aviation, which provides a preferred framework for aviation. Should there be a shipping equivalent, or should shipping be included in the EU ETS?

Robert Ashdown: I am glad that you asked that, because it highlights clearly the difficulties of trying to regulate this global industry at anything other than a global level. The European Parliament tasked the European Commission with including shipping in the EU ETS in 1997, but the Commission has not done that, because it understands fully that, although imposing legislation on aviation at a regional level is very difficult, doing so on shipping is twice as difficult. For 10 years, the Commission has urged and pressed the IMO to take action for it in that regard, because global regulation is much more effective and has a much bigger impact on global carbon reductions. So shipping is not in the EU ETS, but
that is changing. The Commission has indicated that it is losing patience with the IMO and has said that, unless the IMO comes up with a robust scheme by the end of 2010, the Commission will look to include shipping in the EU ETS by 2013. That is very much a second step, but if we cannot achieve the A1 approach, A2 sometimes has to do.

16:45

Des McNulty: On that A2 approach, and leaving aside the global versus regional issue, is the aviation mechanism appropriate for shipping?

Robert Ashdown: No. The specifics would be different.

Des McNulty: How would they be different?

Robert Ashdown: The issue of free allocation is trickier for ships. The aviation industry has tried to work with the World Trade Organization on policy levers and on a series of bilateral negotiations with countries that have flights to the EU. It is not possible to do something similar for shipping, because a ship may make five or six port calls in different countries, so arrangements for shipping would have to be different. Because ships might not buy bunker fuels, that aspect would be different, too. Further, with the prospect of hubs being established outside Europe, for example in north Africa, any EU ETS for shipping would have to ensure that it did not create an incentive for such hubs to grow because, technically, they would require only short final journeys from north Africa into the EU, rather than journeys from, say, Asia into the EU. A range of areas therefore require specific policy mechanisms to ensure that carbon leakage does not occur.

Gordon Wilmsmeier: I agree. If an EU ETS makes sense, it will have to be related to the freight flow from origin to destination. A good example of shipping finding its way around regional regulation arises from the United States cabotage law that does not allow ships sailing under flags other than the US flag to carry cargo along the US coast. The port of the Bahamas has grown a great deal because of that. It is on the doorstep of the US, so containers are brought to the Bahamas to be picked up for the last leg to the US on US-flagged ships.

So hub strategies are important, and a global approach is needed. It is important to bring within the global scope countries such as Panama and Liberia that flag ships but have not signed many agreements. The question is how we get such countries to accept our concerns about CO₂ emissions and get them on board.

The Convener: Are there any final questions for the panel? Do the witnesses want to make any final points that have not been raised in questioning?

Robert Ashdown: We recognise the problems and we want to do more. We are working hard to deliver a global open-trading scheme that can work for the international shipping industry and take account of countries that have not signed up to international schemes. We think that it is possible to do that, but it is proving challenging. However, we are committed to working towards that aim with the Scottish Government, the United Kingdom Government, Europe and the IMO.

Gordon Wilmsmeier: We would like to see a Scottish perspective on local shipping and an incentive for that in the bill, because it has been left out so far.

The Convener: That is a useful observation. Thank you for your time in answering questions. We will suspend briefly for a comfort break and a changeover of witnesses.

16:49

Meeting suspended.

16:54

On resuming—

The Convener: I welcome panel three. I apologise to the witnesses because we are running a wee bit late and the committee’s numbers are a bit depleted, but we hope that we can explore the issues in depth with you. I welcome Paul Tetlaw, the chair of Transform Scotland; Jeff Gazzard, co-ordinator of the GreenSkies campaign; and John Lauder, national director for Scotland at Sustrans.

I invite you to say some brief introductory words and give us your initial view of the bill from a transport perspective.

John Lauder (Sustrans): Sustrans is a charity that campaigns on sustainable transport, particularly active travel. We work closely with the Scottish Government to deliver projects throughout Scotland.

Our initial view of the bill is that we are pleased that it has been produced and with the target, but we were a little bit surprised that walking and cycling, which are forms of active travel, are seen as only small measures. We think that they could be significant in helping to reduce carbon emissions. We do not think that the bill emphasises transport as much as it could. Perhaps we can explore that.

Paul Tetlaw (Transform Scotland): We, too, welcome the bill and the ambition in Scotland for Scotland to be a leader in tackling climate change.
We have made only four recommendations to enhance the bill.

First, the bill must set annual emissions reduction targets of at least 3 per cent from 2010.

Secondly, the bill should include international shipping and aviation. I listened to the evidence that the committee has just heard on that, and would like to comment on it.

Thirdly, the bill should establish a duty on all public bodies to reduce emissions in line with the national targets. We certainly do not believe that it is right that politicians at a national level should shoulder all the responsibility. Things cannot be done in that way. There needs to be a cascade.

Fourthly, the bill should include mechanisms for enforcing emissions reduction targets. I have a water industry background, so I am familiar with all the improvements in water quality and waste water quality that have been brought about over the years. Those improvements have been helped by firm regulation and the work of enforcement bodies such as the Scottish Environment Protection Agency and the drinking water inspectorate. I am familiar with how the processes have worked.

As I said, I listened to the evidence that has already been given. I have a “Blue Peter” homemade model with me that shows where we are now with emissions and where we need to get to by 2050 with an 80 per cent reduction. The strategic transport projects review tells us that emissions from road transport in Scotland will increase by 10 per cent to 2022. I am afraid that if we listen to the special pleadings from certain sectors in transport and there is business as usual, all of our emissions and more will be taken up by transport alone. Therefore, emissions in every other area of society will have to be sacrificed so that there can be business as usual in transport. That is clearly untenable.

The Convener: Thank you very much. I am sure that we will explore in our questions issues to do with the targets and how different sectors will perform.

Jeff Gazzard (GreenSkies): The Aviation Environment Federation, which is a very small body—there are four of us—is the only non-governmental organisation anywhere in the world that works exclusively on aviation. We are proud of that.

I am not the kind of guy who often uses the word “innovative”, but I would say that the bill is innovative and ambitious. I was amazed to hear that BAA was not able to say how much it makes from car parking. I will let you know about that.

We have had a good look at the bill and tried to put aviation in a Scottish context. There is a Scotland, UK and European Union hierarchy when it comes to such issues. We have come up with just four brief recommendations, which are contained in our paper. I will not bore members by explaining them.

There are complicated issues to do with the science of climate change and radiative forcing and equally complex policy issues, such as the design and content of the European emissions trading scheme and the inclusion of aviation in that, but the simple fact that we want to bring to your attention is that Scotland needs to know what its aviation emissions are before it can even begin to get a grip on them.

Facts and figures and our four recommendations are encapsulated in our comments on the bill. It is important that the step of introducing the bill has been taken. We look forward to answering members’ questions.

The Convener: The UK Committee on Climate Change, which is not as pessimistic as Paul Tetlaw—or perhaps it is—estimates that the surface transport modes throughout the UK could reduce CO\textsubscript{2} emissions by between 5 million tonnes and 32 million tonnes. Do you endorse those figures? Why is the range so broad?

17:00

John Lauder: The variety of possible figures is really interesting. Before I came to the meeting, I looked at some estimates that the Department for Transport has made for the UK. It has estimated that if every large town and city in the UK ran an individualised travel marketing programme—essentially a soft measure like the travelsmart programme that Sustrans runs, in which we sit down with households, assess their transport needs and consider how to reduce their individual car trips by walking, cycling and taking public transport—14.2 million tonnes of carbon emissions could be saved by 2015. That figure is for the UK. We could make a wild estimate and say that, at 10 per cent of that, Scotland could save 1.42 million tonnes. However, we will not do that; we will go with what the DFT said. In light of that, it seems to me that 32 million tonnes might be conservative.

I think that Scotland is aiming at a reduction of 14.02 million tonnes. That suggests to me that leaving walking and cycling as peripheral issues—saying that they are small things that we might or might not do once in a while if the weather is nice—rather than bringing them into the bill and really investing in them means that we are missing a big opportunity to make a fairly easy emissions reduction by using programmes that are already well established, well researched and up and running in various places.
The Convener: Are there any other views on the projected reductions?

Paul Tetlaw: The range is interestingly wide and not terribly ambitious. As I tried to illustrate with my crude “Blue Peter” model, it is unacceptable for transport not to play its part, which it has not been doing. It has been going in the wrong direction: between 1990 and 2006, transport emissions rose by more than 14 per cent in Scotland, whereas overall emissions fell by 12.3 per cent, which means that non-transport emissions fell by much more. All other sectors are contributing, but transport is not.

There is no single simple measure. The range of figures that you gave indicates that a series of different measures needs to be used for transport to contribute. John Lauder spoke well about what walking and cycling can do. We need a huge change in our planning and land-use policies. Cascading responsibility to local authorities will focus their minds on ensuring that the housing developments that they construct and allow to be constructed in future reduce people’s need to travel rather than increase it, as many have done in the past. Modal shift to more sustainable and more efficient modes of transport—such as rail and bus—is also important.

The breadth of the figures illustrates the range of initiatives that need to be taken. We have no choice but to take them. We owe it to future generations—our children and grandchildren—to do that. We must get away from the idea that taking those measures will be difficult and punishing, because people will welcome many of them. They will welcome living in much more sustainable communities in which they do not have to travel so far because facilities are closer at hand.

I also share John Lauder’s view that the targets are not terribly ambitious.

The Convener: The question largely concerned surface-based transport. Does Jeff Gazzard have anything to add?

Jeff Gazzard: The debate is framed by policy measures that, as my two colleagues said, stem from basic mathematics. If we cannot agree on the figures, how will we ever agree about the policy measures? This is not algebraic logarithmic equations or mathematics meeting physics; it is simple addition and percentages, which even I can do.

Once again, we have set out figures for aviation in Scotland. We have taken apart the DFT’s forecasting and shown how it has lost millions of tonnes of CO\textsubscript{2}. We have tried to put that in a Scottish context, and our second recommendation measures all that. There cannot be a wide range; we have to agree on the current scale of Scottish emissions and be realistic about what they might be in 2020, 2030, 2040 and 2050, and that will give us a set of figures.

We are very good at special pleading, too. I have a small anecdote, if you will bear with me for one minute. I recently met a lot of environmental colleagues who are based in Brussels. One of our sister organisations there does not have enough passes, so it is, in effect, us. They were discussing whether lobbyists should be registered, and saying that industry lobbyists should be registered. I said that we should all be registered too because we are all industry lobbyists, but we are just a different industry. That put the cat among the pigeons, I can tell you.

There is special pleading on all sides, but my special pleading is to say that we should forget the policy issues and our children and the future, because we know all about that; we need to know about the mathematics of climate change. The bill’s target is 14.02 million tonnes of CO\textsubscript{2} equivalent by 2050. You cannot fit all that in; you have to make some tough choices, but you have to understand the maths of where the sectors contribute. It could be the cement manufacturers or the power generators, or the wide range of non-governmental organisations. Honestly, if there is one thing that my 17 years of working on this has shown me, it is that we have to do the maths. If you cannot understand the maths, you might as well go home and not bother.

The Convener: I have another question about walking and cycling in particular. John Lauder expressed some surprise—or disappointment—that the bill does not do more on active travel. I can take it as read that you think that there is scope for legislation to achieve more active travel. How should it be achieved? Should there be targets for public transport or active travel? Would it be more appropriate to think of mechanisms to create financial incentives as other witnesses have argued, to ensure that people have clearer reasons for making those different choices?

John Lauder: Both of those ideas could be applied. We could learn something from other northern European countries. The Scandinavian countries have already done a lot of the work that I think we should start to do in Scotland. They did not set targets for modal share—Denmark, for example, did not say that it was going to have a 15 per cent modal share in 20 years’ time; rather, the Danes looked at why people do not walk and cycle and began to tackle those reasons through a range of interventions. They built paths, for example, and reallocated road space. They built that into their planning frameworks and they enforced it fairly rigorously. For example, they reduced the amount of car parking in city centres every year. They did it quietly, but they did it and they set targets for it.
The Danes also ran campaigns about soft measures to give people more of an idea of the benefits to them as citizens of walking and cycling. They showed the health and financial benefits. They also worked with businesses. They used a raft of measures, and we could learn and incorporate what they have done already.

It is dangerous to set ambitious targets straight away because we could set ourselves up to fail, but it is also important to make definite plans. The Government has started to look at individual towns and how they might have networks through the smarter choices, smarter places initiative, and that is welcome. It is applying some of what has been learned in England and on the continent, but it is doing it in a small way.

A lot of evidence for how we can go about creating the switch to modal share already exists. It is about winning hearts and minds as much as about building things. The good news on this front is that the cost benefit ratio is very good. The study that Rod Eddington did for the DFT in 2006 showed that there is a lot of benefit in investing in these soft measures and encouraging people to walk and cycle.

When I read the draft bill I was surprised that the Government did not seize on the short trips that we make, particularly by car. I am not isolating the car, but about 50 per cent of road trips by car are less than five miles. I was surprised that the Government did not seize on that in the bill and say, “Great—that’s an easy hit. Let’s make a big investment here and let’s get people walking and cycling for those short trips, which will obviously reduce carbon emissions and improve public health, which also has a big benefit in a cost benefit analysis.” I was surprised that that did not feature in the bill, because we could do what the Danes, Norwegians and Swedes have already done—give ourselves an easy hit straight away.

**The Convener:** Did those countries take a legislative approach that needs to be taken in the bill, or are you asking for a more strategic approach and a change to Government transport strategy?

**John Lauder:** A change in strategy at all levels of government is required—it is required at national level but it must be cascaded down.

Scotland already has the legislation. For example, when you read Scottish planning policy 17, you would think that everyone in Scotland is walking or cycling for short trips. The legislation is in place, but it seems to drop through the cracks and we do not enforce it. I think that it is about taking a strategic approach.

**The Convener:** I put the same question to Paul Tetlaw: given the aspiration that everyone, across the political spectrum, is signing up to, does there need to be a clearer emphasis on emissions reduction in the Government’s transport strategy?

**Paul Tetlaw:** Yes. To build on what John Lauder said, there needs to be a national framework. Whether it is part of the STPR or national planning framework 2 does not matter; nationally, we must set a framework that states that this is where we are going with policy and cascades that down to local authorities. We have examined the matter quite closely and our understanding is that the other countries to which John Lauder refers—the Scandinavian countries and so on—set a national framework; it was part of a national plan that all parties would buy into over the long term. Emissions reduction is not a contentious issue like road pricing and so on; I cannot see that people would get upset about it—people would welcome it. We need a framework to drive it forward. At a national level we must grasp the bull by the horns, and whether it is part of NPF 2 or STPR does not really matter.

I will also respond to the question that you asked John Lauder about other measures. It is clear that over the years the cost of public transport—buses and trains—has gone up in real terms, while the cost of motoring, and indeed flying, has come down. It is not tenable, if we want to achieve the modal shift that I think we all recognise we need to achieve, to allow that gap to continue to widen. Although I accept that it is a more difficult issue to tackle, we have to tackle demand management on the roads and other forms of surface transport. Most cars are driven about with only one person in them—the driver—at peak times, whereas other modes of transport, such as buses and trains, are full and people stand on them. That is an inefficient use of our infrastructure and we have the wrong price signals. Whether it is done through the pricing mechanism or high-occupancy vehicle lanes does not really matter, but we must start to shift the balance and it must be done nationally.

**The Convener:** I will bring in other members; I am sure that other points can be built into other questions.

**Shirley-Anne Somerville:** I ask you all for your thoughts on the 2050 target and the interim target. How ambitious are they? Would you like to see any changes?

**John Lauder:** We are perfectly happy with the target, although we would be happier if it included aviation and shipping. The important thing is the interim target, on which we feel we could make some progress quite quickly.

17:15

**Shirley-Anne Somerville:** Would you like the interim target to be changed?
John Lauder: No, we are happy with it.

Paul Tetlaw: In my written submission, I mentioned a 3 per cent annual emission reduction target, which would allow for better interim targets along the way. As long as we have that target in place, we will hit a trajectory. There are a lot of graphs flying around in the WWF Scotland paper—I am not sure whether it has been submitted to you, but I found it very helpful in demonstrating the sort of trajectory that could be achieved with a 3 per cent target. With that target in place, we will hit the interim targets and the end point that we need to achieve. Scientists are questioning whether that end point is good enough or whether it needs to be tougher, but we have to start somewhere.

Jeff Gazzard: There is not a problem with realising that the target should include aviation and shipping emissions—however imperfect some of the measurement systems might be, they still exist. Bunker fuels are reported only as memo items in an arcane situation in which both aviation and shipping emissions are dealt with by their respective trade bodies. The organisations are trade bodies, despite the fact that they have the initials "UN" in front of their names—the fact that the IMO and the United Nations International Civil Aviation Organisation are dealing with the issue is akin to having the drug companies run the World Health Organization. That is not a throwaway line.

Once again, this is about mathematics—that is my theme for the day. The interim targets and the reduction percentages, and the target of 14.02 million tonnes by 2050 are fine. We came across the background paper on the bill, “Technical Note: Climate Change (Scotland) Bill: Greenhouse gas (GHG) Emissions, Annual Reductions and Targets”, which includes aviation and shipping emissions in its 1990 starting point. Logic tells me, therefore, that those should be included at every step along the way. What to do about it is a different kettle of fish, but that is a pretty good document, and the figures should be included.

On the question of bunker fuels in aviation, an old colleague of ours, Peter Lockley—who left to work for WWF—is the sole non-governmental organisation representative at the IMO. I will ask him to send you a couple of pages about shipping emissions, so that you are fully informed on that, because there are things that can be done.

Shirley-Anne Somerville: We will come to international aviation and shipping later—I will ask some further questions on the targets. Paul Tetlaw has given his view already, but I ask the other witnesses for their views on the annual targets.

The policy memorandum states:

"Prior to 2020, the Scottish Ministers will be expected to set annual targets which build towards delivering emissions reductions of at least 3% each year."

How well placed is Scotland's transport system to meet that ambition? Are you happy with the targets in the policy memorandum? Perhaps John Lauder would like to start.

John Lauder: It would be great to have 3 per cent per year. As to how well placed transport is to deliver that, in the immediate aftermath of the strategic transport projects review I struggle to see how transport will manage to make those cuts. There is heavy investment in road transport, which accounts for 95 per cent of all transport emissions, and which—as Paul Tetlaw said—will only grow. I do not think that it can be done—transport cannot reduce its emissions if there is such an investment in petrol-based and oil-based travel.

Shirley-Anne Somerville: I am sorry—I should have asked how you think transport is placed to achieve the emissions reductions that you hope for in an annual target.

Paul Tetlaw: Are you asking about internal surface-based transport within Scotland?

Shirley-Anne Somerville: We will start with that.

Paul Tetlaw: It is not well placed—the strategic transport projects review projects that emissions from road transport will increase by 10 per cent to 2022, which is not a good starting point.

The idea of a long-term transport plan is good and many aspects of the strategic transport projects review are good and welcome. The methodology is good and I welcome all the work on rail electrification. However, of the long list of 29 projects in the review, some need to be prioritised and developed earlier, whereas some are untenable in the context of the discussion that we are having—alternatives to them need to be considered. Without a priority list in the review document, we are in difficulty.

Shirley-Anne Somerville: Does aviation have any chance of contributing to a reduction in emissions in the short term?

Jeff Gazzard: No—it just does not. We have only to look at the figures to see that. My head spun when I analysed the scale of what Scotland's aviation emissions could be. Members might not believe me, but the Department for Transport's UK-wide figures, from which Scotland's figures come, lost millions of tonnes of CO₂ when they were recast between 2006 and 2007. That is a big issue.

We heard from Alice Bows and—a little grudgingly—from Mr Dewar that growth overtakes technology. There is no doubt that the aircraft that are being delivered now—the Boeing 787 and the Airbus A380—are a technological tour de force, but a Boeing 787's fuel capacity, one tankload, is equivalent to 1.2 million miles of motoring. Such
aircraft are not environmentally benign. They are more efficient and represent tremendous technology, but growth outpaces the best technological improvement rates. The growth rate is 3 to 4 per cent, whereas the best technological improvement rate is 1 to 2 per cent, so the problem continues.

**Shirley-Anne Somerville:** Regardless of the type of transport, does Scotland have the skill base to move to a low-carbon transport system and take advantage of the opportunities that will arise when we change our transport systems?

**Paul Tetlaw:** Absolutely. Why not? Scotland has a great history of innovation. I have no reason to believe that Scotland does not have people who can be equally successful in the new era by innovating in the required ways. We heard a lot from earlier witnesses about the importance of the economy. If Scotland developed appropriate technologies and took a lead, that could be a great boost to the economy. Others would come here to benefit from that, which would have an economic value.

May I comment on aviation?

**Shirley-Anne Somerville:** Certainly.

**Paul Tetlaw:** I heard what you heard—what I describe as special pleading about the fundamental importance to the Scottish economy of aviation, which means that it cannot possibly contribute to achieving the targets, but there are many types of aviation. People have talked about rail travel replacing air travel. There are a huge number of internal flights. Most people accept the argument for rail travel—I know that the business sector accepts it because I am a member of a group of which the Confederation of British Industry Scotland and the chambers of commerce are also members, and it is heavily promoting high-speed rail links to the south. I am sure that business understands that an alternative will have to be presented and that internal aviation will not continue at existing levels. That is one area in which aviation emissions could be reduced.

I do not question essential business journeys by air, but I question the value of some other air journeys. For example, a good friend of mine—I will not say the name—went to Spain last weekend for a hen weekend that lasted four days. I am sure that the committee does not want to know the details, but far too much alcohol was consumed and I do not think that the group did any good to the reputation of Scotland or England—English people were also there. The people returned very much the worse for wear and I do not think that they were productive at work for a couple of days after returning. I am sure that members are all familiar with such trips. I question whether they are essential to the economy—in fact, they damage the economy and Scotland’s reputation. Much flying is for such purposes.

**Shirley-Anne Somerville:** I will pick up on your comments about leisure travel. How could the Government and Parliament change that behaviour and tell people that they cannot go on holiday?

**Paul Tetlaw:** Pricing mechanisms are the simple answer. The only reason why that hen party went on that trip was because it was so cheap to fly to Spain for the weekend. Jeff Gazzard can tell you much more than I can about air travel and whether it pays the true price of its impact on the environment. However, I think that pricing mechanisms could soon change the situation and prices will rise due to oil scarcity, if not through other means. The vision of ever-expanding airports and ever-growing numbers of air passengers is a fantasy.

**John Lauder:** You asked about the skills base. As Paul Tetlaw said, the skills base is definitely there. It is interesting to note that many of the big consulting engineering firms are interested in active travel and see it as a growth area. They are very imaginative and come up with great ideas all the time.

There is a lot of good legislation out there anyway. Before I came here today, I conducted a little test to see what was available and I found that, over the past six years, there has been a lot of good legislation, good reports and good recommendations, and there is more to come this year. There is no shortage of good ideas. What is lacking is governmental effort to bring it all together and fund it adequately.

**Shirley-Anne Somerville:** I am sorry to go on about leisure travel, but I represent the Lothians, and Edinburgh bases much of its tourism on short breaks. People might be worried that we are trying to stop them travelling, which would discourage people from coming here, as well. How do we deal with those concerns, which are based on the contribution that tourism—including the leisure weekends that you think are inappropriate—makes to the capital and other parts of Scotland?

**Jeff Gazzard:** I am not sure that you can sit here and say that such trips are appropriate. In a way, they are a bit of an easy target. The fact is that the website of the Scottish Government’s version of the UK Government’s act on CO2 campaign gives advice on how people can cut their CO2 emissions. It advises people to holiday at home, avoid flying, use videoconferencing, take the train and so on. The Scottish Government’s advice differs slightly from the UK Government’s campaign in that it suggests that people should buy offsets if they fly, whereas the UK Government says, basically, “You can buy offsets.
as a last resort, but they do not make much difference.”

Over the past few years, we have offshored much of our basic service industry. However, in the past 25 years, we have offshored our personal tourism. I do not want to stop people travelling or even—if they think it is really necessary—going to Malaga for a hen night. However, as Paul Tetlaw said, people only do that because it is cheap to do so. If they paid the cost of the environmental damage that their journey causes, they would not do it—they would do their vomiting in an alley off the Royal Mile instead.

Shirley-Anne Somerville: Unfortunately.

Jeff Gazzard: Indeed. However, your Government tells people to holiday at home. I love coming to Scotland, because it is one of the few places where I get on with my colleagues—you can understand why. I think it is great that I can get to Scotland by train. Scotland is a nation in Europe and people like Scotland. People like fiercely independent countries. Get out there and talk to other European nations about your policy. Appoint a Scottish climate change ambassador—I do not care who you choose; perhaps Al Gore might discover that he has long-forgotten Scottish links. There is a lot that you can do to adapt your policy and sell it to other people in a way that enables you to work with them.

17:30

The Convener: Cathy Peattie would like to ask a quick supplementary, and so would I.

Cathy Peattie: I will not go into the visit to Spain.

Jeff Gazzard talked about the Scottish Government’s website and the wisdom there. I agree with that, but I suggest that people who go to Spain—in fact, most people who get short flights to wherever—have not read that advice, which might seem to them like something that somebody else should do, or something that does not affect them. I speak to people who say, “That’s a daft idea. What are you involved in climate change for?” As you can imagine, they use worse words than “daft”. How do we get beyond that? We can offer good advice on all sorts of things, but how do we get people to take it?

Jeff Gazzard: It is a question of compulsion, regulation, exhortation and education. One of the most fantastic things that I have seen happening recently is walking buses, where kids walk to school as a group. That comes up every couple of years. A car manufacturer usually gives them fluorescent jerseys and stuff like that.

My colleagues on the panel are the experts on the easy, cheap hits in relation to public transport and personal responsibility. I work at the other end, which is expensive. I consider what we need to do in high-tech demand management. You have a broad spectrum of witnesses, and none of us does the work for the sake of our health.

I have worked in marketing and advertising for most of my commercial career—or, as my mum so delicately puts it, since the last time I had a proper job. It is possible to develop communication campaigns that grab people’s imagination and shift their views—I will e-mail links to a couple of examples. However, once again, hitting people through the web, Scottish newspapers, Scottish television and the Government’s own information campaigns is very cost effective per head of the population. It is cheap to do. I will be the climate change ambassador. I do not mind.

The Convener: I will follow that up with a quick question for Paul Tetlaw. You said that you are part of a group that promotes high-speed rail and that the CBI, the chambers of commerce and so on are involved and signed up to that agenda. To what extent do those business voices see the business case for bringing some of the tourism and leisure industries back to Scotland so that we benefit from them here, rather than our facilitating the continual offshoring of those industries?

Paul Tetlaw: I have not had that conversation with them, so on that basis I cannot comment, but I am sure that they understand, as we do, that it would be beneficial if the amount of money that goes out of the country was turned around and spent here instead.

The Convener: Whether people spent the money on colourful hen nights or drunken weekends in Edinburgh or on something that is more benign, they would be spending that money in Scotland.

Paul Tetlaw: There is also a huge market just south of the border. At the moment, many people tend to go the other way. It would help if we could get a volume of them coming our way. I observe that there are a lot of English people in Edinburgh at the moment, and have been throughout the winter. I think a lot of them have come by train because the rail companies are marketing their services quite heavily. There is a big market to aim for there.

John Lauder: My comment is almost an anecdote. Every year, we run a conference for school travel co-ordinators, and in the past two years the best speakers were 17-year-olds. Those two sixth-year pupils from different schools absolutely understood the position. Their view was, “Of course I’m going to go abroad with my pals. I know that cheap flying is going to end pretty soon.”
Sustrans has been working in schools for a few years now. I am not saying that it is because of us, but the curriculum is informing the kids. My view is that the public know far more than the politicians who agonise about the matter think. The public know that cheap flying is coming to an end.

Shirley-Anne Somerville: One of the witnesses mentioned the Government technical note that is attached to the bill. What do the witnesses think about the emission tracks that the Government suggests? Do you think that the emission changes are being made quickly enough?

John Lauder: Are you asking whether the emissions targets are being made quickly enough?

Shirley-Anne Somerville: Are we seeing the trajectory go down as quickly as you would like? Would you like to see cuts being made earlier?

John Lauder: Yes. We want to see action.

Shirley-Anne Somerville: You surprise me. What changes would you like to see?

John Lauder: As Paul Tetlaw said, we cannot beat the Government, because everyone has a responsibility. I have been trying to work out how targets will filter down. Paul Tetlaw also mentioned local government. I cannot see how the targets will filter down to local government through, for example, the single outcome agreements. We completely support those agreements; they are working on the ground in some instances, but not universally. I am sorry if I have gone off the topic of the question, but you pretty much knew the answer I was going to give.

Shirley-Anne Somerville: It is nice to have it on the record.

John Lauder: It is more about how the targets will filter down. The way the framework has been set up means that it is not just about the Government setting targets. It is setting indicators and outcomes, but it is up to local authorities to reach agreement with the Government through the single outcome agreements. It is about how 3 per cent year-on-year cuts in carbon can be negotiated on that basis.

Paul Tetlaw: The less we do now, the more we will leave to be done in the future and the worse we make it for the future. You have probably heard that it is all about the area under the curve. The sooner we start the better. It is easier to start now, because there are lots of soft targets—everything we have been talking about that is not that difficult to shift.

In transport and travel terms, we are doing a lot of the wrong things. If we just gave better signals to people and produced better legislation, people would shift quite quickly to doing the right things. We really should start now—hence our request to the committee that a 3 per cent annual target should come in straight away.

Jeff Gazzard: I echo that.

I have a quick comment to make about targets and what to do about flying. If the aviation industry can deliver only 1 to 2 per cent improvements a year, that is its growth. Demand could be managed down through taxation at 5.4p per passenger kilometre, to be introduced over three to five years. About three years ago, we had access to the Department for Transport’s passenger allocation model and HM Treasury’s gross domestic product model—we did not break in; they let us have the information. If you put such taxes on tickets, you will halve the rate of growth. Industries world wide would kill for a guaranteed 1 to 2 per cent growth rate a year. That would give you the chance to stabilise emissions. If you are dealing in percentages, you would say, “Here are the policies. Here’s how to take CO₂ out. Here’s the structure that underpins the bill.” You have a top-down approach—most of the people who have given evidence today are in the middle or somewhere near the bottom, but the absolutely right thing to do is to start at the top. The point that Cathy Peattie made is absolutely right: you have to educate people. You could almost go around and knock on everybody’s door—members could take 10 people each at the weekend. I think that the target of 14.02 million tonnes is achievable by 2050. The trajectories are fine. Scotland, in the political sense, is taking all this very seriously, which is good news.

Shirley-Anne Somerville: Should the bill have sectoral emissions targets for transport?

Paul Tetlaw: Yes, it should.

Shirley-Anne Somerville: That was nice and easy.

Paul Tetlaw: If it does not, there will be special pleading around transport and we will not be able to do anything about it. That would just not be realistic.

John Lauder: I agree with Paul Tetlaw. My concern is that the view could be taken that, in order to grow the economy, we must drive a cart and horses through any targets that we set for transport—that transport must be taken out of those targets. I feel that that is what we heard from the previous witnesses. That goes right to the root of what we measure and what we regard as economic growth. However, I do not want to open up that debate this afternoon.

The Convener: Somebody had to make a joke about driving a horse and cart at some point.

Jeff Gazzard: It is always the Greens.
What you are doing is clever and sophisticated in terms of policy development—all credit to the UK Government and the Scottish Executive. It is a top-down approach that sets out where you want to go. Afterwards, you can have all the arguments, discussions and differences of opinion about what we need to do and how we can get there. Usually, we have all those discussions first, which go nowhere because we are discussing them without a target. That is why the bill is fundamental. We have a road map—a much-abused term—and a trajectory, some figures and some mathematics. We can have the arguments later. Yes, it is difficult. There are educational issues and some people will be intractable—mostly those who float on oceans and fly through the air.

I am a deeply sardonic and pessimistic person—I am not always this happy—but I love it when reasonable questions are asked by reasonable people and reasonable answers are given. That was not what I heard from the previous witnesses—apart from Alice Bows, who is lovely.

Shirley-Anne Somerville: I have a final question on targets. Do you have an opinion on the measurement and reporting of emissions that are generated anywhere as a result of goods and services that are used in Scotland?

Paul Tetlaw: Yes, I do—if I have understood your question correctly.

Shirley-Anne Somerville: It is about overall consumption and the Scottish economy.

Paul Tetlaw: It should be in terms of where it is produced, as well. One reason why our emissions have gone down over the years, while transport emissions have continued to go up, is that we have exported our manufacturing industry. Let us not kid ourselves that we have done anything other than that. It is naïve to believe that we can continue to allow China or whoever else to take the hit for those emissions when they are produced in the manufacture of products that we import. It is only a matter of time before it is accepted that each country must take responsibility for the products that it imports. That will change the whole picture for shipping and so on, because there will not be the same volume of shipping around the world. Once a carbon budget has been created for a country’s own goods, market forces will intervene and people will realise that it makes much more sense to produce those goods at home than to transport them halfway around the world.

I take issue with what one of the earlier witnesses said. He said that it is predominantly more carbon efficient to transport goods around the world. I just do not believe that. Produce that is grown locally in season surely must be better. As for heating tomatoes in polythene tunnels in Kent or wherever, there are all sorts of waste-heat schemes that could be used for that. Instead of being lost, that heat could be used to grow local produce. Therefore, I simply disagree with what I heard about that.

Shirley-Anne Somerville: I think I disagree, as well.

John Lauder: Quite a bit of work could be done to measure the costs and benefits of reducing carbon emissions. We regularly try to sell our ideas to the public, but that is a lot easier to do when we can produce facts and figures that people can understand. Where we struggle at the moment is in measurement and monitoring. The Government could invest in that research to help us to understand the benefits to individuals of reducing carbon emissions. We struggle for figures on that.

The Convener: Aviation and shipping—particularly aviation—tend to get singled out for attention in the climate change agenda, sometimes by me but also by high-profile direct action activists and by a number of people who have debated the UK bill. The previous panel of witnesses might argue that the aviation sector should be allowed to continue to increase its emissions. The flip side of that is to ask why we should single it out for special attention.

17:45

Jeff Gazzard: Simply because it is kerosene all the way.

I agreed with Mr Dewar on one point. He said that by 2050 aviation emissions are likely to be about 5 per cent of the global total, but that is under the scenario of complete carbon business as usual in the IPCC’s “Special Report on Emissions Scenarios”—the relevant graph, in colour, happens to be in our submission. It indicates emissions of 2.5 billion tonnes by 2050, which is an awful lot of carbon given that the total figure is supposed to be between 10 and 20 gigatonnes.

In the UK, we are fortunate to have had a focus on air travel simply because we are a fairly air travel-intensive country. We use a lot of low-cost air travel and have had major airport developments since 1995, such as the second runway at Manchester, so the issue has been flavour of the month. As members know, I run an European alliance. If you speak to people about the new Athens airport, people linked to Charles de Gaulle airport or our NGO colleagues, such as the Sierra Club, the Natural Resources Defense Council and the Environmental Defense Fund in the United States, you find that everyone is concerned about the issue. That is why aviation is emphasised.
In a way, aviation is an easy target, as many people fly and make the connection between their business and leisure trips and what comes out of the engines of the planes that they use—it is a no-brainer. We lobby effectively but we cannot generate stories: the media will print only things that are of interest. The Environmental Audit Committee of the Westminster Parliament and the Transport, Infrastructure and Climate Change Committee of the Scottish Parliament seek facts only about issues that stick out to them like a sore thumb. That is the problem.

We are told that other industries can reduce their emissions, but aviation is more or less kerosene dependent: as emissions from elsewhere come down, its emissions go up. The figures that we have produced for Scotland seem to intersect. That is why the issue gets the attention that it deserves. However, we have a carbon-intensive lifestyle and, if the truth be told, issues such as coal and road transport are just as important as aviation. We must pay rigorous attention to them all.

The Convener: Would you like to respond to the argument that we heard from the previous panel of witnesses, who claimed that aviation’s contribution to the economy is such that it is legitimate to argue that, within an efficient and tightly-capped trading system, it can be allowed to continue to grow, with the rest of the economy taking up the slack?

Jeff Gazzard: The contribution of aviation to GDP is important. Historically, aviation has grown at about twice the rate of GDP. It facilitates the movement of people and certain goods around the world, and the further it goes the more efficient it is. We cannot turn the clock back, but aviation does not pay its costs. If it did, we reckon that we could stabilise emissions at today’s level.

In late December, the Parliamentary Office of Science and Technology at Westminster produced a stunning report—which I will send to the committee—that took apart the DFT’s cost benefit analysis for expanding Heathrow. The way that climate change impacts, economic benefits and job creation ratios are calculated is phenomenal. It is estimated that 1,000 jobs—direct, indirect and induced—are created at the airport and off site per million passengers. If you are Mr Dewar, you employ a car park attendant at Edinburgh and a paper boy is created in Aberdeen. If the ratios were accurate, we would be housing aircraft workers on the dark side of the moon, because that would be the only space left.

The volume of work that is always quoted by the industry and the DFT is a report by Oxford Economic Forecasting Ltd. We have taken that apart in a report by our consultants, CE Delft, who are pretty well respected. I am conscious of the time, so I will send the committee a short note on those findings. Aviation contributes to the economy and is worth having, but only at the rate that we suggest, because it does not pay its external costs. If we were to factor into the cost of air travel some of the social costs of carbon identified in the Stern report, we would probably not fly at all, although I am not suggesting that.

The DFT, in all its financial meanderings to justify the expansion of air transport, assumes a very low cost of carbon based on the amazing assumption that we have hit our 2050 targets. That is what it says—if you are stunned at that, so am I. The DFT assumes that its policies will work and it will hit its target, so we need only a low cost of carbon. I kid you not.

The Convener: You have mentioned some of the aviation emissions figures, and in a previous meeting the committee discussed the national atmospheric emissions inventory as a source for those figures. How robust is that source of emissions data?

Jeff Gazzard: It is as robust as you will get. As we say on page 3 of our written submission, the latest NAEI figure is that there were 1.122 million tonnes of CO₂ emissions from international flights from Scotland in 2006. That is not so far from the 2005 DFT figure for all domestic and international flights, which was 1.5 million tonnes.

These things can be forecast and measured reasonably accurately, although two or three years ago the DFT suddenly decided that there will be no growth in aviation in the UK beyond 2030. I find that amazing, because there will be growth everywhere else in the world. That allows the DFT to get rid of those tonnes of CO₂. Does that answer your question?

The Convener: Yes.

Jeff Gazzard: Forecasts from the DFT, the Civil Aviation Authority and the NAEI are about as good as you will get, but Scotland needs to conduct a study into what its own figures are now and what they will be in future.

The Convener: That is useful, thank you.

I have one more question for the whole panel on international credits as a means of reaching or purporting to reach domestic emissions reduction targets. The Scottish Government does not intend to prescribe a limit on the use of international credits for that purpose. Are there any views on whether a limit is desirable?

Jeff Gazzard: There should be a limit. The UK Government is establishing a limit—I have picked my words very carefully—and so, I believe, is the EU within its 2 degrees policy.

Incidentally, it is our clear understanding from the environment commissioner Stavros Dimas that
the EU 2 degrees policy of which Scotland is, in effect, a subset will include aviation and shipping emissions in its targets.

All international credits should be limited.

The Convener: Would you support a proposal for an 80:20 split, for example, so that no more than 20 per cent of the domestic target should be reached through those measures?

Jeff Gazzard: I think that that is a lot, but it is about as good as you will get, and it is fair enough. We have spent the past five years working on having aviation included in the ETS because it was the only policy option open to us. Do not believe that we are fans of emissions trading as a concept to save the planet.

The Convener: Are there any other views on international credits?

Paul Tetlaw: I support the 20 per cent figure that has been proposed. A limit is needed.

Cathy Peattie: I want to consider the role of advisory functions, reporting duties, public organisations and so on. What advantages or disadvantages do you see in the UK Committee on Climate Change providing advice to the Scottish ministers?

Paul Tetlaw: There is probably a short-term advantage in that the UKCCC has been created and is up and running, but in the longer term it would be better to have a body that is appropriate to and for Scotland.

John Lauder: I agree completely.

Cathy Peattie: That was my next question. Is the idea of a Scottish commission on climate change positive and helpful in the longer term? In a sense, that is what you have just said.

Paul Tetlaw: Yes, it is because it will take account of particularly Scottish circumstances.

Jeff Gazzard: The UKCCC has been very clever because it has rigorously distanced itself from NGOs, industry and special interest groups in its initial 18-month period. The committee has, in the immortal phrase, formed its own views, which was a smart thing to do. Scotland should have an equivalent commission, but it would need to work closely with the UKCCC. The way that it writes its reports and what it says seems okay to me.

Cathy Peattie: So some kind of relationship between the two organisations and parallel working would make sense so that they did not go in different directions.

Jeff Gazzard: Yes. As I said, Scotland may have only 5.1 million people, but you are very important. The Executive and the Parliament do a cracking job; every time I have been here, I have been impressed. We are in Europe and you are part of the UK. At all those pinch points, there are policies and institutions that you need to engage with pretty quickly and thoroughly.

Cathy Peattie: Is the reporting mechanism in the bill robust enough? If not, how can it be improved? Will the bill deliver flexible adaptation options for the transport sector?

Paul Tetlaw: I mentioned the water industry as an example of a sector in which regulation is clearly in the hands of particular bodies. One of our recommendations is that simply reporting on progress is not sufficient and that we need enforcement to ensure that we achieve the targets we set ourselves. Most of my career was in the water industry. We have brought about tremendous improvements in drinking water and waste water quality as a result of clear legislation and bodies that are tasked with enforcing it. The Scottish Environment Protection Agency, which deals with waste water, and the drinking water quality regulator for Scotland have worked successfully with the industry, and society has benefited.

John Lauder: We need to ensure that we have the right mix of people and that they have sufficient enforcement powers and independence.

Cathy Peattie: I am interested in hearing more about the benefit of placing a duty on local authorities to tackle climate change and to report annually on their transport emissions, as well as on their other work on climate change.

John Lauder: That is vital. The point that I explored earlier was whether the single outcome agreement framework will allow local authorities to opt out or change their approach. Some local authorities are already enthusiastic, but others are not. The idea of enforcement seems to go against the idea of single outcome agreements, and it will be interesting to see how targets are enforced—if they can be.

Cathy Peattie: Local authorities have public duties in issues such as equality and biodiversity.

John Lauder: Yes—a public duty is required.

Jeff Gazzard: I have a small point on that. The situation here is analogous with that in the US if we view local authorities as states—we have the good, the bad and the ugly. As we discussed, there are good local councils that can be green beacons and can be encouraged. We should start where we know we will get successes, whatever they may be, to provide a model. Just off the top of my head, we could have town twinning for carbon reduction measures. We have had a lot of input on air transport issues in the US, and we have worked with local authorities and regional bodies such as the air quality management group for the
north-east states. In such groups, there are environmental protection officers, councillors, people from education authorities and others who can take many of the actions that have been mentioned. We need to consider what local authorities can do. On whether the approach should be voluntary or advisory, I suggest advisory. That is a good way forward.

**Paul Tetlaw:** The point is wider—public bodies generally should have a responsibility—but local authorities are key, given the activities that go on in their areas. I referred to the importance of land use planning and the type of developments that we permit in future. A duty would focus the minds of local authorities on the type of developments that they allow in their areas.

Let us be honest: there has been competition between local authorities as regards where people live and what type of housing is allowed, which has led to longer-distance commuting. Local authorities must have a mechanism that makes them think about the implications of allowing housing developments to go ahead. They need to realise that allowing a housing development to proceed might lead to much more transport activity, which would mean that transport activity in another area would have to be cut if there was a target to meet. Having such a mechanism would focus the minds of local authorities.

18:00

**Cathy Peattie:** For many of the past 20 years, if not longer, I found that, although everyone thought that equality was an extremely good idea, only one officer or department had the responsibility for dealing with it. The creation of a public sector duty on equalities has meant that statutory organisations have had to take on the responsibility across the board. Do you not think that imposing a climate change duty would help us to get away from the idea that one department is wonderful and another is awful and that one council is good whereas another is awful? Such a duty would not be prescriptive but would work across councils.

**Jeff Gazzard:** That is a good point. For example, all local authorities are big users of travel. In the final few weeks before Ken Livingstone lost the mayoral election, the Greater London Authority put through a policy on air travel whereby, if a journey in Europe takes up to eight hours from door to door, it must be made by rail. Flying within the UK is not allowed—videoconferencing must be used.

Our organisation also has a travel policy, because we have international advocacy responsibilities. We have cut our flights, and I have made train journeys that are among some of the most convoluted in the history of the railways. Getting to Verona from Manchester by train is not easy, but that is how we must do things.

Bodies such as HM Revenue and Customs say on their websites that their staff will not fly around the UK but use videoconferencing. Even Phil Woolas, one of our middle-ranking environment ministers, did not fly to Australia; he held a videoconference instead. That must become the norm, and public sector institutions are the places in which to implement such policies.

**The Convener:** As there are no further questions for the panel, I ask the witnesses whether there are any outstanding issues that they intended to raise with the committee but which did not come up during questioning.

**Jeff Gazzard:** The Scottish Executive should have some policies on whether to use air travel when travelling around the UK. Some of the Scottish islands are a bit peripheral, and I will not argue against the public service obligations that are in place. There are PSOs for Polish politicians to fly from Warsaw to Strasbourg, which does not represent a good use of air travel, but I accept that the air services to the Scottish islands are vital. They should be a little more expensive than they are, but PSOs have a role to play in peripherality.

A final point on peripherality is that I do not buy the argument that Scotland is very peripheral in Europe, especially if one goes to the other end of Europe and sees how peripheral the countries there are.

**The Convener:** I appreciate your point about the island links. If Rob Gibson had been at today’s meeting, I am sure that that issue would have come up earlier.

Does John Lauder have anything to add?

**John Lauder:** This might sound like special pleading, but it definitely is not. I would like the committee to take account of paragraph 8.1 of the consultation document, which classes walking or cycling instead of using the car as a small change. A big opportunity is being missed: the issue should be mentioned in the bill, just as forestry—which has its own section—is.

**The Convener:** Thank you very much. I appreciate the time that you have spent with us. I know that our meeting has overrun quite badly, and I put on record my appreciation to the staff who have supported us in continuing the meeting so late. I thank everyone for their time.

*Meeting closed at 18:04.*
Introduction

This paper provides background information from the Association of Train Operating Companies (ATOC) for the Committee’s scrutiny of the Climate Change (Scotland) Bill. It highlights the contribution rail can make to some of the policy issues that arise from the Bill, in particular the potential for reduction of energy consumption and emissions in transport. We are scheduled to give oral evidence to the Committee on 10 February and will be happy to provide further written information following this if the Committee would find this helpful.

We would emphasise the important role rail can play in reducing carbon emissions from transport:

- Rail has a substantially lower carbon footprint (CO₂ per passenger kilometre) than car or domestic air rail and has reduced this by 25% in the last ten years. Modal shift to rail from more carbon intensive modes can reduce total transport emissions.
- Train operators are committed to further reductions in rail's carbon footprint and are implementing a range of initiatives designed to reduce energy consumption and associated CO₂ emissions;
- Further electrification offers the opportunity for further reductions in emissions from rail and, in the long term, to provide a very low carbon form of travel. This is particularly important since road and air will continue to rely heavily on petroleum-based fuels for many years and reductions in the carbon intensity of these fuels will be much more difficult to achieve.

Given its increasing environmental advantages, the best thing the railway can do to support Scotland’s carbon reduction targets is to carry a greater share of national passenger travel and freight movement. Train operators will attract passengers onto the railway where capacity exists to do so. We therefore strongly support the recent and current investment in rail capacity being made.

Background

Rail's environmental performance

Recent work undertaken by ATOC has confirmed rail’s continuing carbon advantage over competing modes. The figures below are for Great Britain:

- On a per passenger kilometre basis, rail emits approximately half the CO₂ of car travel and a quarter that of domestic air.
- Rail has reduced its carbon footprint (CO₂ per passenger kilometre) faster than other modes – by 5% in the last year and by 25% over the last decade. In comparison, cars have seen a 9% reduction over the last ten years while UK domestic air has worsened, increasing by 11%.
- Rail can carry additional passengers with minimal carbon impact by filing spare capacity and extending train length. In the long term we believe rail can provide additional capacity at a very low carbon penalty.

The rail industry is actively taking steps to reduce its carbon footprint still further. A programme of initiatives is in hand including:

- The roll-out of regenerative braking, where electrical energy generated under braking is returned back to the grid;
- ‘Eco-driving’ (using the optimum power to maintain the schedule);
- On-train metering, which will enable much improved energy management and;
- Re-engining of High Speed Diesel Trains with improved fuel consumption and quieter engines.

Background Note by the Association of Train Operating Companies (ATOC)

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Modal shift

Given rail’s relative carbon advantage there is a significant opportunity to tackle carbon emissions from transport within Scotland through modal shift from road to rail. Road transport emissions currently comprise approximately 17% of Scottish CO₂ emissions – the second largest source after power station emissions. CO₂ emissions from road transport in Scotland have grown by over 11% since 1990 despite total CO₂ emissions falling by 7% over the same period. Similarly, emissions from domestic flights originating in Scotland have more than doubled since 1990.7

Modal shift from road and air to rail, where practicable, can therefore help to reduce (or limit the growth in) overall carbon emissions from transport in Scotland.

Improving capacity/integration

As regards existing service provision, rail currently delivers a number of critical services in Scotland:

- Supporting significant flows in the Central Belt, particularly between Edinburgh and Glasgow;
- Providing a key role for commuters in Strathclyde with a dense electrified network and a key role in commuting to Edinburgh, particularly from Fife
- Providing fast links to London well as connections to other major cities such as Birmingham, Manchester, Newcastle and Liverpool and;
- Providing important social links to rural communities in South West Scotland and the Highlands.

The Scotland Route Utilisation Strategy, published in March 2007 by Network Rail, forecasts that Scottish rail demand would grow by 3% pa and freight by 10% by 2016.

High speed rail

Modern electric high speed trains provide a fast, comfortable and very energy efficient alternative to domestic aviation. ATOC analysis indicates that, on a per seat km basis, short haul jet aviation is around 4-5 times more carbon intensive than electric high speed rail (using the current UK generation mix). In the longer term, as the electricity supply is progressively decarbonised, electric high speed rail’s carbon performance could be expected to improve rapidly. High speed rail is therefore a very attractive alternative to existing domestic air services and further airport capacity expansion. Significant modal shift from air to rail could make an important contribution to reducing emissions from this market.

Summary and recommendations

Rail has a demonstrable – and improving – carbon advantage over competing modes. Modal shift to rail, particularly from road, is a key mechanism for reducing overall carbon emissions from transport. In light of this, the single most important role rail can play in reducing carbon emissions is to carry a greater share of travel demand, both passenger and freight.

In closing, we also underline the following points:

- Rail’s significant carbon advantage over other modes should be fully reflected in any strategies developed to meet the targets set out in the Climate Change (Scotland) Bill;
- Electrification brings the potential for sourcing power from very low carbon supplies. This will widen rail’s carbon advantage over both road and air which will continue to rely on carbon-intensive, petroleum-based fuels for some time to come;
- There is potential for electric high speed rail to reduce overall CO₂ emissions with mode transfer from domestic air traffic movements.

7 NAEI Greenhouse Gas Inventory data for Scotland (1990-2006).
Background

BAA Scotland welcomes this opportunity to contribute to the Transport, Infrastructure and Climate Change Committee’s consideration of the Climate Change (Scotland) Bill. As the owner and operator of Scotland’s three largest airports – Aberdeen, Edinburgh and Glasgow, BAA Scotland plays a critical role in connecting Scotland with the world. Collectively, our airports handle more than 20 million passengers a year and serve more than 150 destinations, spread across 28 countries. As a country on the North West periphery of Europe, Scotland’s economy depends on a successful aviation industry to compete successfully in global markets. Many of the industries on which our economy depends, including tourism, financial services and the oil and gas sector, rely on the free movement of goods, people and ideas. This is why a competitive and successful aviation industry is so important to Scotland.

Our airports also act as major economic generators for the cities they serve and for Scotland as a whole. The respected Fraser of Allander Institute carried out an independent economic impact analysis of the three Scottish airports and found that collectively, the airports employ 10,000 people, support tens of thousands more jobs across Scotland and contribute nearly £1.5 billion a year to the Scottish economy.

Strengthening Scotland’s international connectivity through increased direct air links has been a key focus for BAA Scotland. We have reduced our airline landing charges in real terms at each of our three Scottish airports every year, year on year, for the last 15 years. We have also administered the BAA Scotland route development fund, which has invested an additional £130 million in new international routes through a package of discounted landing charges and direct marketing support.

This hard work has paid off with world class carriers like Emirates, Virgin Atlantic, US Airways, Continental and Delta coming to Scotland. European carriers, including bmi, easyJet and Ryanair have also expanded their operation at our airports to the benefit of passengers and the wider Scottish economy. As a result, international passenger numbers across our three airports have grown by 36% in the last five years.

However, we are far from complacent and recognise the strong desire within Scotland to further enhance our country’s international connectivity, an aim that attracts support from across the political spectrum. To that end, we have also welcomed the decision of the Scottish Government to include the development of our airports within the draft National Planning Framework, which will help ensure our airports continue to act as fitting gateways into the country we serve. We also welcome the proactive engagement undertaken by Scottish Government with regards to airlines, particularly at international routes conferences.

Aviation’s contribution to climate change

BAA Scotland recognises that climate change presents one of the most significant challenges facing the aviation industry, both here in Scotland and throughout the world. Our starting point is simple – that aviation’s contribution to climate change is growing and we must take action now to curb emissions from flights. According to the Stern review on the economic of climate change, world-wide aviation is estimated to contribute about 1.6% of global greenhouse gas emissions. This compares to 10% for road traffic and 2.3% for rail and shipping. The Intergovernmental Panel on Climate Change central case estimate is that aviation will account for 5% of the world’s total human contribution to climate change by 2050.

There are two main areas of impact:
• aviation in the air, which has CO2 impacts and non CO2 impacts
• airport related, which can be broken down into four main areas: aircraft on the ground, energy use in airport terminals, building new infrastructure and surface transport to the airport.

Of the total emissions from aviation, around 95% of carbon dioxide emissions come from aircraft in the air. Whilst aviation’s overall contribution to global emissions is small, it is growing.
Technological advances

The aviation industry as a whole is focused on improving technology to help address the industry’s contribution to global emissions. Aircraft fuel efficiency has more than doubled in the past 40 years and the industry has set a target for a further 50% improvement for new aircraft in 2020 when compared to 2000 levels. Work is also underway to look at possible alternative fuels for aircraft, including bio-fuels and fuel cells.

Improvements to the management of airspace also have an important part to play in addressing emissions from aviation. According to the International Air Transport Association (IATA), around six million tonnes of CO2 have already been saved by shortening existing routes and BAA is pushing for a unified system of air traffic management within the EU to significantly reduce emissions within Europe. IATA estimates that a single air traffic management system for the European Union could cut aviation CO2 emissions by 12%.

In December 2008, the pan industry UK group Sustainable Aviation issued a report outlining its forecast of future CO2 emissions from UK aviation to 2050. The report concluded that technological advances, operational efficiencies and the use of low carbon fuels in the future can allow emissions from UK aviation to fall back to 2000 levels by 2050.

Emissions Trading

BAA has been at the forefront of the lobbying for aviation to be included in the European Union Emissions Trading Scheme (ETS). The ETS places a cap on the total amount of emissions that is allowed across industry as a whole. Permits are subsequently allocated to companies, which clearly set the amount they are allowed to pollute. The total number of permits is finite and no pollution is allowed above the cap. Companies can then trade permits, selling permits if they can cut their emissions below their allocation and buying them if they want to pollute above their own allocation.

This system was identified by the Stern Review as one of the most effective ways of addressing emissions and on 13th January 2009, the European Union published directive 2008/101/EC, which confirmed that aviation would be included in the EU ETS from 2012.

There are a number of clear advantages to the ETS:
• The amount of CO2 that is emitted into the atmosphere is set – in the EU all departing and arriving emissions from 2012 this will be capped at 97% of average emissions between 2004 and 2006, reducing to 95% after 2013 through to 2020. This represents a significant reduction when compared to business as usual projections
• CO2 reductions are made in the most effective way possible and at least possible cost to the economy
• Emissions trading rewards those who cut their emissions and incentivises the development of new low carbon technology
• The system can be operated internationally and avoids unilateral action by individual countries that could have the unintended consequence of harming local economies. The inclusion of aviation in the EU ETS from 2012 is an important first step in moving towards a global solution.

We welcome the strong support that has been given by the Scottish Government for the inclusion of aviation within the EU ETS. This was confirmed in paragraph 5.50 of the consultation document that accompanied the draft Climate Change Bill.

Our airports

The heating, cooling and powering of our airport terminals all requires energy that contributes to carbon dioxide emissions. Emissions from airports represent only a small fraction of aviation’s overall emissions. However, BAA Scotland recognises that our efforts to influence others within the industry to address their contribution to climate change is in part dependent on us demonstrating our own ability to reduce emissions from our buildings.

Each of our airports track and review the amount of CO2 produced in relation to energy used and each year, clear targets are set to reduce consumption against predicted levels. Energy efficiency measures are incorporated into new building design and refurbishments, ensuring
reductions in CO2 where possible. The airports will be included in the DEFRA Carbon Reduction Commitment, providing an additional incentive to cut our emissions.

The layout and operation of an airport can further influence aircraft ground emissions. By running the airports efficiently, aircraft have less requirement to run engines on the ground. As a result, our airports ensure that infrastructure is in place to reduce taxiing and queuing time for aircraft. We also promoting the use of fixed electrical ground power, which eliminates the need for more polluting generations whilst on stand.

Emissions from road traffic travelling to and from our airports are also important, both from a climate change perspective and in terms of local air quality. We have detailed surface access strategies in place at each of our three Scottish airports, which have set ambitious targets for increasing the proportion of passengers using public transport and minimising wasteful ‘empty’ car journeys.

We work closely with public transport providers, local authorities and the Scottish Government to improve access to our airports. In 2003, we introduced public transport levies at each of our Scottish airports, which places a charge on short stay car parking. This raises almost £500,000 a year to improve public transport and promote modal shift away from private car use.

We will be publishing a carbon footprint for Aberdeen, Edinburgh and Glasgow Airports in 2009, which will detail emissions sources at the airports and identify further areas for reduction.

The Scottish Climate Change Bill

BAA Scotland welcomes the publication of a Climate Change Bill that sets ambitious targets to reduce Scotland’s overall greenhouse gas emissions. We have consistently advocated a strong policy framework and welcome the Scottish Government’s commitment to create a set of clear, credible, long term targets.

We recognise the considerable debate there has been around the principle of whether to include emissions from international aviation within the scope of the Climate Change Bill and respect the strongly held views that were expressed on this during the consultation that preceded the final Bill.

However, paragraph 5.49 of the consultation document that accompanied the draft Climate Change Bill explained the difficulties associated with including emissions from international aviation within Scotland’s reduction targets.

Paragraph 5.52 of the consultation document specifically said the following:

“As methods for apportioning aviation and shipping emissions within an international framework develop and are agreed internationally, it may become possible for these emissions to be satisfactorily included in Scotland’s reductions targets and there will be scope in the Bill to include these sectors in the legislative framework at a future date.”

We respect the policy decision taken that has subsequently been taken by the Scottish Government to include emissions from aviation within the scope of the Bill. However, international agreement has yet to be reached on how to apportion emissions from international aviation. As a result, it will be important to ensure that no unilateral action is taken that either interacts badly with the EU ETS from 2012 or places the aviation industry in Scotland at a significant competitive disadvantage. Such action could risk the ongoing effort to attract new international routes into Scotland and simply shift aircraft emissions to other countries, rather than assist the important effort to tackle overall global emissions.

BAA Scotland will therefore carefully consider the specific regulations that are laid before the Scottish Parliament under Section 14 of the Bill and looks forward to engaging with the Scottish Government and the Scottish Parliament once these regulations have been published.
The Confederation of Passenger Transport (CPT) supports the requirement for action plans to improve the energy efficiency of buildings as well as measures to encourage behavioural change. Many of the ways in which public transport can aid the Scottish Government in achieving the ambitious targets for the reduction of greenhouse gas emissions were detailed in CPT’s response to the initial Climate Change Bill Consultation (Annex 1). However, the business of running Scotland’s bus and coach services extends beyond the actual rolling stock. CPT’s members are also responsible for the offices and depots they operate from and, to an extent, the behavioural attitudes towards climate change and energy efficiency expressed by staff.

One example of good practice is First Group, who are carrying out a series of initiatives to reduce energy usage from their depots, resulting in a drop in energy usage of 19% since 2004 (The 19% equates to 4,537 tonnes of carbon dioxide). This reduction has been achieved through behavioural changes, new and low cost energy reduction initiatives and investment in heating management systems.

First Group are also in the process of installing half hourly meters at all 600 locations with the energy being derived from 100% renewable sources - including on-shore wind, small scale hydro and biomass. The installation of smart meters will support the company in achieving further energy reductions in their buildings. Stagecoach has also signed a contract to source most of its electricity requirement for its UK bus operations from renewables. Energy generated from mostly small-scale hydro, as well as on-shore wind and biomass, will provide more than 70% of the company’s required supply, with the remainder coming from cleaner, low-carbon sources. Smart meters are also being installed to help cut energy use across its 240 UK sites.

Other operators are following suit by reducing energy consumption through investment in new buildings and workshops, temperature control systems and smart metering; sourcing electricity from renewables; reducing water consumption through investment in low usage/recycling devices; improving waste management by the recycling of passenger, maintenance and office waste and engaging staff in environmental management through training and development.

Public transport is rightly regarded as the greener alternative to the private car. Therefore, it would be remiss of our industry if we were not readily aware of the many ways in which an operator can reduce emissions, cut energy use and encourage behavioural change amongst staff and passengers.

Scottish Government action plans on these subjects would be welcomed to help spread these messages and to give examples of best practice to enable our members to attain the enhanced Energy Performance Certificate mentioned within the Climate Change Bill.
Question 20. Do you have any comments on the Bill?

CPT supports the Minister for Transport, Infrastructure and Climate Change, Stewart Stevenson's view that it is unfeasible to create sectoral targets as the relatively high margins for error would make it difficult to record sectoral progress in smaller sectors accurately. However, CPT has recently carried out some research that demonstrates the potential value of encouraging modal shift to achieving the Scottish Government’s 2030 and 2050 targets:

- Carbon Dioxide emissions from the surface transport sector are around 25% of the UK total. 54% of UK transport sector emissions are from cars with bus accounting for 3% and train 2% (source: Defra 2007).
- Carbon Dioxide emissions from the surface transport sector continue to rise.
- Carbon Dioxide emissions per passenger journey from buses and coaches are around one third less than those of cars.
- Around 63% of carbon dioxide emissions from cars arise from journeys of less than 25 miles which can readily be made by bus.
- Use of public transport helps reduce congestion, which in turn improves road safety and local air quality.
- Moving buses produce far less emissions than an idling bus. In fact, increasing average road speed by just a couple of km/h reduces emissions significantly while also increasing reliability and punctuality.
- If every bus in the UK took just one more car driver we could save up to 1.2 million tonnes CO2 per annum.

Public transport, by its very nature, is a greener solution. However, operators in Scotland are not resting on their laurels:

- The average fleet age in Scotland compares favourably to the rest of the UK and is decreasing further as operators gear up to run full accessible fleets by 2017.
- The introduction of the Driver’s Certificate of Professional Competence (CPC) means that all bus drivers will receive continuous professional development with training on subjects including how to drive more efficiently and economically. This includes smoother braking, slower acceleration, more efficient gear changes and less idling.
- The UK’s first bio-buses, which run on 100% biodiesel, are running in Kilmarnock.
- Scotland’s first carbon neutral bus network is in operation between Fife and Edinburgh; and,
- Hybrid vehicles will shortly be introduced in Glasgow.

Scotland is really leading the way in several of these areas. CPT welcomes the Climate Change (Scotland) Bill and hopes that the action plans and guidance that will inevitably follow will take note of the work that Scotland’s bus and coach industries are already undertaking and will consider measures to support investment in emerging transport technologies; encourage partnership working with the public sector to improve local bus infrastructure; and promote modal shift.
ANNEX 1

The Scottish Government Climate Change Bill Consultation
1-G North, Victoria Quay
Edinburgh
EH6 6QQ

Dear Sir/Madam,

Climate Change Bill Consultation

I am writing to you on behalf of the Confederation of Passenger Transport (CPT). CPT is the trade association for the bus, coach and light rail industries and in Scotland our members run over 90% of the registered bus network.

Buses can play an important role in facilitating Scotland’s renewed focus on the climate change agenda. Buses offer the best combination of energy efficiency and space consumption in urban streets. One double-deck bus can take 75 cars off the road, giving a potential annual carbon saving of 67,200kg.

The bus industry in Scotland is committed to providing a clean and efficient fleet for Scotland’s passengers and has invested over £450 million in new vehicles over the past ten years. The industry has also been quick to trial new technologies and fund research and development. In May 2006 First switched to using ultra-low sulphur diesel for its Scottish fleet of over 1,500 buses and coaches as part of its aim to minimise First’s impact on the environment. In October 2007 Stagecoach began trialling 8 bio-buses in Kilmarnock which run on 100% bio-diesel manufactured from used cooking oil and other food industry by-products, resulting in an expected 82% cut in CO2 emissions.

CPT Scotland welcomes this consultation on proposals for a Climate Change Bill and hopes that the final bill will recognise the role that the bus industry can play and will make positive steps towards tackling congestion and encouraging modal shift. The Consultation makes the point that hard policy measures, such as those reserved to the UK Government on taxation and regulation of product standards, may have more potential than softer devolved measures to reduce emissions. CPT believes the Scottish Government needs to utilise the devolved powers at its disposal effectively in policy areas such as planning, development and transport to compensate for an inability to amend reserved matters.

There are many measures that could be introduced within devolved policy areas that would make a considerable impact on Scotland’s emissions. This consultation needs to focus on what the Scottish Government can do and not dwell on what it cannot. With regards to transport, the Government can place a renewed impetus on encouraging modal shift through promotion of public transport above private car use. Consideration of public transport at the outset of planning decisions, the limitation of car parking spaces in town centres and shopping outlets and investment in park and ride schemes and enforced bus priority measures are all steps that can be taken to encourage public transport use and limit emissions generated by private car journeys and the associated congestion these journeys bring.

The consultation identifies the need for new technologies to reduce emissions. Bus manufacturers are constantly working towards providing even greener vehicles. Bus manufacture uses modern materials and construction and maintenance techniques that have much in common with aviation engineering. Work is continuing on Environmentally Enhanced Vehicles (EEVs), biofuels and hybrid technology.

As well as setting emissions targets into law, the Government should consider methods to provide funding to bus operators willing to invest in emerging technologies. As with all new technologies there is a financial risk in the form of the initial costs and the ongoing costs of maintenance. Only through the proper funding of the bus industry can the Scottish Government hope to encourage continuing research and development. However, the Government must temper their demands on the bus industry with the realisation that there is a global demand for the latest clean technologies – vehicle manufacturers are limited in the quantity of new vehicles they can provide to operators.
The consultation states that the Scottish Government is addressing the environmental impacts of transport through a package of funded measures that promote more sustainable travel. CPT feels that more can be done by Government. As well as promoting sustainable travel the Government should consider methods to discourage car use. For example, car parking charges should reflect the true impact of motoring on the environment. Rather than removing tolls the Government should be looking at increasing elements of road-charging.

The consultation states, ‘the small changes that each of us make are important. Walking, cycling and taking public transport rather than the car when we can.’ This message needs to be enforced through governmental actions and funding decisions. To encourage people to leave their cars at home the alternative modes of travel must be made as attractive and reliable as possible.

Local authorities are responsible for funding initiatives such as Statutory Quality Partnerships, Punctuality Improvement Partnerships and Bus Route Development Grant schemes. These initiatives involve local authorities working with bus operators to improve the bus services within the council area; improving reliability and tackling congestion. Such initiatives need to be encouraged to bring about further modal-shift and the associated environmental benefits.

CPT is supportive of the Scottish Government’s intent to ensure Scotland reduces its impact on the climate. CPT members are already working to improve the environmental credentials of the industry and hope the Climate Change Bill acknowledges the great importance of the transport sector and dedicates appropriate funding and attention to make Scotland’s public transport network an example of best practise for quality and reliability with minimal environmental impact.

Yours faithfully,

Paul White
Public Affairs Executive, CPT Scotland
The Chamber of Shipping is the trade association for the UK shipping industry (including deep-sea bulk, short-sea bulk, containers, ferry, cruise, offshore support and specialised operators), working to promote and protect the interests of its members both nationally and internationally. With 144 members and associate members, the Chamber represents over 860 ships of about 23 million gross tonnes and is recognised as the voice of the UK shipping industry.

Question 5: The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

Question 20: Do you have any other comments on the Bill?

Summary

In the climate change debate shipping should be regarded as the best available solution to the global need for transportation. Shipping is the most energy-efficient mode of transport and the backbone of global trade – carrying 90% of all world trade and 92% of the UK’s goods. Furthermore, the carbon cost of carrying a tonne of freight by ship is 10 times less than by road and 100 times less than by air. Seen in light of the enormous volume of goods carried by ships, the CO2 emissions from shipping is small. The reason for this is that shipping for many decades – even without regulation – has had a strong market-driven incentive to focus on reduction of fuel consumption. However the Chamber of Shipping fully acknowledges the need for further reduction of air emissions from shipping and believes that the way to achieve environmental protection must be found in a holistic manner. To be successful, such an approach should take into consideration the availability of technology to reduce emissions, the need to encourage innovation and the economics of world trade.

International shipping’s contribution to global carbon emissions

Precise figures concerning the contribution of international shipping to global carbon emissions are hard to come by. A variety of studies put the figure at anywhere between 1.5 and 5%. The International Maritime Organization (IMO) – the UN regulatory body for shipping – and most scientific commentators agree that a figure in the range 2 - 4% is realistic with an authoritative IMO study published in October 2008 putting the figure at 2.7%. While a precise figure would be helpful for measurement purposes, it is not necessary to wait for this before taking policy decisions. This is for two reasons; firstly, even at the higher end of the estimates of shipping’s contribution to carbon emissions, when seen in the context of the enormous amount of work performed, shipping remains by far the most efficient way to move bulk cargoes of goods and this position is unlikely to be usurped in the medium term. Secondly, despite its excellent carbon performance, the shipping industry is absolutely committed to reducing its carbon footprint in line with society’s expectations.

Looking at future trends (and regardless of the current economic conditions), it is likely that – in absolute terms – emissions from shipping will grow steadily for the foreseeable future despite efforts to improve the carbon performance of individual ships. This is because shipping is a service industry which responds directly to growth in world trade (without which expansion in the world economy could not occur) and that growth is likely to be greater than the achievable carbon reductions. It is worthy of note that no serious politician or government body has ever called for shipping’s carbon emissions to be reduced at the expense of slowing down the world economy. Any reductions in ships’ carbon emissions must therefore be achieved in a way that permits growth in the volume of goods shipped by sea.
Measuring Scotland’s share of international maritime emissions

Measuring Scotland’s share of international maritime emissions is extremely difficult, with almost all of the options failing to provide an accurate representation. Do we, for instance, wish to measure the relative contribution of the Scottish shipping industry (however defined) to that of the global shipping industry? Or do we wish to measure the amount of carbon generated by shipping in order to provide Scotland with the goods and services required? Or should Scotland accept responsibility for all carbon emitted by ships within its territorial waters? When considering the most appropriate methodology for allocating the share of global shipping emissions to Scotland’s Carbon Budgets, it should be remembered that shipping is the only truly international industry. Not only will ships make multiple calls in any one voyage, but they will often carry cargo destined for onward transport to a number of other countries. This makes allocating emissions extremely difficult and carries with it the distinct possibility of introducing error into the Scotland’s overall Carbon Budgets.

Measuring Scotland’s share of international carbon emissions will also be made more problematical for it is only the UK, as a nation state, which has a duty to report bunker fuels sales (even if only as a ‘memo item’) under the Kyoto agreement. Similarly, bunkers that are recorded by the UK as being used for domestic voyages would include fuel used on voyages between the constituent parts of the UK. There would therefore be a significant risk of double counting if both the UK Climate Change Act and any similar legislation in Scotland were to seek to account for the same emissions. It is not clear how this issue could be easily overcome except by utilising some broad measure of disaggregation.

When considering questions of measurement, the other side of the coin – enforcement – must also be borne in mind. The UK Climate Change Act, the Kyoto agreement and the EU Emissions Trading Scheme have all excluded mandatory carbon reductions from shipping for the same reason – it is virtually impossible to legislate for such a mobile and international industry except at the global level. For any country to impose unilateral legislation on a global marketplace is to deliberately impose additional costs on its own stakeholders which will not be shared by their competitors.

Measurement only or mandatory reductions also?

It is unclear to the Chamber what mechanisms for the enforcement of any national measures will not be capable of being easily and legitimately avoided by operators. This means that the total emissions reductions will, in practice, be less and may paradoxically be even higher if legitimate avoidance measures result in longer voyages. For instance, if Scotland were to impose a carbon charge on a ship’s final voyage into Scotland, a ship coming from China may decide to make an otherwise unnecessary call in France or Ireland in order to minimise the technical ‘final voyage’ into Scotland or, more likely, would call at an English port and move the goods across the border by another less carbon efficient transport mode such as road or rail.

If the Climate Change (Scotland) Bill was clear that it only wished to measure Scotland’s contribution – a position that the Chamber of Shipping could support – to international shipping emissions this could be done as soon as an agreed methodology was decided upon. A ‘bottom-up’ approach (i.e. obtaining data from individual ships) would yield more accurate data than a ‘top-down’ (e.g. averages of bunker fuel sales etc) approach, but it should be recognised that this would place a considerable burden on both shipowners and administrations alike.

The Committee will doubtless be aware that the UK Climate Change Act has mandated that the government in Westminster must take account of emissions from international shipping when considering its carbon budgets. In order to assist this process the Chamber of Shipping has teamed up with WWF-UK (formerly the World Wildlife Fund) to assist the UK government in quickly developing a methodology for measuring carbon emissions from ships that is truly reflective of those emissions that can appropriately fall within the UK’s responsibility. Should the Climate Change (Scotland) Bill end up recommending a similar approach it may wish to consider whether our joint proposal to the Office of Climate Change might assist the body responsible for delivery north of the border. A copy of our joint proposal has been appended to this submission for ease of reference (see Annex 1 below).
A word on international agreements to control and reduce carbon emissions from global shipping

Measurement and control mechanisms for carbon are being actively discussed within the IMO and its Secretary General has announced his wish for that body to have agreed upon a concrete package of proposals in readiness for the UNFCCC Conference of the Parties (COP15) meeting in Copenhagen in December 2009. Meanwhile the EU have indicated that, should IMO not deliver a satisfactory package of measures by 2011, then they will look to include international shipping within the EU ETS by 2013. It is therefore clear that shipping will be included within some form of international / regional regime within a very few years.

The UK Government has played an active and constructive role in the negotiations at IMO and its policy position reflects well the realities of dealing with this particular sector. The Chamber of Shipping is keen that the UK Government should remain committed to an international solution delivered through the IMO. While we accept that measures delivered either unilaterally or through devolved administrations will always be an option open to governments, we would stress that these should be seen as options of last resort both in terms of effectiveness and ease of administering. To that end we would consider the inclusion of international shipping in the Climate Change (Scotland) Bill (while negotiations are building to a climax in the international arena) to be a retrograde step and one likely to hinder rather than help the broader discussions and efforts to reduce carbon emissions.

Carbon emissions trading and market-based instruments (MBIs) e.g. a fuel levy are politically very sensitive topics within the IMO. A significant number of developing, non-annex 1 countries (i.e. China, India, South Africa, Brazil etc) are of the opinion that they are not duty bound to seek carbon emission reduction measures through either the IMO or UNFCCC. Furthermore, they are also less willing to discuss measures to improve operational and technical efficiency and are extremely unwilling to contemplate the introduction of MBIs. The Chamber of Shipping, however, is firmly of the opinion that MBIs must play a part in efforts to reduce the sector’s carbon footprint and has openly called for international shipping to be subject to a global, open emissions trading scheme in December 2008. The Chamber is also actively working with its international parent body – the International Chamber of Shipping (ICS) – and sister associations throughout the world to develop consensus for this approach on the understanding that it delivers the necessary environmental outcome while maintaining the necessary level playing field and ensuring that any solution does not discriminate between national shipping registers.

Prospects for developing new engine technologies and fuels, as well as more fuel-efficient operations

Shipping is a mature technology and the scope for improvement by full application of existing technologies is limited. Ships engines have improved steadily since their inception while hull and propeller designs are almost fully optimised. For instance, new hull coatings may provide some enhanced fuel efficiencies (and hence carbon reduction) in the order of 5% - 10%. While there is always room for improvement (and much is dependent on what constitutes an ‘existing’ ship), it is thought that a modern, well-maintained vessel may be able to improve its performance by about 5% if cost/benefit is considered immaterial. Given that fuels costs account for 30-50% of total voyage costs it should be recognised that shipowners have long had every possible commercial incentive to optimise fuel efficiency.

New technologies will certainly come on stream in time. But they are not available now and, no matter how many prototypes or concepts are developed, shipowners cannot be expected to invest in anything other than robust, proven technologies that are commercially available. However, shipowners are keen to see new technologies emerge and are willing to offer ships to assist in trials and development processes. Again it should be stressed that, given the direct link between fuel efficiency and carbon emissions, shipowners also have a direct commercial interest in the development of fuel saving technologies.

Alternative fuel sources may also have a role to play and bio-fuels can be used in ships engines. However, given the volume of fuel used by the c50000 merchant ships trading internationally (transporting every kind of cargo) and the current uncertainty surrounding the net benefit of bio-fuels, the industry would consider it prudent for legislators to better assess
the impact of a substantial take-up of bio-fuels by such a large consumer as international shipping before reaching any decisions.

Fuel cells, solar-power, wind kites etc are all theoretically possible alternative technologies but they are best viewed as supplementary power sources rather than alternatives to the main propulsion systems on board. Nuclear power is technically feasible for ships and there are examples of nuclear-powered merchant as well as military ships. Issues of security and acceptability are, of course, dominant in that particular debate.

Reducing the speeds at which ships travel is often seen as a ‘quick win’ in terms of reducing carbon emissions from ships. While it is true that reducing ships’ speed has a dramatic effect on fuel consumption, the full range of underlying factors which have hitherto determined the speed at which ships generally travel remain relevant. It should be noted that shipowners / operators have relatively little say over the speed of their vessels as this is invariably determined by the charterer. Any reduction in ships’ speed would therefore require the consent of customers as they would in general have to wait longer to receive their goods. Shippers seek to maintain supply continuity and time of delivery is an essential competitive parameter. To maintain an acceptable service at slower speeds would mean an increase in the number of ships required negating much of the fuel savings otherwise expected. Furthermore, very little can be achieved on traditional slow-steaming bulk carriers as these already steam at little more than thirteen or fourteen knots. For ferries, travelling time for the passenger is a key issue in the extensive competition with other (less carbon efficient) transport modes; many Scottish ports are tide-bound which further reduces the flexibility of port arrival / departure times and; they should also be considered, especially in Scotland, as a bridge between outlying areas forming essential and reliable infrastructure. Any policy decision requiring vessels to slow down would need to be underpinned by a robust and detailed analysis of all the implications of such a measure.

Additional Industry Comments

The shipping industry has been working through the IMO, EU and national governments on how best to reduce carbon emissions for some time. As a result, it may be helpful for the Committee to note the broad principles which we feel will deliver a mechanism that delivers its environmental objectives while maintaining the competitiveness of the industry.

- Firstly, and perhaps obviously, industry is only interested in delivering a solution that is effective in contributing to the reduction of total global greenhouse gas emissions.

- In order to achieve this and avoid evasion, such a system must be binding and equally applicable to all Flag States.

- Across all maritime legislation, the shipping industry consistently argues for a goal-based (as opposed to a prescriptive) approach, as being better suited to such a diverse industry and also allowing shipowners the flexibility to meet their environmental responsibilities in the most cost-effective manner.

- Linked to cost-effectiveness are considerations that seek to limit or at least minimise competitive distortion and that, within the parameters of sustainable development, do not penalise trade and growth nationally or globally.

- It has been suggested that shipping suffers from the lack of a Formula 1 to lead and drive technological improvements. Whereas the aviation industry has benefited from the civilian application of military technologies and also from the space-race, shipping has had no such high-end sector motivated by a completely independent set of cost considerations. We would therefore suggest that any control measures for shipping should actively support and encourage the promotion and facilitation of technical innovation and R&D in the entire shipping sector.

- In addition, it is clear that any regulatory mechanisms adopted must be flexible in order to accommodate likely future technologies in the field of energy efficiency.

- Finally in our checklist, the industry would look to ensure that the ‘back-office’ side of any regulation is given due thought. For any system to be workable, and for true
environmental benefit to be gained, it is clear that the approach must be practical, transparent, fraud-free and easy to administer.

Domestic Shipping

We note that the subject of this inquiry is the possible inclusion of international shipping emissions within Scottish Carbon Budgets. However, the Chamber has concerns that emissions from domestic shipping (which can take place as part of an international voyage) should be properly attributed. We are unclear how this will be done. For example, it is not clear how foreign-owned competitors, which have had the opportunity to refuel abroad before making Scottish domestic voyages, will be treated? We would ask the Committee to satisfy itself that the methodologies for including domestic shipping (and its definition) within the Climate Change (Scotland) Bill are likely to achieve the stated objectives.

January 29, 2009

Robert Ashdown
Head of Technical Division
Chamber of Shipping
Dear Ben,

**Shipping and the Climate Change Act**

Following the decision of the UK Government to include carbon emissions from international shipping within the Climate Change Act for measurement purposes - a position which both WWF and the Chamber of Shipping endorse – the two organisations, the leading stakeholders in this field, have committed to working together in its implementation. Our common objective is to assist the UK government to quickly develop a methodology for measuring the carbon emissions from ships that is truly reflective of those emissions that can appropriately fall within the UK’s responsibility.

During our initial discussions we have reached some broad conclusions which we hope you will find useful in developing your own thinking. These are very much our preliminary thoughts and we remain eager to participate in the development of the methodology for measuring this most complicated of sectors.

**Overall Coverage**

‘International shipping’ is imprecise in meaning and its coverage will need to be defined. In general terms it would be taken to mean commercial shipping engaged in international voyages (ie not ‘domestic shipping’). We assume that it is not intended to encompass leisure yachts, military or other Government vessels or installations at sea that are not otherwise regarded as ships such as fixed installations used for the production and pumping of oil. It should be noted that existing IMO legislation contains definitions of many relevant terms (‘ship’, international voyage’ etc) and it would be sensible to use these wherever possible. It is not clear whether fishing vessels should be included, perhaps depending on whether their activities are encompassed elsewhere within the fishing industry itself.

Data on virtually all seagoing internationally-trading merchant ships of over 100 gross tons, including fishing vessels, is held within the Lloyds Register-Fairplay database and are allocated internationally-recognised unique numbers (IMO numbers). This would facilitate the inclusion of fishing vessels but we are not in a position to comment on whether similar methods of reporting and verification would be appropriate. Nonetheless, a clear definition of which vessels/installations are included will be necessary.

Consideration will also need to be given to an appropriate cut-off point for vessel size. Existing international maritime regulations, primarily from the IMO, apply only above certain levels of gross tonnage, though the levels vary for different purposes. For example, MARPOL, which deals with marine pollution, only applies to ships of more than 400gt; SOLAS, dealing with marine safety, applies to vessels of 500gt and over, while other conventions and agreements apply to vessels down to 100gt. Gross tonnage is considered the simplest and most appropriate measure for applying de minimis provisions.

In practice no commercial vessel below 100gt would be engaged in international trade, and very few in the next bands up. (As before, different considerations may well apply to fishing vessels.) The UK government will need to take a view on the most appropriate lower limit recognising the limits of the various data sets, the cost/benefit of measuring very small vessels and any effect the limit chosen may have on subsequent negotiations at EU or IMO level.

**Possible Measurement Methodologies**

Given that the Climate Change Act will, initially, only measure, rather than restrict, carbon emissions from international shipping, greater flexibility can be applied as to the methodology as there is a much reduced risk (so long as any associated administrative burden is low) that ships will choose to reflag as a result of any measurement requirements. Indeed, given that we would expect the methodology chosen to be flag-blind and non-discriminatory, reflagging for this reason alone would be pointless. However, it should be noted that methodologies which will work for measurement purposes will not necessarily work if mandatory reductions are later required. It will also be important that any methodology takes into account the risk of
'double counting' where other countries follow the UK’s lead and seek to take responsibility for their share of emissions from international shipping.

There are numerous ways in which carbon emissions from international shipping could be measured. For example, by ship, by location, by voyage, by fuel sales, by number of port calls. However, the more accurate methods of measurement are considered to fall into two broad approaches, one based on physical activity and the other based on economic activity.

**Physical Activity** would be essentially a voyage calculation, relying on data such as point of origin, ship type, fuel type and distance sailed. There are two particularly difficult aspects to take into account:

- if outward voyages are to be included there is a clear difficulty in determining what the next voyage is to be; the UK has a much lower level of export cargos than imports, and consequently many ship leave the UK empty to seek their next employment – a bulk carrier in ballast may go to Rotterdam to load scrap metal or to Argentina to load grain, depending on market opportunities at the time, and often when on the high seas. If this general approach is chosen, it would be simpler to take account of inward voyages only (of course, where a ship arriving in ballast for an export cargo has come from is equally arbitrary, it is at least known);

- an appropriate methodology would need to be developed to fairly deal with vessels that have multiple loading and/or discharge ports. This is particularly relevant to the container trades, though applies also to other unit loads (such as new motor vehicles or refrigerated cargos) and some bulk trades in both petroleum/chemicals and dry commodities. For example, a containership on Far East service may have its first European port of call in the UK, with short voyages to Continental discharge ports or vice-versa; in addition there may be mid-voyage calls at container hubs in the Mediterranean. As well as the difficulty of determining an appropriate length of voyage, the split of cargo between that for the UK and that for elsewhere would be problematic (and touches on the need to avoid potential double-counting referred to above).

Measuring the **Economic Activity** could either be based on imports/exports or a percentage of GDP; or on shipping company economic activity. A significant advantage of the former approach is that it is better suited to providing the statistical base at the level needed to inform political policy-making whether in the UK, the IMO or elsewhere. In particular, it does not prejudge the approaches that might be adopted should specific instruments need to be developed later. Last, and by no means least, is the avoidance of a significant burden on business, much of which is not located in the UK and much of which is run by SMEs, as the Government already collects very extensive data on the UK’s sea-borne trade.

If the location of the shipping company’s activities were to be considered when assessing ‘economic activity’, the acknowledged difficulties of allocating that activity to the UK or elsewhere needs to be addressed. In that connection, we would draw your attention to work that is currently being undertaken by the Office for National Statistics (ONS) and the Department for Transport together with Lloyds Register-Fairplay to allocate ships within the world fleet according to “country of economic benefit” (COEB). It seems to us that, should the government wish to pursue a methodology based on economic activity, this work could be directly applicable and add to the range of different policy needs to which it might be usefully applied.

It is clear that both of these broad approaches (economic & physical activity) will give rise to a number of questions and queries and that these will need to be considered fully if the finally-adopted methodology is to have credibility as an appropriate measure of international shipping emissions. We conclude, however, from our initial examination that measurement by economic activity is likely to provide the Government with the data it requires to meet its responsibilities under the Climate Change Act with the lowest administrative burden on business.
Specific Considerations Related To Sections of the Shipping Industry

In addition to the application of different methodologies to conventional cargo-carrying merchant ships considered above, it is likely that there will be some sectors that are more problematic than others, depending on the broad approach chosen. For instance, measurements based on imports and/or exports would exclude most ships engaged in carrying passengers (whether cruise ships or ferries) or in the service sectors (offshore support vessels, dredgers etc). It would be possible to develop a statistical approach for some of those activities, for example relating passengers to the voyage concerned or to the numbers embarking/disembarking; though there would be difficulties to be addressed in relation to ferries where most are multi-purpose, carrying both freight and passengers in markedly different proportions according to time of day or seasonal demand.

For specialist service vessels it is recognised that a different method of assessment may be required, compared with those carrying passengers or freight. While any methodology decided upon will need to meet the circumstances of the majority of internationally trading ships, there are some significant sectors where credible measurement is important; for example, in the cruise sector, where passengers may base their purchasing decisions on the environmental performance of the vessels in question.

Definition of Domestic Shipping and Emissions Measurement

At present the UK measures the carbon emissions of domestic shipping based on bunker fuel sales as determined by the IPCC under the Kyoto framework. It is widely recognised that this measure under-records emissions. Given that many domestic voyages will be part of a sequence involving international legs (and such ships will purchase their bunkers wherever most economic), and that there are no significant differences between domestic or international ships except for their voyage patterns, it may be more appropriate for all shipping to be treated as ‘international shipping’, with the proportion of domestic shipping being separately assessed. Again, this would be less burdensome, fairer (as it would include internationally trading vessels performing a domestic leg) and be more accurate than the current arrangements.

Next Steps

The WWF and CoS hope that, by taking our thinking forward jointly on these important issues, we can assist you better as you move your own thinking forward. We would like to emphasis once again our willingness to be engaged in the detailed work going forward so that the most suitable methodology can be devised and applied as soon as practicable.

Yours sincerely

Robert Ashdown
Head of Technical
Chamber of Shipping

Peter Lockley
Head of Transport Policy
WWF-UK
WRITTEN EVIDENCE FROM TRANSFORM SCOTLAND

Introduction

Transform Scotland is the national sustainable transport alliance. We are a membership organisation bringing together rail, bus and shipping operators; local authorities; national environment and conservation organisations; local environment and transport campaign groups; and individual supporters.

We strongly welcome the principle of Scottish climate change bill and the aspiration of the Scottish Government that Scotland lead the way on reducing climate change emissions.

We are a member of Stop Climate Chaos Scotland (SCCS), and are in broad agreement with the evidence presented by SCCS to the TICC Committee at its meeting held on 3rd February 2009.

We are particularly concerned with four elements of the Bill as currently drafted, and we set out our views on these matters in the section on specific comments on the Bill set out below.

This paper represents our interim view on the Bill. We intend to respond to the TICC Committee’s call for views in full before the 27th February deadline.

Transport’s current contribution

In 2006, the Scottish transport sector was responsible for 24.4% of all greenhouse gas emissions.\(^8\)

It is likely that this underestimates the impact of the Scottish transport sector. As expressed by the UK Department for Transport in 2007, government estimates of the impact of the transport sector “are likely to be an understatement of the full climate impact of UK related transportation [because of] the full climate impact of aviation emissions at high altitudes”.\(^9\)

Transport is the principal sector where emissions continue to rise. Greenhouse gas emissions from the Scottish transport sector rose by 14.3% between 1990 and 2006, whereas all Scottish emissions fell by 12.3% over this same period.\(^10\) Clearly, if the transport sector played its part in reducing emissions then there would be a significantly better chance of hitting future targets.

The current level of emissions from the transport sector alone is currently above the total level of emissions that can be emitted under the 2050 target level. In 2006, total Scottish transport emissions were 4.08 MtCe,\(^11\) while the 2050 target will require emissions from all Scottish activity to be below 3.81 MtCe.\(^12\) Hence, current transport emissions represent 107% of the total emissions allowable from all Scottish activity in Scotland in 2050 under the Bill proposed in the Bill.

Current transport priorities

Current Scottish transport expenditure priorities are systematically biased towards large infrastructure projects; current priorities are, on the whole, contrary to achievement of greenhouse gas emission reduction in the transport sector.

The proposed Scottish Budget 2009-10 sets out a large increase in spending on motorways and trunk roads, whilst support for existing public transport networks is static or in decline, and funding for the most sustainable modes of travel - walking and cycling - remains at the

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\(^8\) AEI(2008)<http://www.airquality.co.uk/archive/reports/cat07/0809180941_DA_GHGi_1990-2006_v1r.xls> and www.airquality.co.uk/archive/reports/cat07/0811180855_International_aviation_and_shipping_1990-2006_final_v5.xls. This figure is for all transport emissions (including, e.g., aviation and shipping). It is calculated as 15001 tCO2e (transport emissions) divided by 61359 tCO2e (total emissions including international emissions).


\(^10\) NAEI figures. Transport emissions were 13128 tCO2e in 1990 and 15001 tCO2e in 2006. Total emissions including international emissions were 70002 tCO2e in 1990 and 61359 tCO2e in 2006.

\(^11\) NAEI report total Scottish transport emissions in 2006 as 15001 tCO2e, or 4.08 MtCe.

\(^12\) NAEI report total Scottish emissions in 1990 as 70002 tCO2e, or 19.07 MtCe. 20% of this baseline figure implies a 2050 target of 3.81 MtCe.
pitifully low level of £20m per annum (around 1% of the entire transport budget). In December 2008, the Scottish Government published the Strategic Transport Projects Review (STPR) and its National Planning Framework for Scotland 2: Proposed Framework (NPF2). STPR, amongst other things, sets out a £9 billion spending programme on roads, while NPF2 provides for airport expansion and a £2.1 bn Second Forth Road Bridge.

Even if we accept the optimistic claim that the STPR projects will cut emissions (a 1% cut by 2022 on business-as-usual is asserted), this programme is not compatible with the climate change trajectories set out in the Bill, even in its current state. Current forecasts for the year 2022 indicate that, in the absence of significant technological or behavioural change, total road transport carbon emissions will increase from 2005 levels by some 10%. This is fundamentally at odds with the Government’s climate change ambitions: a 10% increase in emissions from the transport sector (at 2022) is patently not compatible with the acknowledged requirements for deep cuts in total emissions (by 2020).

Specific comments on the Bill

The Bill must set annual emission reduction targets of at least 3% from 2010

Bill §3 (2) (b): The Bill allows the Government the option of setting emission reduction targets for the period up to 2020 that would barely reduce emissions during this period (or continue with business-as-usual reductions of approximately 1% per annum as seen across the period 1990-2006).

The interim target (50% reduction by 2030) is similarly unacceptable; it compares unfavourably with the UK Committee on Climate Change’s Intended budget (42% reduction by 2020). We support the SCCS recommendation of an interim target of 50% reduction by 2020.

It is imperative that the Bill establish annual emission reduction targets of at least 3% from 2010, not just from 2020, and that the interim target be amended accordingly. This would allow Scotland to keep its cumulative emissions within sustainable levels; an early start in delivering emission reduction would also help focus minds in sectors - such as transport - that are currently failing to contribute.

The Bill must include International Aviation and Shipping from 2010

Bill §14: The Bill fails to include emissions from International Aviation and Shipping (IAS), instead providing only that the Scottish Ministers “may” make provision for this at a later date. This is not in accordance with the statement made by the Cabinet Secretary for Finance and Sustainable Growth John Swinney MSP on 27th October 2008.13

“This Government has taken the bold decision to include emissions from international aviation and shipping within its targets. Scotland benefits greatly from international trade and travel and we believe it is right to take responsibility for the Scottish share of these emissions.”

Given the rapid increase in emissions from the aviation sector, the omission of IAS emissions would damage the credibility of the Bill.

The Bill should be amended to specifically include IAS emissions from the start.

The Bill must establish a duty on all public bodies to reduce emissions in line with the national targets

Bill Part 4: The Bill fails to place upon public bodies a duty to reduce climate change emissions, providing only that Ministers “may” choose to do so at a later date.

The Bill should be amended to establish a duty upon all public bodies to reduce emissions in line with the national targets.

The Bill must include mechanisms for enforcement of the emission reduction targets

The Bill contains no mechanisms for enforcement. As such, we question what will make Scottish Ministers (and public bodies) comply with the emission reduction targets that are set. We would like to draw the Committee’s attention to the example of waste water and drinking

water quality. Both of these are regulated and enforced by specific bodies. This mechanism has proved a highly successful model in helping meeting targets for water quality, and the meeting of climate targets will require similar levels of scrutiny and sanctions. The Bill should be amended to include measures for effective enforcement of the targets.

Conclusions

The Bill is generally welcome, but requires improvement if there is any chance of action being taken to reduce climate change emissions within Scotland by 80%. Specifically, we recommend:

- The Bill must set annual emission reduction targets of at least 3% from 2010
- The Bill must include International Aviation and Shipping from 2010
- The Bill must establish a duty on all public bodies to reduce emissions in line with the national targets
- The Bill must include mechanisms for enforcement of the emission reduction targets.

More fundamentally, the Bill must be followed by a fundamental review of all existing and new policy decisions, and new legislation, in order that they comply with the requirements of the Bill. In essence, we require the Government to produce a national plan for emission reduction.
Thank you for the opportunity to answer questions from members of the Transport, Infrastructure and Climate Change Committee on 10th February. I hope the answers I provided during the session, in addition to the written evidence submitted in advance of the meeting, was of assistance to the Committee in its inquiry into the Climate Change (Scotland) Bill.

During the evidence session, I committed to providing some additional written evidence in response to specific questions as follows.

**Technological improvements**
In response to a question from Shirley-Anne Sommerville MSP (Official Report, Column 1494-5), I agreed to provide written evidence on the strategy agreed by the aviation industry to reduce emissions down to 2005 levels by the year 2050.

I have enclosed a copy of a paper that was published in December 2008 by the industry body Sustainable Aviation entitled ‘Sustainable Aviation CO2 Roadmap’. [Click here to access](#)

This document presents an assessment of carbon dioxide (CO2) emissions from UK aviation over the period 2000 to 2050 and provides information on the reductions that can be achieved through improvements in operations, technology and the introduction of sustainable fuels.

**Emissions at altitude**
In response to a question from Shirley-Anne Sommerville MSP (Official Report, Column 1495), I agreed to provide additional written evidence on the impact of emissions at altitude and the multiplier that needed to be applied to fully take account of aviation’s contribution to climate change.

I have enclosed a copy of the paper published by Sustainable Aviation in November 2008 entitled “Non-CO2 climate change effects of aviation emissions”. [Click here to access](#) This details the non-CO2 effects of aviation emissions at altitude and what is being done to address these impacts. The paper also addresses the issue of multipliers, taking into account scientific evidence.

**Public Transport Mode Share Trend**
In response to a question from Des McNulty MSP (Official Report, Column 1497), I agreed to provide written evidence, detailing the trends in modal share for our airports over recent years. I have enclosed a paper that provides this information along with some additional commentary.

**Car Parking Income**
In response to a question from Des McNulty MSP (Official Report, Column 1497) I agreed to provide written evidence, detailing the share of our airport income that is derived from car parking. I have enclosed a paper that provides this information, along with some additional commentary.

I hope this further evidence is of interest to the Committee. Please do not hesitate in contacting me should you require any further information or clarification.

Yours sincerely,

Gordon Dewar
Managing Director
Edinburgh Airport
BAA Scotland
PUBLIC TRANSPORT

Background

BAA Scotland is committed to increasing the percentage of our passengers travelling to and from our airports by public transport. We have produced a detailed surface access strategy at each airport, which sets clear targets to increase public transport usage and minimise private vehicle movements by 2011/12. The strategy documents also detail the actions that will be taken to meet these targets and copies are available from our airport websites.

Modal split

The percentage of passengers travelling to our airports by public transport is shown in the following table.

Table 1 – Aberdeen Airport mode share.

<table>
<thead>
<tr>
<th>Year</th>
<th>Public transport</th>
<th>Private vehicle</th>
<th>Taxi / private hire</th>
<th>Hired car</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>4.5%</td>
<td>53.0%</td>
<td>37.0%</td>
<td>4.0%</td>
<td>1.5%</td>
</tr>
<tr>
<td>2005</td>
<td>6.3%</td>
<td>49.5%</td>
<td>36.9%</td>
<td>6.1%</td>
<td>1.2%</td>
</tr>
<tr>
<td>2008</td>
<td>6.2%</td>
<td>92.3%</td>
<td></td>
<td></td>
<td>1.5%</td>
</tr>
</tbody>
</table>

Table 2 – Edinburgh Airport modal share.

<table>
<thead>
<tr>
<th>Year</th>
<th>Public transport</th>
<th>Private vehicle</th>
<th>Taxi / private hire</th>
<th>Hired car</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>16.0%</td>
<td>48.0%</td>
<td>29.0%</td>
<td>6.5%</td>
<td>0.5%</td>
</tr>
<tr>
<td>2005</td>
<td>19.7%</td>
<td>48.5%</td>
<td>25.3%</td>
<td>6.0%</td>
<td>0.4%</td>
</tr>
<tr>
<td>2008</td>
<td>25.5%</td>
<td>74.1%</td>
<td></td>
<td></td>
<td>0.4%</td>
</tr>
</tbody>
</table>

Table 3 – Glasgow Airport mode share.

<table>
<thead>
<tr>
<th>Year</th>
<th>Public transport</th>
<th>Private vehicle</th>
<th>Taxi / private hire</th>
<th>Hired car</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>8.0%</td>
<td>56.0%</td>
<td>26.5%</td>
<td>7.0%</td>
<td>2.0%</td>
</tr>
<tr>
<td>2005</td>
<td>11.1%</td>
<td>57.6%</td>
<td>26.4%</td>
<td>4.4%</td>
<td>0.5%</td>
</tr>
<tr>
<td>2008</td>
<td>11.7%</td>
<td>84.8%</td>
<td></td>
<td></td>
<td>0.4%</td>
</tr>
</tbody>
</table>

Figures for 2001 and 2005 were obtained from CAA surveys. Figures for 2008 were obtained from BAA’s own retail profiler survey, which does not distinguish between private vehicle, taxi and hired car. A new CAA survey is currently underway at each of the three airports.

Public Transport Targets

The targets for public transport mode share at each airport by 2011, as detailed in our surface access strategies, are as follows.

Aberdeen 8.5%
Edinburgh 27.0%
Glasgow 15.0%

The 2011 targets do not take into account of publicly funded infrastructure projects that will provide new public transport links to Edinburgh and Glasgow airports.

Once operational in 2011, the Edinburgh tram will link Edinburgh Airport with Edinburgh Park, the city centre and Leith. BAA Scotland is committed to working with the City of Edinburgh Council and TiE to agree a new public transport mode share target prior to the commencement of tram operations.

Similarly, preparatory works are now underway ahead of the construction of the Glasgow Airport Rail Link (GARL). This will provide a heavy rail link between Glasgow Airport and
Glasgow Central train station. As with the Edinburgh tram, BAA Scotland will work with Transport Scotland to agree a new public transport mode share target prior to the opening of GARL.

Air Transport Forums

The UK Government White Paper “A New Deal for Transport”, which was published in 1998, required all airports in England handling in excess of 1,000 air transport movements per annum, to set up Airport Transport Forums (ATFs). Although this requirement was not mandatory in Scotland, BAA Scotland believed the establishment of ATFs was good practice and should be followed. We now have ATFs at each of our airports, which meet every six months and are comprised of representatives of surface transport providers - including bus,, rail and taxi operators, local authorities - the Scottish Government and other transport regulatory bodies.

The ATFs oversee their airports' strategies to increase public transport mode share and manage private vehicle movements. These bodies independently monitor the ongoing progress in meeting the targets set out in our airport surface access strategy documents.

Public Transport Levy

As highlighted in our original written submission, BAA Scotland introduced the Public Transport Levy (PTL) at each of our three airports in 2003. The PTL is charged on short-stay airport parking, with an average contribution of 20p per car. The monies raised, which total almost £500,000 per year, are used to promote public transport or minimise private vehicle movements. Funds from the PTL have been used for a number of key projects. At Edinburgh, money is currently being invested in a detailed feasibility study into a possible bus interchange on the A8, which would allow for coach passengers from Glasgow, Stirling and Falkirk to connect with airport bound bus services.

At Glasgow, PTL money has been invested in bus stances adjacent to terminal building, allowing bus services to return to the inner forecourt following the July 2007 terrorist attack. At Aberdeen, money has been invested in the promotion of the new bus service set up by NESTRANS connecting Aberdeen Airport with Dyce train station.

These are just three example of a range of projects that will allow our airports to meet, and if possible, exceed the public transport targets set out in the strategy documents.
CAR PARKING

Income from car parking

Income from car parking represents a comparatively small share of airports’ overall income, averaging 10.1% in 2008. This information has been broken down in the following table.

Table 1.1 – Car parking income as a share of total income.

<table>
<thead>
<tr>
<th>Year</th>
<th>Aberdeen</th>
<th>Edinburgh</th>
<th>Glasgow</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>7.2%</td>
<td>10.0%</td>
<td>8.8%</td>
</tr>
<tr>
<td>2006</td>
<td>7.5%</td>
<td>10.6%</td>
<td>9.1%</td>
</tr>
<tr>
<td>2007</td>
<td>7.9%</td>
<td>11.1%</td>
<td>9.7%</td>
</tr>
<tr>
<td>2008</td>
<td>7.8%</td>
<td>11.2%</td>
<td>9.8%</td>
</tr>
</tbody>
</table>

Car parking is however an important generator of income for our airports. It is important to stress that, as a private company, BAA does not receive and does not seek money from local or national government for the development or operation of our airports. Income generated from ‘non-aeronautical’ sources, including car parking, property rents and retail, has therefore been important in allowing BAA Scotland to significantly reduce its aeronautical charges, attracting new airlines and new routes to Scotland.

Specifically, we have reduced our aircraft landing charges in real terms every year, year on year, for the last 15 years. These consistent reductions in prices, coupled with the BAA Scotland Route Development Fund that has invested over £130 million in new services, have led to a considerable growth in the number of international destinations being directly served from our airports.

Car parking and congestion

There remains a complex relationship between the provision and pricing of car parking and road congestion. The least desirable surface access mode is where passengers are dropped off and picked up by friends and family – so called ‘kiss and fly’. For each passenger who uses ‘kiss and fly’ for a round trip, a total of four private vehicle access journeys are created. For a passenger who drives to the airport and parks, there are only two access journeys created. Experience in recent years has shown the provision of high quality car parking can reduce the number of passengers being dropped off and picked up by friends and family. Conversely, a lack of parking spaces can lead to increased “kiss and fly”, as passengers fear missing their flight because of a lack of available parking spaces.

It is also important to strike the right balance in terms of car park pricing. Setting prices too low could encourage passengers away from using public transport. Conversely, setting parking prices too high could encourage passengers to ‘kiss and fly’ rather than park at the airport, increasing vehicle movements. Our airport surface access strategies detail our targets and actions to increase public transport use and minimise private vehicles movements. The provision and pricing of car parking has an important part to play in these efforts.
Evidence of the Aviation Environment Federation/Green Skies Alliance to the Scottish Parliament's Transport, Infrastructure and Climate Change Committee on the Scottish Government's Climate Change (Scotland) Bill, February 2009.

The Aviation Environment Federation is a UK-based NGO working solely on controlling and reducing the negative environmental impacts of all forms of commercial air transport and general aviation. Our work programmes include working with communities at grass root level; research and policy development across noise, air quality, public health, land use planning, public safety, rail/air substitution, aerospace technology and climate change issues; and communication activities designed to influence industry, policy makers, politicians, opinion formers and institutions as well as the general public.

We have set up and administer three umbrella networks, AirportWatch throughout the UK; the Europe-wide Greenskies Alliance, with observer status at the European Civil Aviation Conference; and the International Coalition for Sustainable Aviation comprising European and US NGOs, with observer status at the UN International Civil Aviation Organization.

We welcome the Committee's decision to scrutinise the Bill and comment as follows.

Section 1: Key overarching recommendation – the Bill’s budgets, reporting and targets must include aviation and shipping emissions.

We support the Climate Change (Scotland) Bill generally in line with the comments the Committee has received from Scottish environmental NGOs with this crucial recommendation on our specialist topic as follows:

Recommendation 1.

The Climate Change (Scotland) Bill must include an unequivocal commitment to measuring and monitoring all Scotland’s aviation-derived CO2 emissions and including these figures as part of Scotland’s rolling annual budgets and 2050 targets from day one. Domestic aviation emissions are already included and a proportionate allocation of the emissions from international flights, using an acceptable methodology such as the UNFCCC recommended reporting of bunker fuels which allocates the emissions from all departing flights to the state they have left, is simple, effective and above all, established.

One of the Bill’s supporting documents, the Technical Note: Climate Change (Scotland) Bill: Greenhouse gas (GHG) Emissions, Annual Reductions and Targets, sets out the path to achieving a reduction from 1990’s 70.12 MtCO2e to 14.02 in 2050, and quite rightly, the 1990 starting point includes both domestic and international aviation emissions.

We cannot understand why a substantial and growing amount of climate-change inducing emissions should somehow be put to one side to return to as and when. This seems to be the Bill’s current intent. This is as much about numeracy as it is climate change – if the starting point includes Scotland’s international aviation emissions then both the end point and all stops along the way must do so too.

For the record, the same applies to shipping emissions.

Section 2. What are Scottish aviation emissions and why are they important?

Figure 1 in the Annex to this memorandum shows a comprehensive range of global aviation CO2 emission forecasts from published regulator, institutional and academic sources. Actual totals are currently in the region of 700 million tones right now and are approximately 2.31% of man made CO2. Note that by way of context, this figure is substantially more than the entire UK’s CO2 emissions – one sector, aviation, emits more CO2 than the world’s 5th largest economy.

Aviation emissions are forecast to rise to around 2500 MtCO2 by 2050, a figure which includes reasonable estimates of continuing efficiency gains via better aerospace technology and operational and ATM improvements. It is universally recognized that the forecast growth
in air traffic of 3-4% per year unfortunately outpaces the best we can expect from efficiency gains which is why the forecast curves continue upwards. Accommodating aviation emissions growth on this scale represents a significant challenge for all national and international control strategies for GHG reductions between now and 2050.

We would point out that the 4.1% “Fraction of total (SRES)” annotation could be a little misleading – the UN IPCC Special Report on Emissions Scenarios referred to is an unrestrained “worst case” business as usual world with no carbon constraints. As carbon reduction policies are implemented worldwide, aviation growth on this scale would automatically become a much larger percentage of the global total by 2050.

Within these global forecasts, and in the context of Scotland’s aviation emissions growth and the Climate Change Bill, it is therefore vital to understand what Scottish aviation emissions could be through to 2050.

Annex Figure 2 shows the UK Department for Transport forecast methodology for forecasting aviation CO2 emissions as detailed in January 2009’s “UK Air Passenger Demand and CO2 Forecasts”.

Under pressure to “green” out-of-control greenhouse gas emissions from unrestrained airport expansion, the Department for Transport has come up with a cunning statistical sleight of hand they have termed re-casting. At least 46 Million tonnes of CO2, and potentially as many as 105 Million tonnes, have been rendered non-existent by this process, studies of Government background documents by the AEF have revealed.

- In 2004, the Department for Transport itself forecast total UK civil aviation CO2 emissions in 2050 as a maximum of $106.8$ million tonnes.
- In a 2006 report for DEFRA’s Global Atmosphere Division, by a team of well-respected UK aviation climate change experts, the UK 2050 figure had risen to a forecast maximum of $165.5$ million tonnes of aviation-related CO2.

The Westminster Parliament’s authoritative Environment Audit Committee put it succinctly in a March 2007 report when analysing these same figures, saying that they:

“...illustrate the difficulty - and, depending on certain growth projections - impossibility of meeting tough carbon reduction targets for 2050 and accommodating the ongoing expansion in flights.”

But Governments can do difficult before lunch and the impossible by tea time.

For in November 2007, the DfT’s “UK Air Passenger Demand and CO2 Forecasts” background document contained a revised 2050 figure for aviation CO2 that had miraculously gone down to $60.3$ (now 59.9 as of January 2009) million tonnes, because:

“After 2030, the growth in emissions is projected to slow, partly due to capacity constraints slowing demand growth”.

So if the forecasts are an embarrassment, just do some desktop re-casting, and make 46 or 105 of CO2 just vanish, instantly as follows:

- DfT 2004 forecast 106.8 MtCO2 minus DfT 2007 60.3 MtCO2 = **46.5 MtCO2 disappeared**
- Defra 2006 forecast 165.5 MtCO2 minus DfT 2007 60.3 MtCO2 = **105.2 MtCO2 vanished**
- Latest DfT 2009 forecast for 2050 is now 59.9 MtCO2 - little different

We may ourselves have underestimated the scale of this problem as we have used only the mid-range figures from the DfT’s documents.
By 2050, total UK CO₂ emissions must be 80% lower than 1990’s 590 MtCO₂, around 118.43 million, and all UK domestic and international aviation emissions clearly have to fit within that total.

But with some of these earlier forecasts for 2050 ranging from 106.8 to as high as 165.5 for aviation alone there’s clearly a problem. Aviation emissions could be some 47 MtCO₂ greater than the entire UK carbon budget in 2050 if this is cut by 80% from 1990 levels.

The sources setting out these figures are:

- DfT 2004 forecasts from Department for Transport Aviation and global warming London, January 2004
- DfT 2007 forecasts from Department for Transport UK Air Passenger Demand and CO₂ Forecasts, November 2007
- DfT 2009 forecasts from Department for Transport UK Air Passenger Demand and CO₂ Forecasts January 2009

CO₂ emissions of domestic and international flights from Scotland’s airport are as follows:

- Latest actual from NAEI is 1,122,000 MtCO₂ in 2006, international flights only
- DfT 2005 all flights domestic and international figure is 1.5 MtCO₂
- DfT central forecasts all flights are 3.2 MtCO₂ in 2030, rising to 4.4 MtCO₂ in 2050

We have outlined previously the DfT’s efforts to finesse aviation CO₂ forecasts by constraining growth, in our view artificially, beyond 2030. We believe this dangerously underestimates the likely growth in aviation emissions through to 2050. In 2005, Scottish aviation CO₂ emissions were around 4.3% of the UK total. This is expected to rise to 4.8% by 2050 according to the DfT.

However, if we take the DfT 2004 UK total for 2050 of 106.8 MtCO₂ as one baseline, then 4.8% of that would mean Scottish aviation emissions could rise to 5.1 MtCO₂ by 2050.

If we then take the DEFRA 2006 forecast UK total of 165.5 MtCO₂ then 4.8% of that figure is 7.9 MtCO₂ by 2050.

Recommendation 2.

We have analysed a series of Government department aviation CO₂ forecasts to 2050 which differ significantly. Because of this wide variation and the scale of these potential outcomes and their impacts when set against Scotland’s 2050 target of 14.02 MtCO₂ from ALL sources, we cannot recommend strongly enough that the Scottish Executive carries out an urgent review of these forecasts to ascertain an agreed trajectory for the country’s aviation CO₂ emissions from 1990 through to 2050 to inform policy measures emanating from the Climate Change Bill.

But it could be much, much worse. Aviation emissions have significantly larger climate change-inducing impacts over and above that of CO₂ alone. For example, Annex Figure 5 is a satellite image of aircraft condensation trails over Europe which make a large additional contribution to aviation’s negative impacts. The most up-to-date chart detailing these impacts can be seen at Annex Figure 4. We are very pleased to endorse the DfT’s view regarding the best metric for assessing the range and scale of these impacts, shown in Annex Figure 7, that:

“...it would not be right to exclude consideration of the non-CO₂ climate change effects of aviation, and there is currently no better way of taking these effects into account.”

The TRADEOFF project gave weight to a multiplier range of 1-4 with a central case using 1.9. Again, we are happy to endorse this figure. But this means that in policy terms it would be wise to acknowledge that the CO₂ equivalent impact of Scotland’s aviation emissions is
almost twice that of CO$_2$ alone. This has profound and severe implications for the 14.02 MtCO$_2$ target.

**Recommendation 3.**

Policies designed to control and reduce ALL aviation’s scientifically validated non-CO$_2$ climate change impacts need to robustly reflect the current best available multiplier of 1.9. A clear understanding of how these impacts are being addressed at EU level is vital and as control polices develop, Scotland’s GHG reduction plans should at least mirror these.

**Section 3: Apart from “forecast finessing” what other policy options and mitigation strategies exist to control and reduce aviation emissions that the Committee should be aware of?**

**Including aviation within the European ETS is the major policy option underway right now.** This is a synopsis of the scheme’s components and forecast outcomes:

- Cap and trade scheme for airlines – cap will be 97% of 2004/6 average CO$_2$ emissions starting in 2012, decreasing to 95% from 2013 onwards
- % auctioned will be 15% but market growth of 25-30% between 2005-2012 (4% p.a. average) expected
- An average airline will be paying for 40% of its CO$_2$ emissions (15% auctioning + 25% permits)
- Share of permits to airlines based on overall %share of EU emissions in 2010/11 – airlines to report this data, details/methodology “in development” and awaited
- Applies to all arriving and departing flights within EU Member States airspace unless foreign airline’s country of origin has a similar scheme in place
- Environmental “benefit”, CO$_2$ reduction from sector is -36% or 122 MtCO$_2$ by 2015
- -46% or 183 MtCO$_2$ by 2020
- These figures include all the “savings” from bought credits
- EC cost pass through estimated at €4.6 to €39.6 for a return trip, trip length dependent at an allowance price of €30
- Demand impact:135% growth over period instead of 142% - or not very much!

However this somewhat simplistic “robbing Peter to pay Paul” mentality is, as it stands, innumerate and dangerous, putting UK climate change targets at risk.

All emissions trading schemes, we are told, have an end point – eventually you’ve managed to trade down to your target. Their theoretical design is supposed to allow a carefully controlled contraction, and along the way, possibly some cross-sector re-allocation of CO$_2$, the main greenhouse gas, across all fossil fuel users over time - in this case, 41 years time. The so-called market place for CO$_2$ will be controlled by Governments and blocs setting targets and allocations, and is not a licence to pollute for ever and ever, a misconception the airline industry and some policymakers clearly suffer from.

It’s clear to us that aviation is still getting very special treatment. The cap given to the aviation sector is much more lenient than that given to other sectors. For 2012 aviation emissions will be capped at 97% of the sector’s average emissions between 2004 and 2006 (roughly double 1990 levels). From 2013 onwards a fixed cap of 95% will apply. Meanwhile, other sectors are expected to reduce their emissions in line with the EU’s commitment that by 2020 total emissions will be reduced by at least 20% compared with 1990. The UK’s carbon reduction targets are tougher still - yet another example of special treatment for air transport.

Our analysis shows that the cap isn’t really a cap. The supposedly binding cap imposed on the scheme as a whole is in fact very dodgy. If European polluters find it too difficult to reduce their emissions, and no sectors in the scheme have credits to spare, then permits can simply be bought from elsewhere in the world - from ‘low emission’ factories in China, for example. While some restrictions have been applied to the proportion of these ‘project credits’ that ETS participants are allowed to surrender, quite what these restrictions are remains very hazy (the UK Government’s own negotiators involved in the EU Climate and Energy package claim not to know what the restrictions will mean for aviation.)
The ETS trades in carbon and as we have highlighted above, the additional climate damage from aircraft emissions at altitude is currently not accounted for. Because of this additional ‘radiative forcing’ from aviation, the European Parliament argued that either emissions from aviation needed to be multiplied by 2 when drawing up the carbon accounts, or a separate policy covering nitrogen oxide emissions from aircraft needed to be drawn up. The EC is about to report on how NOx in particular might be dealt with.

We strongly hold the view that emissions trading was never going to be enough to get soaring aviation emissions under control. It is widely acknowledged that markets don’t work without Government regulation and intervention. The current crisis caused by Governments failing to adequately regulate the banks is just a recent example of this. Similarly, carbon markets can’t work on their own. Lord Turner, chair of the FSA as well as of the Committee on Climate Change has made this very clear. The CCC’s first major report, in December 2008, considered wide-ranging policy measures that could help drive the dramatic cuts in the UK’s carbon emissions that the Committee has recommended. Emissions abatement from the road transport sector, for example, could be achieved through a combination of mandatory efficiency standards for manufacturers, higher taxes levied on more inefficient vehicles, and explicit consideration being given to transport emissions when planning decisions are being taken. For aviation, the report noted that abatement was very much more difficult and that emissions are set to increase, and yet it concluded that emissions from international aviation should not be included in the UK’s carbon budgets for the time being. This what Lord Turner said last December:

“Second, I would like to be clear about our recommendations on international aviation and shipping.

Aviation and shipping are both rapidly growing sources of emission. And in the case of aviation in particular, there may be less potential to cut emissions via new technologies than there is, for instance, in electricity generation. Therefore aviation and shipping would, under business as usual scenarios, amount by 2050 to a very significant proportion of the maximum emissions that the world can safely emit - perhaps as much as 6-8 gigatonnes – about 30% of all acceptable GHG emissions and about 50% of acceptable CO2 emissions.

And even these forecasts assume either significant technological progress or per capita aviation travel in developing countries in 2050 well below the level in developed countries today. If today’s per capita aviation emissions for the developed world applied across a world population of 9.8 billion, total aviation emissions of CO2 would total 5 gigatonnes - about 40 per cent of total global acceptable emissions in 2050 and something like 100 percent of acceptable 2100 emissions.

It is therefore essential that aviation and shipping are covered by targets and by policies which encourage technological and energy efficiency improvement, and which constrain demand below business as usual projections."


We readily acknowledge that aerospace technology can deliver continuing and worthwhile efficiency improvements via these mechanisms:

- Airframe/aircraft design
- Aero engine design and in-flight performance
- Air Traffic Management systems
- Operational techniques – better maintenance, low drag approaches for example
- Alternative fuels

But we can also predict reasonably well what the first 4 bullet points together can be expected to deliver as outlined in the seminal UN IPCC Special Report “Aviation and the Global Atmosphere” 1999:

- Efficiency gains would be 50% by 2050 approx 1% p.a.
- Operational gains inc. CNS/ATM would be 18% over the same period
- Average efficiency gain of around 1.3%
We have seen no hard evidence that would indicate these forecasts are anything other than realistic and accurate. With forecast emissions growth at the levels we have indicated previously, efficiency improvements are always outpaced by growth.

But in the last few weeks, the Society of British Aerospace Companies have had the remarkable claims presented in their December 2008 Sustainable Aviation CO₂ Roadmap taken up by Government Ministers and passed to the Committee for Climate Change for investigation and analysis as part of the go-ahead for the construction of Heathrow's 3rd runway. The CCC have to report on the feasibility of these claims in a January 15th press release thus:

“CC to report on new aviation emissions cap - 15 January 2009

The Committee on Climate Change (CCC) has been asked by the Government to conduct a review into how UK aviation emissions can be limited to below 2005 levels in 2050. The aviation target will play a useful role in buttressing the UK’s overall commitment to an 80% reduction in greenhouse gas emissions (below 1990 levels) in 2050.

As the Committee set out in its initial report, an 80% overall reduction does not require that all sectors reduce emissions by that amount. The report sets out a possible scenario in which aviation emissions would be at 2005 levels in 2050, while emissions across all other sectors of the economy would be reduced by an average of 89%, which together would deliver an overall 80% reduction.

The optimal mix of effort needs to be decided over time in light of the relative costs of emissions reduction across sectors. But given the danger that unconstrained aviation emissions growth would make required reductions in other sectors impossibly large, it makes sense to establish an absolute cap on aviation emissions.

The CCC has been asked to provide a report by December on the measures required to ensure that aviation emissions can be constrained within the limit set by the Government, and will keep under continual review the appropriate balance between different sectors’ emissions reductions required to ensure that the 80% target is met.

Chair of the CCC Lord Turner said:

“We are pleased to have been asked to conduct this very important review into aviation emissions. In order to avoid dangerous climate change it is vital that emissions of greenhouse gases in the UK are reduced by at least 80% in 2050. International aviation and shipping must be part of the Government’s climate change strategy and commitments should be made to reduce emissions in these sectors”.

This is what the SBAC had to say when outlining this CO₂ Roadmap in their press release on December 12th last:

“UK’s leading aviation environmental body today projects how CO₂ emissions from air traffic will fall back to 2000 levels by 2050 despite continued growth in number of flights.

Sustainable Aviation (SA) has today (Friday) published its first report mapping the industry’s carbon dioxide (CO₂) emissions to 2050. The report concludes that CO₂ from all UK civil aviation can return to 2000 levels by 2050, after having reached a peak around 2020, against a background of threefold growth in passenger numbers.

The assessment takes into account the UK air transport market maturity and efficiencies that are expected from new airframe and engine technology, cutting edge air traffic management and operations, as well as the development of sustainable fuels. In making this assessment no allowance is made for the additional contribution to CO₂ reductions that will be achieved through airlines’ participation in international emissions cap and trade schemes, the details of which have yet to be fully defined.

The report highlights that:
• Improvements in current airframe and engine design plus new technologies such as blended wing bodies and open rotor engines are expected to reduce CO2 emissions by 62 per cent compared with a ‘constant technology’ baseline.
• A further 10 per cent reduction is envisaged from improved air traffic management and operations that will be delivered by 2020.
• Lower carbon alternative fuels are expected to provide a further 10 per cent reduction in CO2 emissions from 2030, following a period of increasing deployment from 2020.
• Given these initiatives, overall absolute levels of CO2 from UK aviation are expected to be brought back down to 2000 levels by 2050."

We view the claims made in the SBAC CO2 Roadmap as frankly, risible nonsense designed not so much to manufacture aircraft but manufacture consent for aviation’s unrestrained growth.

Recommendation 4.

We would expect Scottish Ministers, Parliament and the Scottish Executive to keep a very close watch on the UK CCC’s study of the Sustainable Aviation CO2 Roadmap, which is due to report by December 2009. Any subsequent policy outcomes will need to be reflected in Scotland’s own policies to control and reduce aviation emissions.

Conclusion.

With no realistic alternative to kerosene, the air transport industry is locked in to fossil fuel use in ever-increasing volumes for at least the next 40 years. The European Environment Agency estimates the total external environmental costs of air transport, including climate change, at around 5.4 pence per 1000 passenger kilometres, or £54 each time an individual passenger clocks up 1,000 kilometres. Adding these costs to tickets wouldn’t mean airports closing or the end of tourism or businessmen unable to fly where they want to, when they want to.

Environmental taxation at this level would however mean reducing the UK Government’s future growth forecasts for aviation by 50%, matching emissions growth to technology and other efficiency improvements. The Government wants to see almost 500 million passengers passing through UK airports by 2030. It claims too that it wants to add air transport’s external costs to ticket prices. A sensible and fair green levy on tickets of around 5.4 pence per kilometre, a congestion charge of the skies if you will, would instead cap passenger numbers at around 320 million by 2030, avoiding all the new runway construction the Government, airports and airlines promote so aggressively. This still wouldn’t make air transport environmentally benign or sustainable but it would be a start.

One transport sector, aviation, now emits more CO2 worldwide than the entire UK economy. We understand that Scotland is serious about not ignoring greenhouse gas emissions as a nation whatever their source and quite right too – we need to work hard to control and reduce those from air travel as well. 3.6 pence per kilometre on ticket prices is an equitable way forward.

We hope this submission is clear and we hope too that the Transport, Infrastructure and Climate Change committee is able to give due weight to the recommendations we make.
Figure 1. Comprehensive range of global aviation CO$_2$ emission forecasts 1990-2050 from published regulator, institutional and academic sources.

**Current and projected global aviation CO$_2$ emissions**

![Graph showing aviation CO$_2$ emissions from 1990 to 2050 with various sources and projections.]

Figure 2. Extracts from Pages 6, 7 & 60 DfT “UK Air Passenger Demand and CO$_2$ Forecasts”, January 2009 showing forecasting methodology

**Method**

1.18 Our method of forecasting aviation CO$_2$ emissions to 2030 combines:
- detailed forecasts of air transport movements (ATMs) and trip length from UK airports from our demand forecasts;
- the European Environment Agency’s CCRNAIR methodology for estimating aviation fuel burn by specific aircraft types; and,
- a detailed fleet turnover model.

1.19 Beyond 2030, we use simpler, yet still robust, methods to project aviation carbon dioxide emissions. This longer term view is important given the timeframe of our climate change policies and the long lifetimes of large infrastructure projects such as airport capacity$^9$.

**Results**

1.20 The action on overall UK CO$_2$ emissions in the Climate Change Act means that national emissions are expected to fall substantially to 2050. Within that, the demand forecasts and technological assumptions outlined

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$^8$ CO$_2$ Roadmap, Sustainable Aviation, December 2006.

$^9$ For example, the projections extend to 2030 to inform our analysis of the airport developments supported by the Air Transport White Paper.
above mean that UK aviation CO₂ emissions (covering both domestic and international aviation) are forecast to grow from 37.5MtCO₂ in 2005 to 58.4MtCO₂ in 2030, within the range 51.8MtCO₂ to 61.6MtCO₂. After 2030, the growth in aviation emissions is projected to slow, partly due to market maturity and capacity constraints slowing demand growth. By 2050 aviation emissions are projected to have stabilised, and reach 59.9MtCO₂ within the range 53.0MtCO₂ to 65.0MtCO₂.

1.21 Figure 1.4 illustrates this forecast of aviation CO₂ emissions alongside the projected domestic greenhouse gas emissions consistent with the Climate Change Act 2050 target. The aviation line and the domestic economy line are shown independently in this figure, reflecting that no decision has yet been taken on how international aviation relates to any UK targets in the long term. Nevertheless, it can be seen that falling overall UK emissions mean that – even with aviation emissions stabilising after 2030 – aviation’s share of UK greenhouse gas emissions rises to 2050.

1.22 Figure 1.4 shows the forecast profile of emissions from UK aviation under the assumptions of fuel efficiency described earlier. As explained in this chapter, because aviation will be joining the EU ETS from 2012, any emissions growth above the aviation cap will be matched one-for-one by reductions in other sectors, through the purchase of allowances. Across the EU, there would therefore be no overall increase in emissions from sectors included in the EU ETS.

Figure 1.4: UK national and aviation emissions forecasts 2005-2050
3. Aviation Carbon Dioxide Emissions Forecasts

- International aviation accounted for 1.5% of global CO$_2$ emissions in 2005.
- The UK’s total CO$_2$ emissions were 2.0% of the global total in 2005.
- UK domestic aviation accounted for 0.4% of the UK’s carbon dioxide emissions in 2006.
- If international emissions from shipping and aviation are added to the UK total for 2006, UK aviation (domestic and international) accounted for 6.4% of the UK’s CO$_2$ emissions.
- UK aviation’s CO$_2$ emissions have grown strongly in past decades, rising from 12.5 MtCO$_2$ in 1985, to 21.5 MtCO$_2$ in 1995 and 37.9 MtCO$_2$ in 2006. This reflects demand growing faster than fuel efficiency.
- Significant developments have taken place in climate change policy and it is important to understand these when interpreting UK aviation emissions forecasts. They include the Royal assent given to the Climate Change Act which sets a target for UK greenhouse gas emissions for 2050 and the inclusion of aviation in the EU ETS from 2012, meaning aviation’s CO$_2$ emissions will be capped.
- The Government’s comprehensive strategy to address climate change means that overall UK emissions are expected to fall significantly over the period to 2050. Within the overall level of emissions, emissions by sector will be expected to differ.
- In aviation, emissions are forecast to continue rising in the next two decades, as demand continues to grow faster than fuel efficiency. By 2030, emissions are forecast to rise to 58.4 MtCO$_2$, within the range 51.8 MtCO$_2$ to 61.6 MtCO$_2$.
- After 2030, the growth in aviation emissions is projected to slow and stabilise, as demand matures and is constrained by airport capacity. By 2050, UK aviation CO$_2$ emissions are projected to stabilise and reach 59.9 MtCO$_2$, within the range 53.0 MtCO$_2$ to 65.0 MtCO$_2$.
- The inclusion of aviation in the EU ETS from 2012 will place a cap on its emissions. Growth in this sector will require it to secure reductions in other sectors through the purchase of allowances, so that overall EU emissions will not grow.

Figure 3. UK CO$_2$ emissions and forecasts 2005 & 2030, then 2030 & 2050, by airport, including Scotland, from “UK Air Passenger Demand and CO$_2$ Forecasts”, January 2009
Table G10: CO₂ emissions at airport level 2005 and 2030 detailed

<table>
<thead>
<tr>
<th>Airport</th>
<th>Total CO₂ (MtCO₂) in 2005</th>
<th>Share of 2005 Total CO₂</th>
<th>Total CO₂ (MtCO₂) in 2030</th>
<th>Share of 2030 Total CO₂</th>
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Notes:
1. Low CO₂ assumes low demand scenario and the high fuel efficiency case (s2a).
2. High CO₂ assumes high demand scenario and the low fuel efficiency case (a2a).
3. All cases are for the option ‘1/2/2’: Stansted/F2 in 2015, Heathrow/F2 around 2020.
5. CO₂ emissions from UK departures only.
6. APU, freight and residual add-on not allocated to airports.
7. ‘-’ means non-zero, but rounds to zero at no decimal places.
### Table G9: CO₂ emissions by UK airport, 2030/2050, central and range

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<th>Million tonnes CO₂</th>
<th>2030 Low</th>
<th>2030 Central</th>
<th>2030 High</th>
<th>2050 Low</th>
<th>2050 Central</th>
<th>2050 High</th>
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<td>61.6</td>
<td>53.0</td>
<td>59.9</td>
<td>65.0</td>
</tr>
</tbody>
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**Notes:**
1. Low CO₂ assumes low demand scenario and the high fuel efficiency case (C8a).
2. High CO₂ assumes high demand scenario and the low fuel efficiency case (K2a).
3. All cases are for the option ‘at end’- Stansted F2 in 2015, Heathrow F3 around 2020.
4. Airports sorted on 2050 central CO₂ emissions.
5. CO₂ emissions from UK departures only.
6. APU, freight and residual add-on not allocated to airports.
7. **”** means non-zero, but rounds to zero at no decimal places.
Figure 4. Sausen et al TRADEOFF 2005 report, Aircraft RF summary chart

Sausen et al. (2005)  

RFI = Total RF / CO₂ RF

Figure 5. European overflight of satellite NOAA-12 on the 4th of May 1995 at 7:48 UTC (source: DLR-Oberpfaffenhofen). As the resolution of the picture is just over 1 km, only old, slightly dispersed vapour trails are identifiable

Figure 6: Chart showing the range of aviation non-CO₂ effect multipliers linked to different policy horizons
What is the right multiplier?

A simple example

CO₂ RF = 0.02 Wm⁻², contrails cirrus=0.02 Wm⁻², 650 Gt CO₂/yr

<table>
<thead>
<tr>
<th>Penalty for past contribution to climate change</th>
<th>100-yr cumulative future impacts</th>
<th>100-yr end point climate impacts</th>
<th>Avoid imminent dangerous climate impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>RFI</td>
<td>100 yr GWP</td>
<td>100 yr GTP</td>
<td>20 yr GTP</td>
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<tr>
<td></td>
<td>50 yr GTP</td>
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<td>10 yr GTP</td>
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Figure 7. Page 69, DfT “UK Air Passenger Demand and CO₂ Forecasts”, January 2009, Non-CO₂ impacts discussion

3.21 On the other hand, it would not be right to exclude consideration of the non-CO₂ climate change effects of aviation, and there is currently no better way of taking these effects into account.

3.22 In order to recognise the varying scientific views on radiative forcing and to demonstrate the potential magnitude of significance of these other effects, in line with the most recent evidence we apply a multiplier value of 1.9 to the figure for carbon dioxide emitted as the central case, with sensitivity tests to define a range using a multiplier of 1 and 4.

3.23 Although these factors were derived from different sources and on the basis of different modelling, we believe that for the purposes of illustration, they reflect the best available evidence. Over time, as aircraft and fuel technology develops and operational practices change, the current relationship between aircraft CO₂ and non-CO₂ emissions may change. It is not possible to quantify this at present, but as any potential changes become apparent this would be taken into account in future forecasts.
CLIMATE CHANGE (SCOTLAND) BILL

Thank you for the opportunity to discuss my thoughts on the Bill with the committee on Tuesday 10th February. This note summarises the key points of that discussion and some additional referencing.

I Chair the transport thinktank, STSG (www.stsg.org) which facilitates knowledge exchange in Scottish transport. STSG hopes that its members from across the industry are better able to evidence their responses to the Transport Infrastructure and Climate Change Committee as a result of knowledge exchange through its activities. STSG has arranged events and published views on transport and climate change, but no one individual speaks for STSG, and the Group does not respond to consultations. I am therefore pleased to have the opportunity to present my own views as a Director of DHC and to share my own knowledge with the Committee.

General

The Bill needs to be more focused on delivery and less on process. It would be helpful if the Bill was scattered with a few more qualifying clauses e.g. “Scottish Ministers may by regulations ………provided they can demonstrate that there is a reasonable prospect that such action will contribute to reducing emissions”.

Better evidence can be a powerful lever for action, but at present there is a danger that the Bill will create an industry of analysis rather than of emissions reduction. Unless action is taken to develop the markets for delivering a low carbon economy, business survival and competitiveness will depend on the ingenuity of avoidance. This could have significant unintended consequences.

Targets only work well as a trigger for action if the downstream mechanisms are in place to deliver the desired changes. In transport, these mechanisms are not yet in place, so it is important to keep the Bill simple to ensure the necessary flexibility. Some of the detail in Part 3 of the Bill would be better left to the Advisory Body particularly in relation to electricity use, given the expected growth in electricity as the main fuel for transport.

Transport and the wider economy are inextricably linked. Current carbon trading does not yet reflect this close relationship. With the new targets, there could be pressure to reduce emissions in traded sectors which could transfer emissions to transport e.g. the balance between warehousing costs and freight costs. Within transport, international aviation and shipping will be traded sectors, so perverse incentives are likely to emerge. A key role of Scottish Ministers will be to build from the international frameworks, and to use the powers of regulation in the 2008 UK Climate Change Act to smooth out the irregularities that could affect Scotland.

Improved Delivery Mechanisms as a Condition of Setting Targets

The best way to predict the future is to shape it. In the absence of a detailed strategy for reducing emissions from transport, the recent Scottish strategic transport projects review relied more heavily on established strategies for railways, roads, buses, ferries and freight. As a result, its conclusions are not particularly strategic in relation to climate change, viewing emissions as an impact rather than as a planned deliverable.

There is a need for strategic projects to be considered to deliver energy change and reduced emissions, whilst growing the Scottish economy. These might include a programme to reshape towns and cities for low carbon vehicles, perhaps including electric charging points and investment in streetscape, and improvements in local access to replace motorised transport with walking trips for many short journeys.

The King3 review demonstrated that zero emission car travel will be a rapidly growing market between now and 2050, provided renewable electricity generation is used. Scotland is well
placed to set ambitious targets for early delivery, given its high share of renewable generation. However the potential for plug in electric cars can only be exploited if the charging infrastructure for cars is developed rapidly. Cars could charge up at night on cheap electricity. The increasing proportion of renewable energy such as wind and tidal power will result in growing energy losses at night unless massive new storage facilities are constructed, and using the Scottish car fleet as an energy store could make renewable generation more economically attractive.

1 Note also that STSG is a charity registered in Scotland and all of my inputs to the Group as Chair and as Editor of the quarterly newsletter Scottish Transport Review are undertaken on a voluntary basis
3 UK Treasury 2007 – The King review of Low Carbon Cars
4 The first plug in hybrid cars will be on sale to a mass market in 2009/10 complementing the growing market for electric cars. 50% of new cars sold for use on Scottish roads could rely mainly on electricity for energy by 2020 if the charging infrastructure is available.
6 Making the Connections 2003 – Transport and Social Exclusion. Cabinet Office and ODPM.
7 The Eddington Transport Review 2006 – How Transport can Contribute to Economic Success. Treasury and DfT
8 Scottish Transport Statistics 2007 Page
9 BCSC 2006 – Access, Information and Flexibility – The Future of Retail Travel, DHC for the British Council of Shopping Centres

However, technology change alone will not deliver the emissions required. All infrastructure and vehicles have a carbon footprint from their construction and maintenance. There is overwhelming research evidence, including high profile reviews for Cabinet Office and Treasury that public funding should seek improved end to end journeys for people and businesses. However, in Scotland most transport budgets are still managed separately by mode.

A better administrative framework is urgently needed. Well connected and accessible places for people and businesses should be central to future government spending. Currently, transport policy remains dominated by the unstable measure of perceived congestion as viewed by fickle consumers. The large increases in emissions from transport are not in the most congested places, and relate more to shopping, leisure and business travel than commuting. Transport policies still focus excessively on peak capacity issues where there has been much less change in emissions. The fastest growing trip purposes are shopping and leisure where over 85% of trips are by walking and car. For these two modes policies are not always clear, and often conflict with practice but reduced car emissions will be needed.

A Regulatory Framework for Funding Reduced Transport Emissions

Taking forward strategic projects for energy change will be very expensive and well beyond what could be publicly funded. In any case, Government investment in Scottish transport each year is less than 10% of total transport investment. The future will be more influenced by the purchasing behaviour of people and businesses than of Government. Reduced emissions from transport cannot therefore be achieved by a “command and control approach”, but by creating a framework within which people and business can invest in a more sustainable future.

In 2007, an STSG seminar reviewed how to create these new business structures. One conclusion was that the dominant transport markets and revenue streams of the last century such as car sales and parking revenue, would be complemented or progressively replaced with new markets in more flexible and efficient transport, used by better informed travellers. This will require a fresh approach to policy.
There is also scope for greater use of emissions trading schemes. Carbon trading is already investing large sums in lowering transport emissions across the world, and a Scottish carbon trading scheme could ensure that rather than simply buying cheap credits on international markets, people and businesses would be able to invest in sustainable solutions in their own country. If Scottish Government created obligations for transport users to trade within a Scottish marketplace then there could be a significant increase in investment to reduce emissions. This approach could also improve business competitiveness by tackling an important area of market failure. Currently there is economic value if someone takes the bus or uses a car, but no economic value is captured if they walk or cycle for the same trips. In principle it would be possible to create markets to grow footfall in town centres, or build attractive street environments with less motorised travel, provided these projects were able to demonstrate verifiable reductions in emissions.

Scotland, with its leading position in some renewable energy sectors is very well placed to grow low carbon travel and transport solutions, but only if Government creates a framework within which people and businesses can engage and trade successfully. Transport accounts for more than 15% of household expenditure. Unless people and businesses buy sustainable transport it will be hard for the Government to achieve its emissions targets.

Conclusion

The success of the Climate Change Bill is predicated on the development of a wider framework for transport emissions reduction. Top down target setting will only be effective if supported by a new regulatory and administrative system that enables people and businesses to engage in the delivery of a sustainable transport economy.

Derek Halden
Scottish Parliament

Transport, Infrastructure and Climate Change Committee

Tuesday 24 February 2009

[THE DEPUTY CONVENER opened the meeting at 14:01]

Climate Change (Scotland) Bill: Stage 1

The Deputy Convener (Cathy Peattie): Good afternoon and welcome to the seventh meeting in 2009 of the Transport, Infrastructure and Climate Change Committee. I remind members and the public to turn off their phones and pagers. I have received apologies from Patrick Harvie.

Item 1 is our fifth evidence session on the Climate Change (Scotland) Bill. Today, we will hear from three panels. The first will consist of representatives of the Convention of Scottish Local Authorities and the sustainable Scotland network. The second will consist of representatives of the Carbon Trust, the Energy Saving Trust and the Association for the Conservation of Energy. Finally, we will hear from the trade unions.

I welcome the first panel. We have Ken Gibb, chair of the sustainable Scotland network; and Alison Hay, spokesperson for regeneration and sustainable development, and Anil Gupta, leader for environment and regeneration, from COSLA. We will be asking questions, but you are welcome to make brief introductory statements.

Councillor Alison Hay (Convention of Scottish Local Authorities): I will be brief. I do not want to say much, other than that we realise the importance of climate change. We sent you a submission, on which we are happy to answer questions. Thank you for giving us the time to do so.

Ken Gibb (Sustainable Scotland Network): I echo those sentiments. On behalf of all the local government officers and practitioners whom the network represents, I welcome and support the aspirations of the bill.

We will be asking questions, but you are welcome to make brief introductory statements.

Councillor Alison Hay (Convention of Scottish Local Authorities): I will be brief. I do not want to say much, other than that we realise the importance of climate change. We sent you a submission, on which we are happy to answer questions. Thank you for giving us the time to do so.

Ken Gibb (Sustainable Scotland Network): I echo those sentiments. On behalf of all the local government officers and practitioners whom the network represents, I welcome and support the aspirations of the bill.

Councillor Hay: In relation to consulting the public?

The Deputy Convener: Yes, in terms of the bill.

Councillor Hay: COSLA has been through quite a wide consultation. My regeneration team, which represents the 32 local authorities, has examined the bill. We have also set up a COSLA climate change task group, which includes representatives of not only councils but the Society of Local Authority Chief Executives and Senior Managers and the SSN. We have been through the bill and the consultation almost line by line. Our submission reflects quite a thorough consultation process and is a fair representation of the views that we heard.

The Deputy Convener: You are content with the consultation process.

Councillor Hay: Yes.

Ken Gibb: We took the opportunity to have a pre-consultation session at our annual conference in November 2007, which included 160 delegates from throughout Scotland. Not just local authorities but people with an interest in sustainable development had the opportunity to contribute to that session before the consultation was officially launched. We found that very beneficial—I hope that the Scottish Government did, too. Subsequently, we held a major seminar during the consultation period involving our network members and carried out an in-depth assessment of all the issues in the bill. From those two events and the individual responses that I know the committee has received from individual local authorities, I am content that you have an accurate reflection of the general views of local government.

The Deputy Convener: In a sense, you have answered my next question. I assume that you are content with the development of the bill and the consultation process. I am interested in how you have been consulted on public sector duties, about which we will hear more later. It is clear that such duties would have major implications.

Ken Gibb: That issue has certainly been considered. At the network, we are quite relaxed about the concept of public duties if they are properly framed. We recognised from the outset that there is already a general sustainable development duty under the Local Government in Scotland Act 2003. Any further duties would be a development of that concept.

Other duties potentially link to climate change, such as statutory responsibilities around energy efficiency under the Home Energy Conservation Act 1995, and the forthcoming carbon reduction commitment will be a duty, in a sense. We are relaxed about the overall concept. I do not wish to engage in the detail, as it might arise in relation to further questions, so I will leave it there at this stage.
Councillor Hay: Ditto. COSLA is not opposed to duties per se, but in light of our current duties, such as the sustainable development duty that Ken Gibb mentioned, and the biodiversity duty—there are a number of duties in the environment field—it would be useful to examine and rationalise them all, rather than impose a duty right away. The proposed enabling powers are a good way forward.

The Deputy Convener: There will be more questions on that later.

I am interested in targets. Do you feel that the 2050 target is ambitious enough?

Councillor Hay: The target is an 80 per cent reduction in emissions by 2050, which is ambitious enough. If we take into account what the United Kingdom Committee on Climate Change has suggested, 80 per cent is quite a tight target.

Ken Gibb: It is certainly ambitious, but whether it is ambitious enough is another issue. The indication is that if aviation continues to grow, we might, even with a 3 per cent cut in emissions, have to consider a 90 per cent target in order to beat the 80 per cent target. I think that 80 per cent is ambitious in moving us to the lower end of what we need to achieve to get the result that we seek.

Anil Gupta (Convention of Scottish Local Authorities): Given the way in which the bill is framed to enable advice to be sought from the UK Committee on Climate Change, we would accept upward revisions being made, as we are not experts in the area. How we position ourselves overall will also depend a great deal on international treaties. The target is useful, and we are also keen on the idea of a 2020 target as something for which we should aim.

The Deputy Convener: In a sense, that answers my next question. Do you agree that there should be an interim target? I am interested in alternatives—Mr Gibb has already proposed an alternative target. Do you have a view on that?

Ken Gibb: Again, it depends largely on the international scenario. The bill sets an interim target for 2030, but we should probably think about setting a target for 2020, in line with existing legislation and international obligations. With regard to the level of the reduction, whether we consider a 42 per cent target or a 34 per cent target depends on what happens at the Copenhagen conference and elsewhere. I know that that issue has been well aired. In a sense, the interim target is in the lap of bodies that are outwith the Scottish scenario. I presume that we can reflect on the advice as it develops in the months to come.

Councillor Hay: I agree.

Shirley-Anne Somerville (Lothians) (SNP): I apologise for missing the start of the meeting. I had to deal with an urgent constituency case.

Are annual targets the most appropriate mechanism for achieving carbon emissions reductions?

Councillor Hay: We are not opposed to annual targets, but we need to be careful not to set a carbon emissions reduction target of 3 per cent per council, as has been suggested. The 3 per cent target should be for the whole of Scotland, because people are at various stages in reducing their carbon emissions.

Ken Gibb: We are fairly agnostic on annual targets and on the level at which they should be set. I echo the comments that were made on sectoral targets. Setting a mandatory 3 per cent target for local authorities across the board would be a step too far; we are not yet at that stage of the game. We have yet to find out whether we will move towards such an approach as we move towards the 2030 scenario that is envisaged in the bill. We should certainly consider budgetary targeting, which would give us time to adjust authorities’ performance over the piece in light of their individual circumstances. Much good work is being done, as I am sure members know, but we would be nervous about committing to an annual reduction for local government. That is currently too big an ask.

Councillor Hay: We would be happier with a rolling programme over a number of years—perhaps five years—than with a rigid approach.

Anil Gupta: Councils are concerned that unforeseen factors might result in our not being able to achieve reductions. For example, climate issues, such as a particularly cold winter, might cause problems. That is a reason for proposing a five-year rolling target. Councils would report every year, but the longer timeframe would enable the inevitable ups and downs to be averaged out. Indeed, future technological advances might allow for decarbonisation or a reduction in greenhouse gases.

We foresee quite lumpy progress towards the 2050 target, which must be taken into account, particularly as there will be increasing pressure on individuals to meet targets. There is a possibility that there will be mandatory cap and trade schemes, for example, so we should be careful not to create a rigid system that puts too great a burden on people.

Shirley-Anne Somerville: The pressure will exist from the start, and it is important that we make changes from the start: the issue is how much change we can make and how we make it. I would like there to be pressure on people to accept that change is required.
The challenge is to set annual targets that are challenging enough to ensure that people do not put off difficult decisions and no one is let off the hook, whether they are in the public sector or the private sector, and that are realistic and achievable enough to ensure that there is buy-in from local authorities and individuals. How do we strike that balance?

Councillor Hay: Councils are doing a number of things—I am not so sure about the general public, in relation to which there is a mixed picture. There is no doubt that local authorities are conscious that they must reduce carbon emissions. Authorities are all working with the Carbon Trust to measure emissions from their buildings, and they know that the ability to purchase or sell carbon credits will heave in sight on the horizon. We have all signed up to Scotland’s climate change declaration, as has the Scottish Government. Public bodies are all working hard to do what we can to try to reduce carbon emissions.

As far as members of the public are concerned, it is important that local authorities and other public bodies show a lead, but people’s homes vary in construction and some are easier to sort out than others, which opens up a whole new discussion.

14:15

Ken Gibb: Alison Hay mentioned the carbon management plans that all councils are delivering with the Carbon Trust. I think that we are now in the sixth phase of a process that has been around for about five years. Over the piece, councils are reducing their emissions by the equivalent of 3 per cent per year. Over the period of the carbon management plans that are in place, that averages out at a 15 per cent reduction in emissions, which is an indication of our commitment.

As has been indicated, we are all committed to delivering on the climate change declaration. In addition, in the current single outcome agreements, 21 local authorities refer to reductions in carbon emissions, on which there are 36 indicators, half of which are SMART—specific, measurable, attainable, relevant and time-based—so we can report on what we do.

Efforts are being made on a voluntary basis. We are concerned that if mandatory percentages are set, certain local authorities will have difficulty meeting them. We think that the current process is in the spirit of the bill and that progress is being made towards the numbers that the bill aims to achieve. We will continue to refine, tighten and improve that process as we move further along the spectrum. I am quite content that we are okay in that regard.

Anil Gupta: You mentioned the setting of targets. Inherent in that is our capacity to deliver realistic targets. The majority of our emissions can be broken down into three sectors. Greenhouse gas emissions, which include methane emissions from waste disposal, probably account for between 40 and 45 per cent of local authority carbon dioxide equivalent emissions. The figure is the same for emissions from buildings. The remaining emissions are from transport. It is quite clear that with the targets for landfill diversion and the reduction in methane emissions from landfill sites, we will probably achieve reasonably rapid progress over the next 10 to 15 years.

Beyond that, we require fairly considerable investment in infrastructure to make buildings more energy efficient. We need to be sure that we have in place long-term loan arrangements that help us to invest now to save in future, because we do not have such capacity in our finances at the moment.

On transport, we will have to wait for technological advances to provide alternatives to existing fuels. That will involve more use of batteries and electric vehicles and developments on the hydrogen front. We would probably want to seek advice about realistic targets in negotiation with the UK Committee on Climate Change or with a Scottish committee on climate change.

Shirley-Anne Somerville: My colleagues will ask about single outcome agreements and the climate change declaration, so I will leave that to them. Should targets on emissions from aviation and shipping be included in the bill?

Councillor Hay: From COSLA’s point of view, yes.

Ken Gibb: The sustainable Scotland network believes that such emissions should definitely be in the bill.

Charlie Gordon (Glasgow Cathcart) (Lab): Mr Gupta began to comment on advisory functions in his response to question 3, but do you have a view on the bill’s proposals in that area? In particular, what is your view on the idea of using the UK Committee on Climate Change in the first instance?

Councillor Hay: I think our submission says that COSLA is happy for the UK Committee on Climate Change to be used for advice, but that we will need to review the situation after a period of time to ensure that the advice that we get is relevant and pertinent to Scotland and its particular needs.

Charlie Gordon: Indeed. Can the UK committee adequately understand the unique Scottish model for local authorities and the wider public sector?
Councillor Hay: That is what we have to find out. I am not an expert on the people who are on that committee, but I looked at the list the other day and they are all eminent people. I hope that they have a broad knowledge of the UK that enables them to sit on the committee and ensure that it gives a UK perspective when it gives advice. As I said, we are content at the moment, but we must review the position in a year or so to see whether the committee's advice is helping.

Ken Gibb: I entirely support those comments. We have no reason to suspect that the UK committee will not pay due attention to particular Scottish circumstances, but time will tell.

Charlie Gordon: If views change and a decision is taken that we should look to Scottish expertise from the start, how confident are you about being able to step up to the mark professionally?

Ken Gibb: Are you asking us as a network or are you talking about Scottish—

Charlie Gordon: Well, what is your view on the professional capacity that is available to the Scottish public sector?

Ken Gibb: There is no doubt that the experience and knowledge that we have in Scottish local government would make us more than capable of making a meaningful contribution to the discussions that any group would have.

Councillor Hay: It is not just a question of Scottish local government. In Scotland generally, we have the expertise to set up a committee should we need to do so, but in the meantime I am content to let the UK committee have a go.

Charlie Gordon: Do you have a view on the proposed reporting arrangements? Do you anticipate any problems with the collation of information locally?

Councillor Hay: I am not sure what you mean.

Charlie Gordon: The bill requires annual reporting to Parliament on proposals and policies to meet any future annual emissions targets.

Councillor Hay: We are happy with reporting to the Scottish Government.

Ken Gibb: Our only concern is about areas over which local government does not have direct control or influence, such as some of the consumption data and what are known as area-wide emissions. Clearly, those are outwith the control and, to a large extent, the influence of local government. That is our only reservation. We have a fairly well-established system for and track record of recording, monitoring and, if necessary, reporting on our own emissions, so I am content that that aspect will not cause us any difficulties.

Councillor Hay: Local government is required to do a lot of reporting. We get a lot of people coming into councils to write reports on how well we are doing on various things. Particularly if Audit Scotland is to audit what we are doing, some training will be needed, but let us try to keep things as tight as possible when it comes to being audited and reporting.

Charlie Gordon: Those are useful comments. Thanks.

The Deputy Convener: We move on to some questions on the duties of public bodies. Are single outcome agreements and the climate change declaration leading to the required cuts in emissions? Can you give us any examples of best practice or indeed any examples of barriers to the success of voluntary agreements? What is happening at the moment? Is there good practice or are there barriers?

Ken Gibb: You will probably not be surprised to hear that the strengths are in energy efficiency and management. There is a well-established track record. The approaches to energy efficiency and management are fairly objective and reasonably well funded, and what has happened can be measured and recorded. That is not to say that energy efficiency and energy management—certainly in the context of some of the emissions targets—are particularly easy to deliver, but at least reporting and resource mechanisms are in place to move towards that.

Obviously, other issues are more contentious. Transport in general is an issue. A number of authorities are struggling to get to grips with local authority transport fleet management and business mileage. We have recognised for some time that we need to get involved with that agenda. A number of authorities are moving towards green travel plans, which we are keen to see developed. Excellent partnership work has been done with local partnership groups on funding and resourcing appropriate studies and facilitating the required infrastructure to help to move towards green travel. Such work needs further support.

The other issue, of course, is procurement, which is a major issue for us. We are fairly clued up on energy procurement—there is a fairly good set-up through Scotland Excel—but we have to get to grips with other possibly more difficult procurement issues.

I have given members a fairly wide indication of where we are strong and where we are weaker and need to improve. We recognise where we need to improve and have sought to address matters through our various single outcome agreements and the climate change declaration.
Anil Gupta: On reporting on the climate change declaration, we are quite happy that after a couple of years of a voluntary arrangement, more than half of the councils are reporting on how their commitments are being implemented. Obviously, we are aware that that does not necessarily represent a full glass, but given that the arrangements are voluntary and that what is happening here is far in excess of what is happening in Wales and England, we are keen to encourage the voluntary approach, which allows a diversity of practice to develop.

We want to engage further with the SSN and others in the not-too-distant future to address how we can consolidate best practice and produce internal arrangements to ensure that more people come on board, but we think that we have a success story that indicates a useful and sustainable way of proceeding in the meantime. Ultimately, if a public sector duty is developed under the powers that are given to ministers, we will expect the experience that we have developed to feed actively into the process, similar to the way in which experience fed into the public sector equality duties process, which members know about. There was considerable engagement by councils in that process. They tried to show their practices and have them incorporated in the legislation.

Councillor Hay: Things should move forward at a slightly quicker pace than they did under that process, however.

The Deputy Convener: That process was very slow.

Mr Gibb spoke about measuring. What process do you use to evaluate whether a job has been done properly?

Ken Gibb: We have a range of options. Earlier, I mentioned objective issues. We can use hard sums and measure hard deliveries in energy management, but with a lot of the other stuff, particularly moving towards the adaptation end, we can use an indicator that assesses where we are in the process—whether we have started it, whether we have started a consultation, or whether we have a fully developed, all-bells-and-whistles strategy that is under constant review. Those are the two ends of the spectrum. Most options sit in the middle. A combination of two approaches that involves what we can measure and assess fairly subjectively is often used. The other aspect is a general assessment of how the public perceive things to be being delivered locally.

There is a range. There is no simple answer, but we are seeking to make our indicators as firm as we can. That is part of what is at times a painful process that we are all going through with the review of the SOAs, to ensure that we capture all our objectives with indicators that are as firm as possible. As I am sure the committee recognises, that is happening throughout Scotland. I hope that the new SOAs will be much better than the previous ones at identifying the issues that you have flagged up.

14:30

Councillor Hay: The SOA process is certainly the way to go. The second round of SOAs encompasses the agreement of the community planning partnerships. Sitting on those partnerships are all the groups that you would hope would be involved in what we have just been discussing. The SOAs are the way forward.

The Deputy Convener: We spoke earlier about the duties of public bodies. How successful do you think those duties are in relation to biodiversity, equalities and so on? Are local authorities and others able to deliver the ambitions of the duties or is that difficult for you?

Ken Gibb: The key to an effective duty is first of all that it is clearly defined. As I indicated earlier, that encompasses the full spectrum from what you have control over to what you might only be influencing to an extent. You will not be surprised to hear me say that there also needs to be appropriate support and resources for any duties that are introduced. A duty is all very well, but it needs to be properly defined, relevant to what is being asked for, and appropriately resourced.

Councillor Hay: Councils have a number of duties. You do not just set an action plan, then walk away and leave people to do things. You have to ensure that there is regular monitoring. As long as you keep the regular monitoring going, you are able to say, at the end of a year or whenever, whether something is working and whether it needs to be re-examined.

Anil Gupta: It is important that there is a clear role for an external body—probably Audit Scotland—to take a view on best value in relation to the public sector duty. We do not envisage a new climate change commission being set up in Scotland specifically to pore over all the public sector duties, from the police, health boards, colleges and so on. I do not know whether you have considered a particular route, but within the current arrangements, the Audit Scotland approach focuses our minds. Audit Scotland is involved in the evaluation of the SOA process, and it seems to fit very well.

Rob Gibson (Highlands and Islands) (SNP): Do you believe that placing climate change duties on public bodies is necessary in order for local authorities to contribute towards the targets of the bill?
Councillor Hay: As we indicated, although we do not oppose the imposition of duties in principle, it needs to be done in such a fashion that it takes into account everything that we are doing at the moment. To impose a duty just for the sake of imposing a duty is not a good idea. I hope that you agree that, as Ken Gibb has indicated, we have our minds fairly focused on what the Climate Change (Scotland) Bill entails. In principle, duties are fine, but there should be enabling powers to begin with and consideration should be given to what other duties we have, so that there is no overlap or contradiction and we do not take our eye off the ball. In principle, I would say yes to duties, but let us not rush into this.

Ken Gibb: I support that. Clearly, as Alison Hay has said, duties have value, but they need to be properly defined and consulted on so that we are in full partnership with the Government on them.

Anil Gupta: I want to expand on what Ken Gibb said about area-wide emissions. We have material from the Scottish Government that suggests that public sector bodies in Scotland are probably responsible for about 2 per cent of greenhouse gas emissions, so we need to keep things in proportion. If we wish to go beyond our own immediate emissions, we need to think about how easy it is to influence those with whom we have partnerships, including the private sector. If there is a public sector duty that goes beyond what we are currently doing, there must be ways and means to achieve a broader impact.

Rob Gibson: COSLA’s written submission states:

“We are open to the development of a process that would identify the gaps and barriers to action within present structures and how any future duty might seek to overcome them.”

In terms of the targets, if there are gaps and barriers, you ought to hint at what those might be.

Councillor Hay: Our submission goes on to say:

“One possible way forward would be the convening of a high-level … Climate Change Steering Group bringing together key partners”

so that we can look at all this. I maintain that view, and I have been talking about that for quite some time. A cohesive Scottish drive to implement the Climate Change (Scotland) Bill must be led from the top. We do not have all the answers at the moment—there will be gaps and barriers somewhere. However, we need to look at it in an holistic way with all the public bodies, the private sector, which plays an important part in this, and the voluntary sector. All of us need to sit down and look at what we can do to ensure that the bill is as watertight as we can get it.

Rob Gibson: Therefore, you do not think that a specific duty should appear in the bill.

Councillor Hay: No.

Rob Gibson: Let us turn to adaptation and mitigation. The bill requires the development of a climate change adaptation plan. What are you already doing, which we have not discussed before, to increase resilience to climate change? That is a duty that local authorities can be involved in. What else could the bill define on that matter?

Ken Gibb: A range of things could be done. We are still catching up with the agenda and we have had difficulty in properly assessing and measuring adaptation. We are mindful of the fact that the second stage of the consultation on adaptation is due to begin, and we will have a chance to give the matter further consideration then.

As far as adaptation is concerned, our mind is very much focused in the here and now on the increased risk of flooding. That is a serious issue now for many Scottish local authorities, which requires consideration of significant investment in roads infrastructure and the appraisal of assets. For example, a number of local authorities own reservoirs, some of which are quite old and, with an increasing number of climatic events, are becoming more prone to damage or flooding. Therefore, we also have concerns about our responsibilities for reservoirs under the Flood Risk Management (Scotland) Bill.

The appraisal of such assets is now of concern to us. Whereas, in the past, they were perhaps fairly peripheral to a local authority’s concerns, they have suddenly become quite central in terms of concerns over risks to infrastructure and human life. That is a whole new area, which goes beyond the simple consideration of emergency planning. That is a first stage in the process, but we need to move beyond that to strategic risk assessment not only of our infrastructure, which is quite costly, but of the maintenance of the key services that we deliver. Key services are often linked to appropriate infrastructure, especially in rural authority areas. We are concerned about a range of issues that are important here and now, without beginning to consider the problems that may become more prevalent as a result of increased heat events and prolonged periods of drought, which we may well face in the years and decades to come.

Councillor Hay: A number of local authorities are already looking at the matter. I have just come from giving a short presentation on flooding at the Scotland and Northern Ireland Forum for Environmental Research conference in Glasgow. SNIFER is looking at the Flood Risk Management (Scotland) Bill, which is apposite as that bill and the Climate Change (Scotland) Bill go
hand in hand. The issue of flooding is linked to emergency planning to some extent, but there is no doubt that we must examine the impediments to natural flooding in our areas and what we need to do to allow that to occur.

It is also apposite that we have new planning legislation. We need to ensure that what we approve as planners does not cause more problems and that developers and house builders do not submit applications to build on flood plains without giving due consideration to mitigation, adaptation and so on. Local authorities are looking at many issues at the moment and will continue to do so, along with their partners. However—dare I mention it—resources will always be a problem for us, even if we identify what is wrong.

**Alison McInnes (North East Scotland) (LD):** You have touched on the issue that I want to raise. You have spoken a lot about the role of local authorities and the work that they do. I am particularly interested in the step changes that they can make as planning authorities. Could you say a little more about the role of local plans in moving forward the climate change agenda?

**Councillor Hay:** It is extremely helpful to focus on planning. When we construct local plans, we talk not just to planners but to the Scottish Environment Protection Agency, Scottish Natural Heritage and other bodies; we also look at transport infrastructure. All of those discussions have an impact on how we draw up local plans. Planning has an extremely important role to play in enabling us to identify where the problems and risks may be. We must take those into account when drawing up local plans.

**Ken Gibb:** The committee may be interested in hearing more about the local climate impacts project that the network is promoting in association with SNIFTER, of which I am sure members are aware, and the UK climate impacts programme. We have run a successful pilot in four authorities in Scotland, which is about to be reviewed with a view to its being rolled out much more widely. The project focuses on the current and historical impacts of intense weather events, how those are likely to change in the future and how local authorities should consider responding through planning, to which Alison Hay alluded, and service delivery. That piece of work is on-going, and we hope that the Scottish Government will continue to support it. We are sure that it will bear fruit and benefit local authorities and the Scottish public sector.

**Rob Gibson:** The pilot scheme is to be rolled out to other authorities. Is that a good example of local authorities sharing best practice on climate change mitigation and adaptation?

**Ken Gibb:** Undoubtedly.
Anil Gupta: The whole picture will have to be considered, because things are getting confusing. It is a bit of a moveable feast. We expect that energy performance certification from Europe will cover buildings with a floor area that is quite drastically smaller than the present specified floor area of 1,000m². We would like some sort of floor, if you like, to be put on such reductions, so that we can size our tasks and plan properly. Councils will have a big role in enforcement and will have to recruit more staff. That will have to be taken into account, as well as the capital side.

When the powers come to be used, it would be good to be sure that an holistic view has been taken of all the legislation—whether European, UK or Scottish.

Ken Gibb: I concur with what has been said.

Alison McInnes: You have expressed concerns about resourcing, and it is clear that capital budgets are under heavy pressure. Have you any suggestions on how we can move forward?

Councillor Hay: I do not want to steal anybody’s thunder, but I have mentioned that a central loan scheme might be set up. That idea can be elaborated on by others.

Alex Johnstone (North East Scotland) (Con): I understand that several local authorities provided the Finance Committee with written submissions on the financial memorandum but that that committee was unable to hear evidence from either COSLA or a local authority. Let me take the opportunity to ask a couple of questions on issues that arose from those submissions. First, a number of local authorities criticised the information that was included in the financial memorandum for being vague and for being based on assumptions that were merely best guesses based on disaggregated UK costs. Do you have any views on that?

Ken Gibb: I concur with that. I must confess that I read the questionnaire that came with the financial memorandum with a view to trying to provide a response, but I found it difficult to give a meaningful response to any of the questions. Therefore, I felt that it was inappropriate for me to provide a written response. I recognise the point that has been made.

Anil Gupta: We found it quite difficult to get advice on how we could respond. That is one reason for the gap. The task involved was quite difficult, so we did not submit a response specifically on the financial memorandum.

Alex Johnstone: Part 5 of the bill includes various regulation-making powers that could have a significant impact on local authorities. Do you have any view on the cost implications of those, or are those issues to which councils do not want to commit?

Anil Gupta: It is not so much that we do not want to commit. Our impression was that it is difficult even to start sizing the job at this stage. We expect to be fully involved in discussions and consultations on any secondary legislation that is proposed to cover those issues. However, the provisions are too vague at the moment.

Ken Gibb: I seem to recall that quite a lot of the issues were predicated on dealing with waste, which I felt was in the remit of another network.

Alex Johnstone: The submissions from Glasgow City Council and Highland Council highlighted their particular circumstances that might result in greater challenges and costs for them in meeting the targets under the bill. Do you have any views on how the various costs on local authorities could be accommodated equitably through the various funding allocations?

Councillor Hay: In general terms, each council receives a funding allocation. We are grateful that an awful lot of money that was previously ring fenced is no longer ring fenced, so we have a budget that we can use flexibly. It will be up to each council to prioritise how it spends its money. With funding becoming ever tighter and with our priorities in social work and education and so on, it is difficult to see how councils will be able to fit in everything that is expected from what is a very limited budget. However, each council must take its own decisions on how it spends its budget, based on local priorities.

Alex Johnstone: Do you expect national Government to consider the implications that such responsibilities will have on how the Government allocates funding to individual local authorities?

Councillor Hay: If we continue to work under the concordat, that will need to be done in conjunction with discussions with local government. It is up to local authorities how they spend their budgets. National Government has a set of priorities to which we try to align our priorities through the SOAs. By and large, I think that national and local government are not too far apart. However, at the end of the day, the budgets must be set by the councils, which need to allocate resources as they feel appropriate, based on what they feel are the needs of the local populace. For example, Moray Council and Perth and Kinross Council are faced with a big burden in trying to mitigate the effects of flooding, which happens quite a lot in their areas. That will become a priority for them and I assume that they will spend money on it. Councils do not all have the same priorities, so they will allocate money as they see fit.

Anil Gupta: If additional responsibilities are imposed on councils because of the bill and secondary legislation, the resources will need to
follow and we will want to be engaged about that and to have an open dialogue about what we require—that may be what Alex Johnstone is asking about. However, there is no great detail at this stage about what the obligations might end up being and what actions will be required, so we cannot start talking meaningfully about the resources that will be required. That is one of the difficulties that are caused by the amorphous nature of what is in the financial memorandum. We will need to discuss that in detail at some point, but we are not there yet.

Des McNulty (Clydebank and Milngavie) (Lab): I hear loud alarms. What you have just said reminds me a bit of single status agreements, which have been a financial catastrophe for local government. The bill is wide ranging, with arduous targets, and it will be delivered only through significant changes to local government’s duties and practices. Is it not local government’s responsibility to ask central Government, which wants the bill to be passed, to spell out in clear detail what it needs local government to do and the price of doing that because, otherwise, local government might not be able to guarantee to deliver the bill, although it might support it in principle? I am surprised that COSLA could not give evidence to the Finance Committee on the bill, or that the committee could not hear evidence from COSLA. It is axiomatic that we should not pass such a comprehensive bill, with so many implications, without clear understanding from local government of what is involved and the associated price tag.

Councillor Hay: Much of the detail will come out through the UK climate impacts programme—

Des McNulty: No, I am sorry, but you cannot do it that way. You cannot say that we will pass the legislation and then sort out the detail; it must be done the other way. We must have the detail before accepting the legislation.

Councillor Hay: I do not have a problem with saying that local authorities need to reduce the carbon emissions from their buildings, draw up plans to mitigate the effects of flooding and stop throwing all their rubbish into tips. I have no quibble with doing that sort of thing. It is implicit in signing up to such generalities, if you like, that there will be deep discussion between the Government, local authorities and their partners about how we go forward with the detail. I am not signing up to this just so that the Government can tell us what it wants us to do and expect us to fund it from budgets that are not going to rise. I would have thought that the sheer magnitude of the bill indicates to everyone that there is a cost attached. It is difficult to work out what that cost will be because there is so much in the bill and so much detail that councils and other organisations will have to draw up. We cannot put a price tag on that at the minute.

It is a responsible way forward for local government to say that we are content with the generalities in the bill and are starting to do certain things already. There will be costs, but we need to sit down and talk about them.

Des McNulty: I will put on the hat that I formerly wore as convener of the Finance Committee. If you, as local government, say that you are prepared to sign up to a measure in principle but will come back and discuss the costs later, the Government—whatever Government it happens to be—will turn back to you and say that you signed up to the measure and it is under no obligation to fund the costs because they have not been prequantified. There must be a deal that concerns not aspirations, but concrete delivery mechanisms. Otherwise, we are just playing.

15:00

Councillor Hay: In that case, we will have to do nothing until we have had all those discussions. I do not know how long it will take until we sit down and discuss in intimate detail how much all the proposals will cost.

This is not in our submission and perhaps I am speaking out of turn, but I would like local authorities to continue along the voluntary track that they are on—to continue to draw up the plans that they have in train through the sustainable development duty, examine what their buildings emit and consider how they can improve transport infrastructure—and sit down responsibly with a responsible Government to discuss how we take all that forward for the future. Climate change is too big a topic and is too important to Scotland—to the world, in fact—for us to stop doing all that until we work out down to the last ha’penny how many pounds, shillings and pence we will need. If we do that, nothing will be done. I would far rather continue doing what we are doing and talk in a mature manner with everybody concerned about how to make progress.

Ken Gibb: I, too, hope that I am not talking out of turn, but we all realise that we could consider a range of spend-to-save proposals. For example, we are just beginning to get to grips with the carbon assessment of capital investment projects and the real return on investments. There is still a fair degree of scope to work within our existing budgets, which we clearly have to do at the minute, unless new resources are made available. However, there is scope for us to be more imaginative about how we make capital investments and spend revenue. We are engaged in that almost daily. That is the only situation that we can live with at the minute.
Des McNulty: There is uncertainty about how aspects of the bill might be delivered. However, the one thing that is certain is that it is not cost free. We are a responsible legislature and, if we are to pass legislation—particularly legislation that is as broad ranging as the Climate Change (Scotland) Bill—we require at least an outline delivery plan to enable us to understand what the proposals actually mean.

Local authorities account for something like 34 per cent of the budget. If, with all the expertise that is at their disposal, the bodies that spend 34 per cent of the budget are not able to provide us with an assessment of the bill’s implications, how are we expected to perform our function? That is not about whether we are willing to tackle climate change or are in favour of tackling it, but about making a proper, rational and systematic assessment and asking what the bill means. With respect, Councillor Hay, if I was in government—

Councillor Hay: As I understand it, the bill is broad ranging. I agree that we need to know the cost. You were not here when we talked about the need for a minister-led body that could examine the issue, including the gaps, the barriers and where new resource will be needed. Such a discussion needs to be led from the top, because budget planning is associated with the bill. That is Parliament’s point of view.

Councillor Hay: The bill is broad ranging. I agree that we need to know the cost. You were not here when we talked about the need for a minister-led body that could examine the issue, including the gaps, the barriers and where new resource will be needed. Such a discussion needs to be led from the top, because budget planning is associated with the bill. That is Parliament’s point of view.

Shirley-Anne Somerville: A few different percentages have been bandied about, such as that local government gets 34 per cent of the budget. I think someone said earlier that it accounts for 2 per cent of emissions. Given the scale and importance of the issue, is it not advisable that we do not delay or seek to put barriers in the way of this important bill before the Copenhagen summits, simply because of 2 per cent of emissions? Given that we are talking about a framework document rather than policy directives, there is room for each local authority to come back with specific proposals. Each authority will be affected differently and can adapt to some of the climate change issues.

Councillor Hay: Yes. That is a sensible way forward.

Ken Gibb: Absolutely.

Alison McInnes: I want to return to something that Councillor Hay said earlier. She was at pains to stress that the investment that local authorities will make is really up to them—she stressed their autonomy. Given my background, the witnesses will understand that I respect that autonomy. However, we are talking about tackling something unprecedented. I want to explore with you the tension between local autonomy and the need to address a much wider issue. You stressed that all local authorities had signed up to the climate change declaration. I would like an assurance that that is not something that is done and dusted and put away in the cupboard. Choices have to be made about social work, education and so on, but surely the commitments that you have made must underpin that. I would like to hear that assurance from COSLA.

Councillor Hay: We have set up the climate change task group, which I chair through COSLA. That group involves Ken Gibb’s organisation, SOLACE and finance officers. We are monitoring anything to do with climate change—in other words, the declaration. We have taken an active interest in the bill and the adaptation consultation. We are doing what we can at our level, if you like, to ensure that we take forward the declaration, which the Government has signed, too.

Ken Gibb: It might be useful to say that the declaration is very much alive and developing. A number of authorities are looking at rolling it out across community planning partners and other public sector organisations. Some other organisations have used it as a starter for developing their own similar, but not identical, work. Some of the universities and other academic institutions are about to launch something in the same spirit that is allied to the declaration and which, to all intents and purposes, is seeking to achieve the same ends. The declaration is very much a developing piece of work. We seek to continue to expand and develop it.

Alison McInnes: I suppose that the proof of the pudding will be when we start to see changes in budget provision. When will those high-level commitments start to flow through into significant changes in budget spend?

Councillor Hay: They are already starting to come into the SOAs. If you look at them, you will see commitments to the climate change declaration.

Ken Gibb: There is a small caveat in that a lot of the climate change declaration stuff sits below the waterline in terms of action planning, so it might not appear as a high-level indicator in all the SOAs. In a significant number, it will appear more appropriately in the action planning part, which is the working end of the SOA, if you like.

Anil Gupta: On the carbon reduction commitment, about three quarters of our members are covered by the cap and the carbon trading
scheme, albeit that they are not terribly pleased to be involved in the trading scheme. The effect of that is that the councils that have been involved in the carbon trading councils programme that was launched by the Local Government Information Unit are taking it very seriously. Carbon use within councils’ service functions is starting to become a main consideration alongside finance. We envisage that that is likely to roll out across a number of councils as the finance managers start to look at carbon as a mainstream consideration in their input to policy.

The Deputy Convener: I thank the witnesses for their evidence this afternoon. If there are issues that have been missed out of our discussion this afternoon, witnesses should write to the committee.

Councillor Hay: Thank you for listening.

The Deputy Convener: You are welcome.

15:10
Meeting suspended.

15:12
On resuming—

The Deputy Convener: I welcome the second panel. The witnesses have given evidence to the Economy, Energy and Tourism Committee on part 5, chapter 3 of the bill, which is on energy efficiency. The panel consists of John Stocks, who is the Carbon Trust’s manager for Scotland; Mike Thornton, who is the Energy Saving Trust’s Scotland director; and Chas Booth, who is the senior press and parliamentary officer for Scotland for the Association for the Conservation of Energy. Before we move to questions from the committee, does any panel member wish to make a short opening statement?

Chas Booth (Association for the Conservation of Energy): I will, for committee members who do not know us, briefly introduce the association. The association undertakes research and campaigns to reduce overall energy demand as part of a secure and sustainable energy future. Our work reflects the interests of our members—the major manufacturers and installers of energy-saving equipment across the United Kingdom—and is funded largely by them. We are members of the Stop Climate Chaos Scotland coalition and the Scottish fuel poverty forum.

Mike Thornton (Energy Saving Trust): The trust works to persuade the domestic audience—householders and citizens such as you and me—to save carbon and energy in our daily lives, and hence to save money. We always figure that we have to engage with millions of people to produce mass change. Our interest in the bill focuses on that area.

John Stocks (Carbon Trust): We work largely with the business audience, helping businesses to deliver emission reductions now and in the future through the use of existing and future technologies.

We welcome the bill. We are particularly pleased about its emphasis on the numbers and on quantitative and not qualitative targets. We are also pleased about the rigorous approach that the Government has taken in setting annual targets and asking for detailed annual reports.

In our discussions with small businesses on how to set their carbon footprints, we say up front that they must spend time on careful consideration of the boundaries of their emissions footprints—what is in and what is out—and on careful setting out of those boundaries.

15:15
I see little detail in the first four parts of the bill about sorting out the boundaries of Scotland’s footprint, nor do I see that a lot of thought has been given to the calculation methodology. Once you have that boundary, how do you calculate the footprint? You could argue that the detail can be worked out as time goes by and we progress with the bill.

It is important to any organisation that is presenting its carbon footprint that it knows what its data sources are and that those data are available. One concern I have is about whether there is a need for statutory obligations on energy suppliers and utilities to provide the right sort of data to Government and local authorities so that they can properly calculate their footprints.

The Deputy Convener: I am keen to get on to questions. You can perhaps address in your responses issues that you want to bring up.

Do you have general views on how consultation on the bill has been carried out, including on part 5?

Mike Thornton: The Energy Saving Trust feels that the consultation process was helpful and informative for all parties. I do not know what committee members think, but we definitely think that it is good that there were so many consultation responses—a phenomenal number—because one of the key targets for the bill and for the agenda that it sets out is engagement of organisations and the public. We definitely seem to have made a good start, which is encouraging, as far as it goes.
Chas Booth: I echo Mike Thornton’s comments. The consultation was excellent. We attended a couple of events at which a number of stakeholders were encouraged to give their views. That was fantastic—the bill team is to be congratulated on how it consulted on the bill.

Our only concern is the lack of consultation on specific measures to tackle emissions from existing buildings. In February last year, the Scottish Government gave notice on its website of a forthcoming consultation on emissions from existing buildings. There was a consultation in, I think, November of last year on non-domestic buildings, but there is still to be a consultation on domestic buildings, which account for a third of Scotland’s emissions, so there is a major gap. That is the only concern that I would highlight about the consultation process.

The Deputy Convener: You feel that that is “a major gap” in the consultation process.

Chas Booth: Yes. The bill as drafted wills the ends—the emissions reductions—but does not deliver the means to deliver them. Energy efficiency is the cheapest, quickest and most cost-effective way of delivering those emissions cuts, so there should be something in the bill on domestic energy efficiency. That is a major gap.

The Deputy Convener: I am interested in the targets. Are the 2050 and interim targets achievable? Will the bill work and achieve what it is meant to?

Mike Thornton: The trite answer is that if it does not, we are all in trouble. The previous panel made comments about new technologies, particularly in transport and so on, and there is no doubt that new technologies have a part to play, but in respect of saving carbon and reaching the targets in the bill, we do not need magic bullets: we need to apply consistently techniques, approaches and technologies that are already here, over the period for which the bill sets targets. If we do that we can achieve them.

I echo Chas Booth’s comments that energy efficiency is very much part of the armoury that will be needed.

John Stocks: I could not be certain yet. I am not sure that I can stack up the sums to say, “Yes—I can see an 80 per cent reduction being achievable.” However, I see some very significant measures that together can start to produce very deep reductions. It will not be one action that will deliver a cut of 80 per cent; it will be a number of actions across the board because of how they add together.

If we can cause the energy consumption—heat demand and electricity demand—of buildings to fall dramatically through increased energy efficiency, we can start to use low-carbon sources to meet that residual requirement for energy. If we add together the effects of a decarbonised electricity supply and of using renewable sources for heat, we will start to deliver the deep cuts that are needed if we are to achieve the 80 per cent target by 2050.

Chas Booth: We think that a target of at least 80 per cent by 2050 is right for Scotland. That is in line with what the Intergovernmental Panel on Climate Change recommends. It is important to keep that target under review. Clearly, there will be a role for a Scottish advisory body to ensure that the target reflects current science.

We believe that the target can be achieved with the right policies. The Scottish Government recently commissioned a report from AEA Technology on mitigating climate change in Scotland, which contained an assessment and identification of initial policy options. From memory, I think that it identified policies that would deliver a reduction of around 78 per cent in carbon emissions, which is only 2 per cent less than the target.

The Deputy Convener: What is your view on annual targets and the Scottish Government’s suggested emission tracks?

Chas Booth: We think that annual targets are vital and that they should be set in statute from the start.

Our industry needs time to invest in the processes and the manufacturing equipment that we need in order to deliver insulation products and highly energy-efficient products. If our industry is to have the confidence to invest in that, we need to be certain that Government is serious about delivering those cuts. We think that the best way to do that is for Government to set annual targets in statute right from the start, which would be a way of saying that it is absolutely serious about delivering the cuts and that it wants the entire economy to help it to do that.

Statutory annual targets of at least 3 per cent, which I think is what was promised in the SNP manifesto, should be delivered from the very start.

Mike Thornton: We, too, support the use of annual targets. As the committee has been told on many occasions, the early cuts count most, because the sooner we start to make cuts, the smaller will be the area under the line on the graph of carbon emissions between now and 2050.

The bill takes the right approach, but we have to bear in mind what that approach means. Annual targets can lead to a temptation to meet each annual target in turn and to forget about the background question on how you will meet the annual targets in 15 years. There must be a twin-
track approach. That is implicit in the bill, but it is worth stating explicitly. There are elements that are on different timescales that need to be done at the same time as one another. For example, next year, we will have to work to meet the short-term annual targets at the same time as we are doing things that will put us on track for medium-term and longer-term targets. That way of thinking must be taken on board.

John Stocks: Until recently, our growing economy and our business-as-usual approach have meant that there has been growing energy consumption. However, we have to turn that around so that there is declining energy consumption. It is therefore essential that we have routine and regular data to measure that. I strongly welcome annual targets and annual reporting.

Des McNulty: There are three basic criticisms of the bill. Earlier, with COSLA, I dealt with one of them, which is the issue of financial costings. I would like to raise the other two with you. One of them concerns the reductions in the medium term, and the fact that, between now and 2020 there is a flexible target, as it were, rather than an annual target of a 3 per cent reduction. Could we set a higher bar for the period between now and 2020? If so, where should the bar be set?

It has been suggested that the bill should include a commitment to public engagement and that consideration should be given to a framework for the delivery of public engagement. Should public engagement figure in the bill? That is an appropriate question to put to your organisations.

Mike Thornton: Engagement is key. Public awareness of climate change and the need to do something about it by cutting carbon emissions is high, but engagement as a result of that awareness is relatively low. The trick is to get people to understand that the issue is real and matters to them and that they will need to take action personally. The bottom line is that the country cannot make carbon savings of 80 per cent unless pretty much everybody agrees that they must play a part in that. People have to see that they must act and that benefits will be gained by their doing so.

Many of the benefits are to do with finance and lower energy bills, but there are also many benefits to do with quality of life. People often think that climate change means that they will not be able to have a car. They think, “No car—can’t travel”. We need to put the proposition that other forms of travel and public transport will be more convenient than driving oneself. There is a big job to be done to make people understand that the hair-shirt model of responding to climate change is not necessarily the future for them.

In the context of public engagement, the duties that the bill will place on public bodies are vital. Nobody can expect individual members of the public to engage unless the bodies that work for them are seen actively to be pulling in that direction.

John Stocks: I touched on the issue that Des McNulty raised in his first question when I talked about how it was business as usual, with rising demand, until about 18 months ago.

We need to turn that round by getting on to a trajectory of reductions of 3 per cent per year, but we must go through a transition if we are to reach that point. I agree with Mike Thornton that we need to do that as soon as possible. My guess is that we ought to be able to reach that point sooner than 2020; we should certainly aim to get there much sooner. Long-term action is needed, because before we start to see big changes we will need to have designed, built and put into operation buildings that have smaller carbon footprints. There will be a time lapse before we get onto a trajectory of 3 per cent annual reductions, but I doubt that it needs to take until 2020 for us to get there.

I agree with Mike Thornton on public engagement. Most private householders are also employees. We need to engage with people at home and at work on delivery of reductions.

Chas Booth: I also agree with what Mike Thornton said about public engagement. One of the best ways of engaging the public is for the public sector to take a lead. For example, we were pleased by the Westminster Government’s commitment to procure only public buildings that are in the top quartile of energy performance. It would be extremely useful if the Scottish Government could match that commitment. That would be one way of ensuring buy-in from the public.

Des McNulty asked where the bar should be set in the middle distance. At the committee’s meeting a few weeks ago, a witness suggested that the target should be for a reduction of about 50 per cent by 2020. We think that that is about right. However, annual targets are also essential.

The previous panel of witnesses today suggested that annual targets are not appropriate because of the so-called cold-winter effect, but we do not believe that that argument holds water because the variability that a cold winter would bring would not be sufficient to knock us out of the 3 per cent threshold. If the Government misses its 3 per cent target, it has to come back to Parliament and explain how that happened and how it will ensure that it gets back on track. It is not as if somebody is going to take the Government to court for missing its 3 per cent
target. All that has to happen is that the Government must focus on why it missed the target and on what it is doing to get back on track. We do not believe that the cold winter argument holds water.

15:30

Alex Johnstone: I bet you are surprised that I am raising the subject of aviation and shipping. Given your organisations' experience in benchmarking in both the business and domestic sectors, can you contribute anything to the measurement processes, which are currently discouraging some people from pushing for aviation and shipping to be included in the bill?

Chas Booth: I watched over the internet when transport industry representatives gave evidence to the committee a couple of weeks ago, and I was surprised, to put it mildly, that they argued, in effect, for a special case to be made. My understanding is that aviation and shipping emissions are already measured and reported to the IPCC under so-called bunker fuels. I fully accept that that measurement process might not be perfect, but it is better to have an imperfect process than no process. We entirely reject the idea that there should be special pleading for one sector of the economy simply because it contributes a great deal to Scotland's economic growth. Our sector contributes to economic growth. Our sector contributes to economic growth. Our sector contributes to economic growth. Our sector contributes to economic growth. Our sector contributes to economic growth. Our sector contributes to economic growth. Our sector contributes to economic growth. Our sector contributes to economic growth. Our sector contributes to economic growth. Our sector contributes to economic growth. Our sector contributes to economic growth.

On your specific question, there are measurements in place to establish emissions resulting from the aviation and shipping sectors, so I cannot see any justification for leaving those sectors out of the bill.

Mike Thornton: You must think about the signal that you will send to other sectors if you exempt a sector in practice or in principle. Either the target is for everybody or, probably, it is for nobody.

John Stocks: Aviation and shipping have significant footprints in their own right—about 3 per cent—but the more important factor is probably their rate of growth. You must include them in the bill because you have got to curtail that growth. You need to put them under the same disciplines as every other sector.

On the point about our experience, we have done a lot of work on the carbon footprinting of products, and when we do that work we often consider transport costs. We begin to see one or two myths being broken as we factor in the emissions from transportation.

Charlie Gordon: I have a supplementary question on that point. Mr Booth said that, in the context of the bill, his sector could contribute to economic growth and additional jobs. Do you have any figures to show in net terms what the bill could mean for the creation of jobs?

Chas Booth: Off the top of my head, no. I would need to get back to you on that. The one figure that springs to mind is that the Scottish Government announced that it aims to create—I think—16,000 jobs from the renewable energy sector. In my view, energy efficiency and insulation can do a lot more than that.

I do not know whether my colleagues have any figures on jobs.

John Stocks: No.

Mike Thornton: I have no specific statistics on that.

Chas Booth: I can certainly research that and get back to you.

The Deputy Convener: That would be helpful.

Alex Johnstone: What roles do your various organisations already play in advising the Scottish Government on emissions reductions?

Chas Booth: I can probably answer that in a very short space of time. The Association for the Conservation of Energy is a member of the Scottish fuel poverty forum—obviously, tackling fuel poverty in the right way can also reduce greenhouse gas emissions. We are also in fairly regular discussions with Scottish Government officials on, for example, the energy efficiency loan scheme that the Government hopes to introduce in the near future. We are in regular dialogue with the Government, but I hand over to my colleagues to comment on advice.

Mike Thornton: As I said at the beginning, the Energy Saving Trust delivers many programmes on the Scottish Government's behalf, most of which integrate with households to get them to reduce emissions through transport, microrenewables and energy efficiency. In delivering those programmes and discussing them with the Scottish Government, we feed back much experience on what works and does not work and we offer what we hope are insights and advice on pathways to make initiatives more effective.

The Energy Saving Trust has a strategy and policy team, two members of which are based in Scotland. We produce strategy and policy reviews and reports in our own right, which we present to and discuss with the Scottish Government in the hope of adding to the policy debate. We also have a wide range of expertise and statistics, which we place at the Scottish Government's service.

John Stocks: The Carbon Trust advises the Scottish Government in two ways. First, as the Scottish Government is a large administrative
organisation with a large footprint in its own right, we are taking it through carbon management in the same way as we have taken and are taking local authorities through it. We advise the Scottish Government in the same way as we advise any other large business client.

Secondly, our insights team considers policy options, and the output of its work is available to the Scottish Government. We routinely brief officials on that work and its implications for Scottish policy.

Alex Johnstone: I will move on to the main question on which I would like your opinions. The bill provides for the possible creation of a Scottish committee on climate change, but initial reliance will be on the UK Committee on Climate Change. Does the UK committee have the necessary expertise to perform the advisory role for the Scottish Government? With the benefit of your experience, do you feel that a Scottish committee would fulfil that role more appropriately?

Mike Thornton: Our view is that, as a previous panellist said, the UK committee provides a large centre of expertise. Some of the policies that affect UK and Scottish climate targets are UK policies, so the sensible default position is to wait and see. If the UK committee can focus on Scottish needs and circumstances, we see no reason why it should not deliver what the Scottish Government needs. The committee has the expertise, and we hope that it will also have the focus. If that proved not to be the case or if Scottish circumstances and needs required something that was closer to and more centred on Scotland, the option of the Scottish committee would exist. We would judge that on the evidence. Reinventing the wheel is not necessarily the most cost-effective strategy if another wheel is not needed. We cannot judge that yet.

Chas Booth: I disagree slightly with Mike Thornton, given what the UK Committee on Climate Change’s first report says about Scotland. When this committee took evidence from the Committee on Climate Change’s chief executive and one of its researchers a few weeks ago, they admitted that their first report took a broad-brush approach to Scotland—it might also be described as cursory.

I understand that, because we do not yet have a Scottish climate change act, the Committee on Climate Change’s focus is on Westminster, but the initial report’s broad-brush approach suggests that that committee does not have the resources to give independent advice in Scotland. I also question whether the UK committee has sufficient insight into the Scottish situation. On energy efficiency, for example, Scotland’s building stock has a different profile. That means that the challenges are different in achieving the energy efficiency savings targets.

We would prefer a separate Scottish committee. It is of course important that, as Mike Thornton says, we do not reinvent the wheel, and that the Scottish committee has close links with the UK body, but at the moment the evidence suggests that the UK Committee on Climate Change does not have the expertise or resources to enable it sufficiently to perform the role that is envisaged for it in Scotland.

Mike Thornton: Perhaps that is the challenge that the committee faces. The question is, will it achieve focus and rise to that challenge?

John Stocks: On its website, the Committee on Climate Change sets out four priorities: to “Provide independent advice to Government on setting and meeting carbon budgets and targets”, to “Monitor progress”, to “Conduct independent research and analysis” and to “Engage with representatives”. In at least two of those areas, there is benefit for Scotland in getting the same output of independent research and analysis of global issues as the rest of the UK. I am a little more nervous about whether the committee, with its UK-wide structure, has the resources and time to dedicate to the large amount of Scotland-specific reporting that will be required to meet the bill’s objectives.

Rob Gibson: My question relates to our improving knowledge of how progress will be measured through the annual reporting process. Do you think that the mechanism for reporting is sufficiently robust? How it could be improved?

John Stocks: I answered the question in part in my opening comments. I see little detail of the reporting and data-gathering mechanisms and calculation methods that will be used. I am uncomfortable about saying that we know that they are sufficiently robust. I am particularly concerned about data gathering, an issue with which our clients routinely have difficulties. You might think that it would be easy to get good data, but it is not. Unless we focus on data, know which data we want and put in place adequate provisions to ensure that they are made available, reporting will be weakened.

Rob Gibson: Has the Government not already indicated that data will be sourced from the IPCC? Is it not looking to provide the industry standard level of data? When we asked it about particular kinds of data procurement, that was the default position. Are you criticising the level or detail of those data?

John Stocks: I would have to look at the data to which you refer.

Rob Gibson: They relate to many of the issues that we are discussing. Are there specific points
about which you are uncomfortable? Can you identify a particular area in which the data hold no water?

John Stocks: I am particularly interested in data relating to the energy that is delivered in Scotland and whether there is provision for us to get robust data from the utilities.

Rob Gibson: Would anyone else like to comment on the issue?

Mike Thornton: My point relates not to data but to reporting. We are pretty supportive of the mechanisms for reporting, but those are limited to what the bill defines as Scottish emissions and will not take into account Scottish consumption of goods and services that generate emissions abroad. The Welsh Assembly Government is proposing to report separately on Wales’s total consumption emissions. We float the idea that doing the same here might add to the picture that the Scottish Government gets of Scotland’s overall carbon footprint. In earlier evidence-taking sessions, the point was made that there is potential for us to get that information out of the carbon footprinting tool, which might be a way forward. We think that it is important to take exported emissions into account.

Rob Gibson: We can certainly ask the minister about the matter.

15:45

Chas Booth: I agree with Mike Thornton that it is important to measure exported emissions. The international standard is that targets are set in terms of production, but we think that consumption should also be reported, to ensure that we are not exporting all our emissions to China. The point has been made that, although Scotland’s emissions dropped substantially when Ravenscraig closed down, we continued to use steel—we just imported it from China.

Rob Gibson: Okay. Let us move on to the duties of public bodies. We have just heard evidence from the local authorities. Do you think that the public sector generally is delivering the required emissions reductions just now, given the current knowledge?

Chas Booth: No, I am afraid not. I will give you two pieces of evidence that show that the public sector generally is not doing quite enough. Scottish planning policy 6 was introduced more than two years ago and requires that all new developments over a certain size incorporate on-site microgeneration in order to reduce the CO₂ emissions from those buildings. It is required that local authorities implement that national policy in their local plans. Nevertheless, recent research found that only eight of Scotland’s 32 local authorities have done that. To me, that suggests that local authorities are not taking action where they can.

Rob Gibson: I wonder why some authorities are slower than others in implementing the policy. Are there difficulties for authorities in applying SPP 6?

Chas Booth: I recognise and sympathise with the comments of the previous panellists about finance. If local authorities cannot access finance, that is a key issue. There is a central energy efficiency fund to which local authorities can apply for money to make energy efficiency improvements. We would like that funding to be increased and we would like the processes by which local authorities can apply to the fund to be streamlined and made less bureaucratic. Nevertheless, our perception is that local authority planners have not had the support and guidance from central Government that they should have had to ensure that SPP 6 was rolled out smoothly and effectively.

Some local authorities in England have been running similar planning policies for nearly a decade. There is lots of expertise out there and we would be more than happy to train up local authority planners in how to implement SPP 6. Unfortunately, we have encountered a certain resistance from the Scottish Government to our rolling out that guidance to local authority planners. We would not lay all the blame for the slowness of the roll-out on local authorities; some of the blame must lie with the Scottish Government.

Rob Gibson: This is opening up a whole can of worms that it could take a long while to get to the bottom of. We need some data. If local authorities are not delivering the required emissions reductions, should specific duties appear in the bill to ensure that they do?

Chas Booth: Yes, absolutely. The previous panel’s main objection to that was the fact that funding is not available. We think that it is crucial that funding is made available to them, especially in the present credit-crunch climate. That is why we would like the central energy efficiency fund to be increased.

It may be a little cruel, but I would paraphrase the view of the previous panel as, after St Augustine, “Oh God, give me responsibility for climate change emissions, but not yet.”

Rob Gibson: We do not need the hyperbole; we are trying to take people with us. We ought to be asking ourselves whether there are specific duties that should appear in the bill. We can talk about the money when the secondary legislation is introduced. Do you think that there are specific duties that must be in the bill now?
**Chas Booth:** Yes. As I said, there should be duties in the bill. The only objection that the previous panel raised was about the lack of finance. If finance is made available, there can be no reasonable objection to the bill placing duties on public bodies.

**Rob Gibson:** I am interested in teasing out of you the specific duties. What should they be?

**Mike Thornton:** I do not quite follow the question. Are you inviting us to suggest specific measures that local authorities should take to reduce emissions by 3 per cent a year?

**Rob Gibson:** I am talking about public bodies in general, not just local authorities. Many other bodies have a part to play.

**Mike Thornton:** The specific duty should be expressed as a sectoral or organisational target, so that it conforms to the target approach in the bill. That is my answer to the question. I agree that it is non-specific, but I think that that is the right approach. It is up to the organisations and bodies concerned to decide how they will achieve the target, but they must achieve it.

**John Stocks:** Local authorities and health boards must achieve the same level of cuts as everyone else, so if we need to achieve an 80 per cent cut, that is what they will have to achieve.

It is not long—it is two years, I think—since the Scottish climate change declaration was signed. There has been a lot of movement since then. Many organisations have come through carbon management. Some of the leaders that went through that process a few years ago are on a trajectory that makes it begin to look as if emissions reductions of between 2 and 3 per cent will be achieved each year. A large number of organisations are now going through carbon management; they are starting out on that path and are beginning to make cuts. From what I have seen of the plans that they are preparing, they are ambitious and plan to get on to the same trajectory. We know that some organisations have got there and that many others are moving in that direction, but it is a little too early to say whether they will succeed in making those reductions on a voluntary basis. They are on the right path. Huge changes have been made over the past two years.

**Rob Gibson:** Those were extremely helpful remarks; thank you very much.

**Alison McInnes:** The deputy convener pointed out that the Economy, Energy and Tourism Committee took detailed evidence on the bill’s provisions on energy efficiency and renewable heat, but rather than simply requiring that an energy efficiency action plan be drawn up, should the bill include more specific legislative proposals?

**Mike Thornton:** Our overall view on the domestic sector’s path to achieving an 80 per cent cut in carbon emissions is that, over time, regulation of some form will be required. A lot can be done voluntarily and through engagement, but if such deep cuts are to be achieved, some form of regulation will eventually be required, so we think that it might be appropriate to include in the bill a provision that would allow such regulation to be made in the future. Our view is that that is a necessary tool to have in the box as we move forward.

**John Stocks:** Buildings—business buildings, public sector buildings and domestic dwellings—make up the biggest single part of our carbon footprint. If we do not tackle buildings, we will not tackle climate change, but the bill makes little reference to them. As well as building new buildings to strict low-carbon standards, we need to start thinking about refurbishing the existing building stock to the same low-carbon standards. If the bill were to contain additional measures on energy efficiency and renewable heat, we would like them to be on buildings and the building regulations, particularly in relation to the refurbishment of existing buildings.

**Mike Thornton:** I do not want us to be too much of a double act, but the building regulations offer a pathway to greatly reducing carbon emissions from new build. When I mentioned regulation, I was referring to the need to regulate existing buildings. Two thirds of the buildings that will be standing in 2050 have already been built. When it comes to carbon emissions, retrofit is the big game in the domestic sector.

**Chas Booth:** I agree with many of my colleagues’ comments. As I said earlier, the bill as it stands wills the end, but not the means. There are two energy efficiency provisions in the bill, one of which is for an energy efficiency action plan, which was first promised to us in 2004. Primary legislation is not needed to bring such a plan forward. In November last year, the Scottish Government promised that it would bring forward a plan by the end of 2008. We are extremely frustrated that it has delayed publishing a plan by at least another year. Of course, we welcome the statutory requirement for the Government to bring forward a plan, but such a requirement was not needed; the Government could have just got on and done it. We are frustrated because many things that do not need to be statutory have been put into the bill, whereas some provisions that should be statutory—such as giving ministers powers to require minimum energy efficiency standards at point of sale or rental; Mike Thornton mentioned that—are not in it. A number of studies show that such a provision will be needed for us to
achieve the 80 per cent cut that is required by 2050 and the fact that it is not in the bill is a major omission.

The Scottish Government cannot simply wish emissions away by setting targets; it must enable us—the wider Scottish economy—to deliver on those targets. The bill is hollow. It does not include measures that can help us to deliver on its targets and is, as it stands, doomed to failure. We will get nowhere unless amendments are lodged at stage 2 to tackle emissions from domestic buildings and strengthen the existing provisions for non-domestic buildings.

The second energy efficiency provision in the bill relates to non-domestic buildings. All that it does, as the previous panel made clear, is expand the provision for those buildings that will be required to have an energy performance certificate. The European Commission is already discussing going beyond that in considering what it wants from the energy performance of buildings directive, which is currently being recast. We think that it would be useful to include in the relevant section of the bill a measure that was included in the consultation that the Scottish Government put out last year, which is to require that certain cost-effective improvements that are listed on the energy-performance certificate will be put in place by the building owner over a certain period of time. We think that that would be non-controversial as long as finance was available. An energy efficiency loan scheme already exists for small and medium-sized enterprises. It is not big enough—it should be bigger—but finance is available, so we cannot see any reasonable objection to such a measure being included in the bill at stage 2.

Stephen Boyd (Scottish Trades Union Congress): I thank the committee for the opportunity to give evidence on this very important bill.

I would like first to highlight the reporting on our submission by BBC Scotland this morning. I do not know whether anyone here heard it, but it was based on something of a misapprehension that our written evidence speaks only about energy workers. I hope that it is reasonably clear to everyone that our submission covers the potential for the bill and climate change generally to impact on all the workers whom we represent. I would not like people to labour under the misapprehension that we are focusing on one sector only.

Our written submission refers to the work that has already been carried out by the joint forestry trade unions on the adaptation part of the bill. The forestry trade unions are sending a further written submission to the Rural Affairs and Environment Committee, so that evidence will be provided to you in due course.

The Deputy Convener: Thank you. I will start with the questions.

How much engagement did the STUC have during the development of the bill?

Stephen Boyd: Are you asking about internal engagement?

The Deputy Convener: I am asking about consultation around the bill and its development.

Stephen Boyd: We did not respond in writing to the first Scottish Government consultation, which reflects the considerable pressure that we were under last year, as you can imagine, with the deteriorating economy. We have looked quite closely at the bill now, and have had the opportunity to address it through our democratic structure. It has been discussed by a number of our committees, so I am quite confident that the written evidence that we have provided to the committee has the full backing of the STUC and our affiliated trade unions.

Anne Douglas (Prospect): I completely agree with Stephen. As part of that democratic committee structure, I was involved in the consultation along with the other affiliates.

The Deputy Convener: How does the STUC develop a coherent policy on climate change? How do you respond to the issues around climate change and the bill?

Stephen Boyd: We have done a number of things during the past few years. Although it pains me somewhat to say it, we have relied on the work that has been carried out by the Trades Union Congress at UK level. It has put a considerable amount of resource into the greening the
workplace agenda. The TUC benefited from Carbon Trust funding—which we have been unsuccessful in obtaining to date—which has allowed it to promote a very progressive agenda on the issues that we discussed in our written submission, including greening the workplace, the just transition framework, the transitional skills strategies, and so on. The TUC has developed a lot of material, with which I would be more than happy to provide to the committee.

Last year, we also held our first annual climate change conference at which we had a number of speakers from the Government and other stakeholders. It was an important event for pushing climate change up the trade union agenda in Scotland. We are looking to hold another similar event later this year. It is fair to say that unions are now far more engaged in the issue than they were previously.

Anne Douglas: If I may, I will just supplement that slightly. Different affiliates will do different things, but the committee might be interested to know that Prospect has run two pilot schemes on greening the workplace. One was with Scottish Power in Motherwell in an office environment, rather than a power station. A number of employees wanted to become environmental reps, which was interesting and good, as was the company’s buy-in on working jointly to try energy efficiency measures in the workplace. Within a year, that Scottish Power site managed to reduce by 10 per cent its carbon emissions through jointly agreed initial measures. It has identified more measures and, if they were implemented—some, if not all, would have costs—the company would reduce its carbon footprint by 40 per cent.

The second pilot organisation is public sector rather than private sector—the National Library of Scotland, here in Edinburgh. We have one training course and are about to embark on another. Fifteen employees in the National Library have expressed an interest in becoming environmental reps. Again, management has agreed to set up a joint committee, and we hope to develop that.

I want to pick up on something that a previous witness said about public engagement. We have found that members who are not normally active in trade unions want to become active in environmental campaigns that we run, which clearly pleases us as trade unions. However, trade union members are not just employees; they are also householders and, in many cases, shareholders, either directly or indirectly. To go back to Stephen Boyd’s point about funding, we believe that trade unions and the environmental reps, of whom we are appointing increasing numbers, are a good way to get to an audience that goes much wider than just employers and fellow employees. They reach a much wider social landscape in Scotland and, indeed, in the rest of the UK.

Charlie Gordon: Do you believe that the emissions reduction targets in the bill are achievable?

Stephen Boyd: Yes. As we said in our written submission, they are challenging, but achievable—given appropriate investment.

Charlie Gordon: I asked the previous panel whether they had a feel for what the net increase in jobs might be from implementation of the bill’s proposals. We hope to get information in due course about that. Do you have a feel for what the bill’s impact on existing jobs might be or for what new jobs might be created? Should we have a debate—in the context of the bill—about development of new skills, or about adapting skills as will be required to move to the low-carbon economy that is needed to hit the bill’s targets?

Stephen Boyd: Yes, I think we should. For a number of years now, we have heard extravagant rhetoric from politicians of every persuasion about the potential jobs dividend from developing our renewable energy and environmental sectors. We are supportive of that agenda and believe that jobs can be derived from that. On balance, we expect that to be beneficial to Scotland. However, I do not think that the detailed work has been done that would allow us to make a properly informed estimate of the net jobs impact. There are bound to be pluses and minuses, but it is difficult to give detail.

Charlie Gordon: I am interested in the minuses, too. Is there a potential downside or threat to existing jobs from the bill?

Stephen Boyd: If the bill’s implementation is not properly managed through our just transition strategy, as we outlined in our written submission, and if people are not sufficiently engaged in the agenda—I do not think that they are, at present—I can envisage situations developing whereby difficult decisions are made to close energy-intensive workplaces in order to meet targets. Clearly there is a potential downside.

One of our concerns is that, for a number of years and in Administrations of all persuasions, the underlying philosophy appears to have been that if we get the market broadly right, the jobs will appear—the market will deliver them. We do not believe that that is the case. There has to be a far more interventionist strategy. For a number of years, we have spoken at length about the need for a low-carbon industrial strategy for Scotland. Government has to act; it has to intervene to ensure that the jobs appear as we develop the sector.
Charlie Gordon: The Prospect witness has already given examples of the involvement of workers and trade union members in environmental activities in their workplaces and has reminded us of their wider role as citizens. Does the STUC have a system of communicating climate change messages to its affiliates? Are you aware of other programmes of behaviour change that are being driven by the unions?

Anne Douglas: On how the STUC communicates, a fairly extensive report was written after the conference last year to which Stephen Boyd referred. The report and the various contributions that were made by speakers at the conference were circulated widely among our affiliates.

I cannot talk for all unions, but when Prospect meets members of branches at annual conferences, we always have a session on the environment, just as we always have a session on international development. We do not talk just about pay and overtime rates; the discussion is wider than that. I have no doubt that other affiliates do similar things.

I hope that I understood your question on behaviour change correctly. I would point to the example of health and safety reps. Union reps have improved the health and safety performance of their employers to the extent that research says that those workplaces are more productive as well as being healthier for people to work in.

The other example to which I would point is union learning reps—the lifelong learning agenda has come to the fore. Employers, as well as the STUC, would argue that workplaces where there are union learning reps working with colleagues and employers are more productive, and people are more geared up to be flexible and to move as jobs change. On the low-carbon industrial strategy to which Stephen Boyd referred, having union learning reps in place is key to our beginning to change the skills of employees so that they do not lose out as a result of the climate change agenda.

Shirley-Anne Somerville: I want to follow up on one of the points that Charlie Gordon made. Anne Douglas gave the example of Scottish Power in Motherwell. I assume that the management was fully on board and was working in partnership with the union in that case. Are there other areas where you—Prospect or the STUC—would have liked to do more work, but where management has put up barriers or does not see the advantages to itself, never mind to wider society?

Anne Douglas: I am not aware that we have come across any examples of management saying no, but I am also honest enough to say that we have targeted the approaches at mantagements that we think will be sympathetic, in order to try to get some success stories under our belt, which we can then roll out to other employers with which we deal. The two cases that I mentioned are in Scotland. There are a number of other examples in the private sector and the public sector in the rest of the UK. I am happy to let the committee have the details, if you would find that helpful.

Shirley-Anne Somerville: That would be useful.

16:15

Stephen Boyd: The STUC tends to hear the good-news stories; stories about arrangements collapsing tend not to filter through to the centre. I have attended various conferences but I have not heard many stories about arrangements collapsing, which reflects the fact that the approach has tended to be targeted at workplaces in which working relationships are good, as Anne Douglas said. The approach has been taken in a number of workplaces in the manufacturing sector down south, where relationships tend to be more positive than they were in the past.

An interesting aspect of the agenda, which Anne Douglas mentioned, is the very positive benefit to trade unions in the context of our organising agenda and recruitment of new members—early work has been done on that. Perhaps there will be a different response from employers as we go forward, but we can only hope that that will not be the case.

Shirley-Anne Somerville: Has the STUC taken a position on the inclusion in the bill of emissions from international aviation and shipping?

Stephen Boyd: It seems entirely reasonable for the bill to include Scotland’s share of emissions from both sectors. We did not go into detail on the matter in our submission because we have not done detailed work on how emissions might be measured and assessed, which would enable us to comment on the provisions in the bill. However, if the bill is to have credibility, it would be reasonable to include emissions from aviation and shipping.

Des McNulty: In paragraph 2.3 of your submission you said:

“It is somewhat disappointing that the Bill has not been accompanied with more detailed work on potential economic and employment impacts.”

Do you agree that it is imperative that there should be a systematic job impacts evaluation before the bill is implemented? Would the STUC have an important role to play in such an evaluation?

Stephen Boyd: Such an evaluation would be desirable. As you can imagine, I spend a lot of time discussing the economic downturn with a
range of stakeholders in various forums, and a pretty constant refrain from some quarters is that there should be no new legislation that will impact on business. That is not a position that we support. As members know—Rob Gibson, in particular, will be bored of hearing this in the Economy, Energy and Tourism Committee—Scotland, as part of the UK, is a lightly regulated economy, and it is entirely proper that legislation should be introduced on important issues such as climate change.

However, it is imperative that in legislating we are as clear as possible about a bill’s potential impact, so that we can negate the inevitable arguments about the dangers of taking strong unilateral action. Therefore, we would support work on job impact evaluation.

Des McNulty: Does the STUC have a position on whether nuclear energy should be part of Scotland’s energy mix? What is your reaction to the view of the UK Committee on Climate Change that Scotland’s not having nuclear power would put the country at a competitive disadvantage due to higher energy costs?

Anne Douglas: The STUC’s position on energy is that a balance of generation sources is needed to ensure security of supply. That should include nuclear, and there should be further development of renewables and coal—clean coal, where possible—as well as oil and gas.

In the context of the bill, it is clear that because nuclear power does not produce CO₂ the continued use of nuclear power can only help us to achieve the targets that have been set UK-wide, and the targets that the committee is considering. I am not able to respond on higher energy costs, but I can say that we cannot in the future have a secure energy supply in Scotland in which nuclear is not part of the mix.

Des McNulty: Paragraph 4.1 of your submission states:

“The STUC tends towards support for a separate Scottish Climate Change Commission to advise the Scottish Government”.

If goes on to say that that commission

“should be charged with determining whether or not any reduction in emissions has been consistent with wider economic and social objectives”.

Will you comment further on that?

Stephen Boyd: The previous panels demonstrated that everyone understands that we need to engage the public in the whole agenda. From the STUC’s perspective, in engaging the public we have to help people to understand that they have a stake in change, and that that change is not being undertaken in a way that is actively detrimental to their interests. It is potentially quite unhelpful to have the main advisory body advising only on meeting the targets. It is entirely consistent with the wider aims of the Scottish Government and, in particular, of the Parliament, that the reporting mechanism should seek to address the wider economic and social agenda and not just the stark emissions targets in the bill.

Des McNulty: That is an interesting argument. Is your view, therefore, that the technical expertise of the UK Committee on Climate Change might be more appropriate in relation to considering the strictly scientific aspects of the issue, and that there is a need for a Scottish advisory body that is more involved with issues such as public engagement and the economic and social implications of climate change? Is that the kind of balance that you are pointing to?

Stephen Boyd: We are open-minded about it. There is a case to be made for a separate Scottish advisory body, given that there is a different legislative framework. A substantial part of the relevant policy is devolved and the public sector landscape is different in Scotland. If, as you suggest, the UK Committee on Climate Change were to provide the technical expertise, and a separate Scottish advisory body was established, we would look on that with interest.

Des McNulty: One of the criticisms of the bill is that the 3 per cent year-on-year reductions will not kick in until 2020. It has been suggested by witnesses that we need to get up to 3 per cent earlier than 2020. Does the STUC agree with that? What are the practicalities of introducing a higher interim target, in terms of climate change and perhaps also in economic and social terms?

Stephen Boyd: There is a compelling case for the emissions reductions to be front-loaded. That goes back to my earlier comments about the need to be far more robust in relation to the evidence base and the potential net jobs impact and so on. If we were to move towards a more front-loaded approach, it would make that all the more imperative.

Rob Gibson: Leaving aside for a moment the issues in relation to the bill that we have dealt with in the Economy, Energy and Tourism Committee, as you know, the bill sets requirements for annual reporting to Parliament, and on proposals and policies to meet any future annual emissions targets. The STUC believes that the reporting mechanism is robust, but you might want to expand on that. Can the STUC and Prospect suggest ways in which it can be improved?

Stephen Boyd: I was interested in the comments from the previous panel, particularly those from the Carbon Trust. If I can digress slightly, I attended a meeting of the national textile forum a week ago last Friday. The forum has
introduced a sustainability strand to its work, and I was keen to interrogate that a wee bit. I asked the employers around the table which of them had used the services of the Carbon Trust. All of them had, and all had found the service to be excellent, but only one thought that it derived real benefits. The others’ perception was that the interventions that the Carbon Trust suggested they should implement would be far too expensive for them. However, under further interrogation it appeared that there is very little understanding of the net CO₂ emissions savings. I have some concerns about how it will all pan out, if we look at this as a stark cost-driven issue and consider the reporting elements and the data capture that John Stocks from the Carbon Trust mentioned. It could be extraordinarily difficult to engage companies in ensuring that what they are doing in the workplace to reduce emissions is properly reported and collated at the Scotland level. That should not stop us trying, but we should be aware of the difficulties.

Rob Gibson: It struck me that John Stocks was saying that as we are going along we are improving both our understanding of how to collect the data and the accuracy of the data. Given the enabling powers that we have in respect of annual reporting, some of the data will improve over the years. Is it not a case of suck it and see?

Anne Douglas: To some extent, that is right, but it is important to have the mechanisms in place. The danger is not that some organisations will not go along with their responsibilities but that we end up with the lowest common denominator of reporting. It is therefore important that a robust mechanism is in place so that everyone’s reporting is up to the same standard, and comparisons can be made within industries and within sectors.

When we embarked on the programme with the Scottish Power office, getting to the position where we and Scottish Power were confident about the size of the carbon footprint was not a straightforward exercise. Because such reporting will be—assuming that the bill is passed—such a new experience, it is important that the mechanism is robust and simple so that everyone can comply with it.

Stephen Boyd: The work that the TUC and the Carbon Trust in England have carried out jointly on emissions reductions is clearly tightly audited. However, the myriad ad hoc workplace relationships between employers and trade unions on emissions reduction are probably not being audited at all. There is a job to do there to provide such support.

Rob Gibson: We can see from previous evidence that collaboration with people who collect the information is central to our making a better job of emissions reduction. Given that, the duties on public bodies are an important part of reducing carbon emissions and so on. Stop Climate Chaos’s evidence was unequivocal in saying that climate change duties should be placed on public bodies. Does the STUC have a view on why the bill is vague in this area?

Stephen Boyd: I do not have a view about the bill being vague, but I certainly support the duty being imposed on public sector bodies. Previous experience, particularly in relation to equalities, suggests that the imposition of duties is necessary to provoke the required action.

Rob Gibson: The previous panel referred to local authorities, health boards and the like. Should we have an extensive list of public bodies that should have a duty to report?

Stephen Boyd: The starting point should be that the duty should apply to all public sector organisations.

Rob Gibson: It is as simple as that.

Stephen Boyd: Yes.

Rob Gibson: If that is understood, is there a need to spell it out?

Stephen Boyd: Yes.

Rob Gibson: Have you any specific ideas on what such public duties should be? We are talking about annual reporting. In the light of your experience of working with Scottish Power employees, can you suggest better ways of establishing how to cut carbon emissions?

Anne Douglas: I am not sure in respect of reporting. A number of matters can form part of an audit. If the audit is done and the actions that are identified by the audit are carried out, the most important issue is the output—the difference between the position at the start and that at the end. I am not sure about reporting the whole audit action-plan process. It is necessary to report what has been done, but it is more important to report what has been achieved rather than how it has been achieved.

16:30

Rob Gibson: We are interested in outcomes. We can anticipate a rolling programme, as all parts of all organisations have to work out what they are achieving every year. The experience that you described is important but limited; we are aiming for a situation in which all organisations go through such a process. Trade unions, employees and employers, whether they are in the public or private sector, will have to undertake an exercise that will become pretty well standard if we are to gather meaningful data.
Anne Douglas: The exercise will be pretty well standard, but I am not sure that the approach will be different from the approach that organisations currently take to governance or corporate social responsibility, which to a large extent includes environmental measures. The better organisations are probably already halfway there, in that they consider that they have a duty to report on corporate social responsibility.

The Deputy Convener: I want to pursue Rob Gibson's line of questioning about duties on public bodies. You mentioned the importance of corporate governance. Is the approach that is envisaged in part 4 already best practice for local authorities and public bodies? As Stephen Boyd said, placing a duty on bodies in relation to equalities made a difference, because although people had been saying for a long time, "We're doing equality and it's fine," there had been no way of measuring what was being done. Local authorities and public bodies have a responsibility to institute best practice, but is it also important to place a duty on them in relation to performance on climate change targets, so that Audit Scotland can consider what they are doing to meet the targets?

Anne Douglas: It is important that public bodies demonstrate best practice. However, I am concerned that if reporting is mandatory we will end up with reports that meet only the minimum requirement. I would not want authorities to end up doing the least possible reporting.

Alison McInnes: Are the provisions on the promotion of renewable heat and energy efficiency appropriate and sufficient to deliver what is needed?

Stephen Boyd: Your previous witnesses made apposite comments in that regard. There is a massive job to be done, particularly given the legacy of poor quality housing in Scotland. That aspect of the bill could be made more robust.

Des McNulty: The bill covers a range of matters, and a criticism that has been made is that although parts 1 to 4 cover the principles of responding to climate change, other issues have been just tacked on in part 5. You made clear to another committee your views on the provisions on forestry. Do you have reservations about other aspects of part 5?

Stephen Boyd: Nothing is jumping out at me at the moment. There are aspects of part 5 on which we have no view, such as the provisions on muirburn. The gaps that we perceived in the bill are to do with public engagement and how the proposed approach can be reconciled with the Government’s wider economic and social agenda. Those are the matters on which we would like more work to be done.
WRITTEN EVIDENCE FROM COSLA AND SUSTAINABLE SCOTLAND NETWORK

Introduction
This paper is a joint statement by the Convention of Scottish Local Authorities (COSLA) and the Sustainable Scotland Network (SSN).

COSLA is the political representative body of Scottish local government. SSN is the national network of sustainable development officers and advocates from Scotland’s 32 local authorities. Both COSLA and SSN welcome the opportunity to give evidence on Scotland’s Climate Change Bill to the Transport, Infrastructure and Climate Change Committee.

SSN and COSLA have worked collaboratively on climate change for a number of years. In 2006 a national Development Group was established involving COSLA, SSN and other key organisations, which developed and successfully launched Scotland’s Climate Change Declaration. All of Scotland’s local authorities signed the Declaration within the first quarter of 2007 and SSN and COSLA have continued to work together to support local authorities as they work to implement their Declaration commitments.

Last year saw the creation of the COSLA Climate Change Task Group which is a standing elected member group chaired by Cllr Alison Hay, COSLA Spokesperson for Regeneration and Sustainable Development. The Task Group is supported by an Officer Support Group to which SSN provides the lead support function. The Officer Support Group also brings together representatives from other local authority officers’ networks, including those on energy, waste, planning, transport, finance etc.

COSLA and SSN both responded to the Scottish Government’s consultation on the Climate Change Bill in early 2008, as did many individual local authorities. We also responded to the consultation on the Scottish Climate Change Adaptation Framework. These consultation responses have been informed by participative seminars and active collaboration with many of Scotland’s local authorities.

The work undertaken on climate change by Scotland’s local authorities is extensive and becoming increasingly well informed and coordinated. Key activities by local authorities includes:

- All of Scotland’s local authorities have been, are currently, or will very soon be working with the Carbon Trust on their Local Authority Carbon Management Programme. This initiative supports local authorities in measuring their own direct greenhouse gas emissions and agreeing an emissions reduction plan which includes emissions reduction targets and a programme of policies and initiatives designed to meet those targets.
- 21 local authorities included ecological and carbon Footprinting in their 2008 Single Outcome Agreements. Many council are now using the footprint approach to understand their area-emissions profiles and to undertake policy scenario planning. This work is supported by the Local Footprints Project (a joint project between SSN and WWF Scotland) which assists local authorities using the Resources and Energy Analysis Programme (REAP) software to measure consumption-based emissions from their communities and to assess the effectiveness of various policy interventions.
- In 2008, four local authorities developed their Local Climate Impacts Profiles as a practical step in the process of addressing climate change adaptation. This work is now due to be rolled out to other local authorities, with support provided by the Scottish Government as part of the Scottish Climate Change Impacts Partnership.
- SSN and COSLA have held national events on the Carbon Reduction Commitment, in order to help support the preparations being made by Scotland’s local authorities for the introduction of the CRC scheme in 2010;
- work on energy efficiency and micro-renewables in buildings as well as building regulations;
- our work on waste diversion from landfill, reaching all targets for BMW and on course for the 2010 40% reduction target;
- efforts towards more sustainable and active travel under the Cycling, Walking, Safer Streets grants and the Smarter Choices, Smarter Places projects.
Supporting education about climate change and more sustainable lifestyles, most notably through the widespread support for the Eco Schools Scotland programme.

Both COSLA and the SSN support the principles behind the Bill and welcome the target of reducing greenhouse gas emissions by 80% by 2050, as well as the inclusion of Scotland’s share of international aviation and shipping.

This paper outlines our views on key aspects of the Climate Change Bill. We look forward to discussing these issues and any others relating to the role of local government at the Committee session on 24th February.

**Views on the Key Aspects of the Scottish Climate Change Bill**

**Targets**

**The 2050 Target**
COSLA and SSN recognise the scientific and political reasons why it is important for Scotland to be aiming for an 80% cut in emissions by 2050, and agree that this should be altered only if the international (IPCC) assessments justify. We also recognise that, based on current understanding of emissions trajectories and climate change modelling, 80% should be regarded as a minimum long-term target. COSLA and SSN support the Scottish Government’s approach of addressing the United Nations Framework Convention on Climate Change (UNFCCC) ‘basket’ of six greenhouse gases and the inclusion of Scotland’s share of international aviation and shipping in our emissions account.

COSLA and SSN also recognise the scientific importance of securing early and significant action on emissions reductions; one tonne of CO2 saved in 2010 is more important than one tonne of CO2 saved in 2040. COSLA and SSN also recognise the important of cumulative emissions and would suggest that this be recognised in the body of the Bill.

**Interim Targets**
COSLA and SSN recognise the important of realistic and meaningful planning timescales, and we are supportive of the principle of interim targets. Both are useful in determining the direction of travel and the urgency of action. We welcome the 2030 interim target of 50% emissions reduction, but would suggest that the Bill should also take cognisance of the recent recommendations of the UK Climate Change Committee which has proposed cuts of at least 34% by 2020, and 42% depending on progress in current international climate negotiations. COSLA and SSN would suggest that the Scottish Bill’s interim target or targets should be reviewed and amended where necessary to reflect the recommendations made by the UK Climate Change Committee. If the Scottish interim targets are lower than the Climate Change Committee’s recommendations, we would expect the Scottish Government to explain clearly why the Climate Change Committee recommendations had not been accepted.

**Setting Targets in Batches**
COSLA and SSN welcome the principle of setting targets in batches. This approach should provide the medium-term clarity that local authorities, other parts of the public sector and private sector organisations require to take informed planning and investment decisions. We are supportive of the conditions established in the Bill for setting the target batches. From the proposal in the Bill we would expect that in setting the ‘batches of targets’ attention would be given to Scotland’s cumulative emissions and the carbon budgets recommended by the UK Climate Change Committee (or any alternative ‘relevant body’). Scotland’s ‘batches of targets’ should be set with due regard to the emissions trajectory of the UK Climate Change Committee’s budgets (or those of any alternative ‘relevant body’) and the agreed allocation which relate to Scotland.

**Annual Targets**
COSLA and SSN recognise that a 3% per year overall emissions reduction target is highly ambitious, necessary and will require some lead-in time to achieve. Moreover, a rigid 3% per year target applied across the board to specific sectors such as local authorities may be difficult to achieve in the face of differing local circumstances and fluctuation in performance due to variable conditions, including weather events, etc. We respect the Scottish Government’s initial analysis in delaying the annual targets till 2020 but we also recognise that many quick wins could be tackled to achieve substantial in-roads in early years. We
submit, therefore, that early impact is more an issue of political will and financial investment than technical capability. The evidence from the recent UKCC report on the significance of early emissions reductions for a successful trajectory as advised by IPCC, Tyndall Centre and others merits due reflection in the final form of the Bill.

Further, while local authorities will no doubt play a significant part in achieving these targets recent sectoral breakdowns being used in the ongoing Scottish Government Strategic Overview Project looking at how the 80% reduction in emissions by 2050 could be achieved suggest that the two smallest contributors to emissions are the public sector and the waste sector. Other sectors such as business, transport, residential, energy supply, agriculture and land use make up the bulk of the contributors to emissions in Scotland. However given the significant levels of employment and the wide powers vested in the public sector, it seems likely that a larger proportion of emissions are under the influence of local authorities and the public sector than might appear on first analysis. We do not therefore attempt to discount the role of local authorities but rather to point out the limited benefits to be achieved by targets on the public sector alone, given the uncertainties in emissions allocations attributable to it and the need for progress across all parts of Scottish society.

At a local authority level, many Scottish local authorities have been working with the Carbon Trust to develop carbon reduction implementation plans which require carbon reduction targets to be set, monitored, and reported on. These have seen local authorities aiming to move in line with 3% annual reductions. It is evident that some Scottish local authorities are already seeking to make similar levels of annual reductions. This process, and its linkage to the Single Outcome Agreement process, more accurately reflect the situation that councils will vary in their ability to deliver carbon emissions reduction. The Single Outcome Agreement process should therefore be the vehicle for any such delivery and reporting. In addition to these voluntary efforts to set local authority targets, the Carbon Reduction Commitment will establish a legislative driver encouraging annual emissions reductions and reporting. It is estimated that at least two-thirds of Scottish local authorities will be participating in the CRC scheme.

We are aware that some have called for local authorities to be subject to area-wide emissions reduction targets. While we accept there are concrete actions that can be taken with regards to councils own estates we are concerned about area-wide targets given that councils only tool with respect to public behaviour is that of influencing and providing information. Meeting local area based targets will be difficult given the considerable variability in overall and per-capita emissions between local authority areas. Should an area-wide reduction target be set for local authorities or Community Plan Partnerships, COSLA feels this would need not only to be resourced but paired with the appropriate powers to require carbon accounting at an individual or community basis, though we recognise this will cross over into reserved territory.

In conclusion with respect to targets, while we accept the need for early action we are not convinced that strict 3% per annum sectoral targets to 2020 as have been advocated by some are the best way forward. A simple modification allowing a 5 year rolling arrangement might represent the best approach, delivering progress with flexibility. The longer term achievements will rely on technological change and it is for the Scottish and UK Governments to drive this forward. Sectors will also be vulnerable to missing targets if external circumstances intervene. An example would be alternative energy sources failing to meet predicted output. It may be more appropriate to have a rolling target to account for such fluctuations.

We agree there should be at least three budget periods in statute at any one time. This will assist the planning of successive carbon budgets against circumstances. The Government must show leadership by ensuring that targets are challenging but also realistic and achievable against current technological progress and other external factors that will influence the meeting of targets. Emission budget periods should be set for a long enough time period to permit investment in energy generation to be scheduled and financed in a manner acceptable to industry. Major infrastructure projects are normally financed over 25 years. It would be useful to have certainty in terms of CO2/GHG targets over the same period.

However, we are very aware of the fact that achieving these targets, nationally and within local authority areas and estates, will be challenging and will require us to allocate resources in different ways or to identify new resources. COSLA and SSN would recommend that local
government and the Scottish Government, along with other parts of the public sector, need to work together with renewed urgency and commitment to address the resource requirements of achieving Scotland’s emissions reduction targets. The Scottish Government’s current Strategic Overview and Carbon Assessment Projects potentially offer good bases upon which a Scottish Government-Local Government exercise could be established.

In addition to the urgent need to address the resource and investment requirements associated with meeting annual emissions reduction targets, SSN and COSLA would stress the need to fast-forward and expand public sector capacity building (tailored training, information provision, technical advice, peer learning, etc) so that the Scottish public sector quickly becomes better able to achieve emissions cuts.

**Scottish Emissions Account**

COSLA and SSN are supportive of the general principles of the Scottish Emissions Account, as proposed in the Bill.

**Using Carbon Credits**

With regards to the purchasing of carbon credits, SSN and COSLA would recommend that the use of such credits should be limited and regarded as a measure of last resort. We would also suggest that permissions to use these credits be subject to scrutiny by the Committee on Climate Change (or other related Scottish body) and the Scottish Parliament to ascertain whether the Scottish Government of the day is doing enough to stimulate domestic action and is not using international credits for ‘quick hits’ against emissions targets. We want to avoid a situation where companies and governments are prepared to pay to cut down on their own emissions.

**Defining ‘Scottish Emissions’**

COSLA and SSN support the definition of ‘Scottish emissions’ used in the Bill; based as it is on the UNFCCC ‘basket’ of the main six greenhouse gases plus the inclusion of Scotland’s share of international aviation and shipping. We also welcome the recognition of the importance of Scotland’s ‘carbon sinks’ within the account, thereby encouraging climate-aware management of land assets. The definition of Scotland’s emissions should be continually informed by internationally recognised good practice and scientific understanding.

COSLA and SSN accept that the Scottish target should be based on the proposed ‘Scottish Emissions Account’, which addresses the greenhouse gas emissions produced within Scotland.

SSN and COSLA would also welcome a provision in the Bill requiring the Scottish Government to report regularly (though possibly not annually) on Scotland’s consumption-based emissions. We were encouraged by the inclusion in the Scottish Government’s Bill consultation paper of the potential inclusion of consumption-based reporting. It is noted that this has not been included in the Bill. The TICC Committee may wish to explore how the Bill could be amended to include such a provision. We recognise that consumption-based emissions reporting is complex and is in many respects a ‘developing science’, but we feel that it is developing to the extent that it could be included as part of the Scottish Climate Change Bill’s reporting regime. Reporting our consumption emissions simply recognises the reality that responsibility for emissions can be accounted for in two legitimate ways and that Scotland is part of a global economy. Reporting consumption emissions would also encourage Scottish citizens to be more internationally aware and would foster an open and honest engagement with the inherent challenges of reducing greenhouse gas emissions.

Scottish local authorities are already addressing consumption-based emissions through participation in the Local Footprints Project and by using the Resources and Energy Analysis Programme provided by the Stockholm Environment Institute. We would not expect consumption-based emissions to form the basis for targets, but believe that such reporting would add greatly to the quality of the Scottish Climate Change Bill and would be another indication that Scotland intends to have ‘world leading’ climate change legislation.

**Public Sector Duty**
We have no issue with the proposal to bring forward enabling powers so long as any duty imposed on the public sector to take specified actions on climate change or other specified environmental issues delivers the appropriate resources to enable those responsibilities to be carried out. Reporting on any new duty should be fully integrated into the Single Outcome Agreement process and any Public Sector Duty should be developed jointly between COSLA and the Scottish Government.

All 32 of Scotland’s Local Authorities have signed up to Scotland’s Climate Change Declaration, a voluntary agreement to work towards climate change mitigation and adaptation. This high level commitment is expected to be increasingly reflected in the new Single Outcome Agreements and in partnership with Community Planning Partnerships. Information gathered on work towards the declaration commitments is providing valuable material to inform the SOA process and will effectively roll out the principles within the Declaration to the wider public sector as COSLA has previously recommended. In time, with adequate resources provided through the local government settlement, more specific local indicators with regards to climate change work could and should be integrated into these agreements and the management delivery arrangements beneath these to ensure that they address the range of climate change activity agreed by local authorities under the Declaration. Any duties with regards to Local Authorities would, in accordance with the Concordat, need to be developed jointly between COSLA and the Scottish Government and be integrated into the Single Outcome Agreement process.

We are open to the development of a process that would identify the gaps and barriers to action within present structures and how any future duty might seek to overcome them. One possible way forward would be the convening of a high-level Ministerial Climate Change Steering Group bringing together key partners across Scotland including Local Government to not only look at a potential public sector duties but to provide needed national leadership, appropriate guidance and public awareness.

We would also note that local government is already subject to duties that cover much of what might be expected to be included in a Public Sector Duty, e.g., Carbon Reduction Commitment (CRC), Home Energy Conservation Act (HECA), Energy Performance of Public Buildings (EPPB), Landfill Allowance Scheme (LAS), etc.

Adaptation

A number of local authorities are examining ways of identifying and reporting on how their communities require to adapt to the impacts of climate change. There is an understanding that this is about managing strategic risks to local communities and their assets, and that more is required than simply reviewing Emergency Planning arrangements. Pilot studies jointly arranged by the Scottish Climate Change Impacts Programme (SCCIP) with Scotland & Northern Ireland Forum for Environmental Research (SNIFFER) and UK Climate Impact Programme (UKCIP) on developing Local Climate Impact Profiles have taken place, with guidance due to be published shortly, and further opportunities are intended to be rolled out. Some authorities are including process-led objectives and indicators in their SOAs to track their level of response to climate change impacts to key services and infrastructure.

Forestry – COSLA Views

With regards to the forestry proposals within the bill COSLA accepts that the national forest estate is likely to include a number of locations suitable for wind, hydro and micro-renewable energy generation. Locating windfarms and hydro schemes within forestry can help to reduce detrimental impacts, in that both activities can share the same road systems; commercial conifer forests are already man modified landscapes so impacts are likely to be less than in wildland areas; and forests can help to limit the potential for close views of turbines, dams and other structures by reducing the availability of open views across the landscape.

However COSLA does have some reservations with regards to the proposals to offer leases and cutting rights over parts of the national forest estate. Our main concerns are:

- Lack of business case in the bill.
- Impact on the function and funding of the remaining part of the national forest estate.
- Loss of regional presence.
Impact on the stability and development of timber markets as presently underpinned by FCS.

Impact (immediate and longer term) on FCS employees and the communities they live in.

Loss of community acquisition opportunity through the National Forest Land Scheme.

Loss of a wider range of non-market community benefits as provided through FCS and which will be greater than provided through any lease arrangement.

No guarantee that funding raised will be placed specifically to forestry related climate change measures.

Potential for further leases.

Member states of the E.U. have generally supported and protected their national forests.

Any proposal will need to go through the usual process of public consultation as well as early consultation with the affected local authorities to ensure for adequate compensation with regards to local income from timber production, recreation or indeed potential future uses.

COSLA would expect there will be a need for negotiation and management of appropriate community benefit and would look for efforts to be made to provide opportunity for partnerships with Local Authorities to provide heat and power for local communities from any new renewables projects on the National Forest Estate.

We would also advocate a national strategy on renewables to map out suitable locations across Scotland rather than looking at this on a piecemeal basis.

Any proposed future developments would also need to consider the implications of the Land Reform (Scotland) Act 2003, with the need to retain access rights for the general public.

Energy / Buildings

The energy efficiency measures included in the Bill are to be welcomed but do raise some practical issues with regards to financial resources, additional capacity and consistency with activity at the EU level. There is already some concern on the part of Scottish councils following the review of the EU Energy Performance in Buildings Directive around the added up front cost to councils of extending the scope of this directive to smaller premises. We would have similar concerns of a resource and capacity nature with any such Scottish proposal.

Our member Councils are already functioning at full capacity to fulfil the requirements of the existing EPBD, having committed budgets and allocated staff time to completing the Energy Performance Certificates (EPCs) for the buildings covered in the scope of the existing Directive. Similarly, additional workload dealing with applications etc. is likely to force an increase in fees passed down to the public; otherwise Councils will face even more pressure to deal with the applications. There is also already a concern that the extension of the EPBD might necessitate extensive re-training for Building Standards Officers. A concern which would also apply to any new proposals at the Scottish level.

While councils are highly in favour of the principle of addressing energy efficiency in Scotland’s buildings and see it as a key tool in both saving carbon and lowering running costs to building owners and tenants, they are very mindful of the added costs and any proposal to improve the energy performance of buildings in Scotland needs to be paired with the appropriate resources to carry it through as well as the decarbonisation of electricity and heating.
WRITTEN EVIDENCE FROM STUC

Introduction

The STUC welcomes the opportunity to contribute to the Transport, Infrastructure and Climate Change Committee’s scrutiny of the Climate Change (Scotland) Bill. This is an important piece of legislation and one that could have profound implications for our 640,000 trade union members in Scotland.

The STUC concurs with the widely held view that climate change will be humanity’s greatest challenge in the 21st century. The Trade Union Sustainable Development Committee (TUSDAC14 – a joint TUC/DEFRA body) offers a cogent explanation of why environmental issues have assumed real importance for the trade union movement:

“‘Sustainability’ is not something we put in a separate box marked ‘green’. It is a core trade union and workplace issue. It directly impacts on jobs, in numbers, types, skills and locations. The employment and training implications of the transition to a low carbon economy are profound, as is the need to manage the changes fairly – through the so-called ‘just transition’”.

The STUC believes that the current global economic crisis provides an opportunity to build a new economic and social model that better protects the interests of both workers and the environment and distributes the proceeds of sustainable economic growth far more equitably than has hitherto been the case.

The following submission does not attempt to answer all the detailed questions posed by the Committee but rather focuses instead on areas of particular concern/interest to the STUC.

Targets

The STUC broadly supports the targets as set out in Climate Change (Scotland) Bill and believes the 2050 target is achievable through investment in:

- Low carbon technologies including renewables (on/offshore wind, marine, solar & sustainable biomass), nuclear, CCT & CCS;
- Energy efficiency including enhanced building standards and new technologies; and,
- Cutting transport emissions through:
  - Improving the carbon efficiency of vehicles
  - Introduction of electric vehicles powered by low carbon electricity production;
  - Increased use of hydrogen; and,
  - Sustainable biofuels.

The STUC notes that the targets proposed are more challenging than those in the UK Bill but believes that Scotland can benefit from being a global leader in environmental standards. However, there are risks as well as opportunities in targets that are more challenging than other nations. It is vital that risks are properly understood.

Therefore, it is somewhat disappointing that the Bill has not been accompanied with more detailed work on potential economic and employment impacts. This omission plays into the hands of those who argue that strong unilateral action necessarily constitutes a barrier to competitiveness.

As we have already witnessed with renewable energy development, matching rhetoric to effective action and measurable outcomes will be difficult and specific actions required to reduce emissions must be the subject of wide consultation with all stakeholders: trade unions, employers and civic society.

The STUC believes that challenging targets can be reconciled with sustainable economic growth but does not believe that the economic and employment benefits of greening the economy will be maximised by simply establishing targets and leaving it to the market to deliver.

14 http://www.defra.gov.uk/environment/tusdac/
The potential economic and social impacts of reducing emissions are too often overlooked in public debate. Witness the Committee on Climate Change’s report *Building a Low Carbon Economy* which reduces ‘wider social impacts’ to the single issue of fuel poverty. There is no consideration whatsoever of the economic and employment consequences for individuals and communities.

**Duties of Public Bodies Relating to Climate Change**

The STUC believes that Government and the wider public sector must be seen to lead the way in helping to meet targets for emissions reduction and therefore supports the imposition of statutory duties in relation to climate change.

It is recognised that other measures such as the Carbon Reduction Commitment will have an impact on parts of the public sector but the pressing need for action across the whole public sector makes a compelling case for a statutory duty in primary legislation. It is important that any additional responsibilities are sufficiently funded and that workplace change is subject to negotiation with the relevant trade unions.

**Scottish Committee on Climate Change**

The STUC tends towards support for a separate Scottish Climate Change Commission to advise the Scottish Government given that relevant policy is substantially devolved and that the legislative framework will be distinct.

The STUC is of the view that as well as providing advice on how to achieve the targets and determining whether the targets have been achieved, the Committee should also be charged with determining whether or not any reduction in emissions has been consistent with wider economic and social objectives (for instance – the Scottish Government’s ‘golden rules’ on solidarity and cohesion).

**Forestry**

The joint Forestry Trade Unions have submitted joint written and oral evidence (11 February 2009) to the Rural Affairs and Environment Committee on this matter. ![Link to the Rural Affairs and Environment Committee](Link to the Rural Affairs and Environment Committee).

**Trade Union priorities**

The STUC believes that, in order to gain widespread public buy-in and to combat negative perceptions over the potential economic impact, targets for emissions reduction should be accompanied by four interlinked strategies:

- A green workplaces strategy;
- A robust and comprehensive low carbon industrial strategy for Scotland;
- A transitional skills strategy for Scotland;
- A Just Transition Strategy for Scotland.

Although the detailed scenario planning work on economic impact does not appear to have taken place, it is safe to assume that the impact on the Scottish economy will be great. Energy intensive sectors will have to change their ways and with that comes the prospect of major changes in the nature and location of jobs. Also, these sectors will have to compete in global markets transformed by carbon trading, international treaties and environmental regulation. For those working in these sectors, the prospect of change can be worrying. The industrial restructuring of the last 30 years, whether necessary or not, was allowed to occur in a deeply unjust fashion that saw some lose everything while others reaped huge rewards. It was an injustice that still scars Scottish society. And while the Scottish economy remains one of the least regulated and planned in Europe, fears that green restructuring will fall much harder on some than others must remain justified.

The STUC believes that the Scottish Government, working with social partners, must start planning now so that all the conditions exist for a genuinely ‘just transition’ to a low carbon economy. The right consultation mechanisms, the right training, the right innovation policies, and the right financial support need to be in place. But most importantly we need the type of
green enterprise and growth, already seen in countries such as Germany and Denmark, to ensure that greener jobs are available when transition becomes a reality.

**Green Workplaces**

Following the success of initiatives such as the TUC’s Greenworkplaces project, there should be an extension of schemes to help employers and employees work together to set and meet environmental targets. These goals could relate to simple environmental measures (e.g. basic energy saving practices) or more complicated schemes such as efforts to increase the sustainability of production processes. *(It is also vital that the UK Government provides legal rights to green reps to give them time off for training and environmental activity at work).*

Workplaces are responsible for the 80% of emissions and much more must be done in Scotland to support workplace change. Learning from the successful lifelong learning model, funds should be made available to help trade unions resource workplace environmental programmes. It is hugely unfortunate that the Scottish Government’s Climate Change Fund does not consider the ‘workplace’ as a ‘community’ for the purposes of the fund.

**Low Carbon Industrial Strategy for Scotland**

The Bill should be accompanied by the development and implementation of a low carbon industrial strategy for Scotland. This should include specific plans for each of Scotland’s priority industry sectors.

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To date, maximising the wider economic and employment benefits from developing Scotland’s renewable energy sectors has appeared to be an afterthought to, rather than an integral component of, energy policy. During the last decade of economic growth this lack of progress was a disappointment to trade unionists, environmentalists and others. As we now enter a potentially lengthy recession, the failure to grasp the growth opportunities presented by the green economy should concern all with an interest in the sustainable development of the Scottish economy.

Given that Scotland’s renewable energy resources are widely recognised to be the most abundant in Europe, our performance in generating jobs has been disappointing. Denmark, Spain and Germany have all built large, job-rich renewable sectors through a variety of means.

The STUC believes that the UK and Scotland’s poor performance in this respect reflects an unwarranted faith in markets to deliver socially beneficial outcomes and a deeply embedded antipathy to anything that smacks of industrial policy – other countries better understand that intervention is required in the early stages of development in order to secure technologies and grow employment.

Maximising industrial opportunities from the development of Scotland’s energy sectors should be a core strand of economic strategy. Some initial actions could include:

- Using business support mechanisms (such as RSA and innovation support programmes) strategically to help develop technologies and secure these technologies within Scottish industry;
- A comprehensive research project to learn the lessons of other European countries;
- Within the context of the Planning Bill, and working within EU Competition Law, consider ways in which developers can be encouraged to use local content; and,
- Improve links between developers and Scottish manufacturers – we are not convinced FREDS or the Energy Community are effective mechanisms for this activity.

However, much more can be done now within existing budgets to address the main barriers to growing environmental industries:

- The low price of environmental impacts;

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- Weak investment and demand for green products and services;
- System failures that slow green transformation.

For instance, the Scottish Government should examine:

- Creating lead markets through ‘Forward Commitment’ procurement initiatives – learning from examples in Sweden and the US, the Government can play a key facilitatory role in developing programmes to design and sell innovative green products. Forward Commitment programmes draw together a group of organisations to define a need (i.e. a more energy efficient IT system). Bids are then sought to deliver a product or service that meets this need. The specification of the need will include a range of criteria that must be met and the procurement group commits to purchasing a minimum amount of the new product or service provided these criteria are met;
- Developing markets through public procurement – there are currently good initiatives at national and local authority level but these are often implemented in a piecemeal way and more needs to be done to ensure consistent use of environmental criteria in purchasing decisions;
- Better integration of public policy priorities to boost job creation – for example, Scotland could aim to develop an indigenous hydrogen economy for promotion at the Commonwealth Games in 2014: hydrogen facilities linked to Scottish wind farms could generate the power for a fleet of hydrogen fuelled buses for use at the games. With the appropriate level of ambition and support, there is no reason why these vehicles should not be designed and manufactured in Scotland.

A Transitional Skills Strategy for Scotland

A successful low carbon shift needs to be accompanied by sector-based skills and training strategies. For instance, one of the main barriers to increasing the uptake of new microgeneration devices is the shortage of appropriate skills and training courses for each of the emerging technologies. The development of new technologies in manufacturing industries and the development of our environmental industries, including clean-coal, will require investment in the right skills and specialities. A number of skills issues need to be addressed:

- Stakeholders should be involved in a comprehensive survey of labour and skills requirements in the energy sector;
- A transitional skills strategy is required for moving to a low carbon economy which provides support both for well-qualified staff at all organisational levels and for lower skilled employees who may lack a portable or adaptable skills base; and,
- Environmental literacy in relevant Modern Apprenticeships must be improved. The Gas industry workbook initiative prepared by the Energy and Utilities Skills Council is an example of good practice.

Just Transition

A Just Transition\textsuperscript{16} Strategy for Scotland will involve:

\textit{A national framework or mechanism to ensure long-term planning and representative decision making on environmental transition} - The framework would outline how the Government planned to engage with trade unions and other key stakeholders on Just Transition. It could involve the creation of a new body or bodies to plan for, and advise ministers on, the transition process. It may also stipulate consultation requirements for subnational bodies and companies involved in environmental transition.

The STUC proposes that the TICC Committee should consider ways in which this framework might be given a statutory basis in the Climate Change (Scotland) Bill.

\textsuperscript{16} For more detail see the TUC pamphlet \textit{A Green and Fair Future} (2008) \url{http://www.tuc.org.uk/touchstone/Justtransition/greenfuture.pdf}
Education and training to aid sustainable employment - It is vital that adequate planning and provision of education and training takes place to protect jobs in the sectors that will be most affected by environmental transition. From a Just Transition perspective, key priorities must include the following: a genuine partnership approach to negotiating skills strategies that are fit for purpose; development of employer support for a new apprenticeships strategy; a new diversity strategy for the energy sector; and employers fully recognising the role of union learning representatives (ULRs).

Decent jobs - Just Transition must not just be about creating ‘green jobs’ to meet the direct material needs of those workers affected by the shift to a low carbon economy. It must also be about ensuring the jobs are decent jobs. While the transition process in sectors such as energy is meeting this goal, other environmental industries – in particular, waste and recycling – are not. A combined effort is required by employers, government and unions to address insecure and dangerous working conditions.

Greening the workplace - As outlined above.

Flexible transition packages for workers - Support for workers whose jobs may be lost or may face significant change due to environmental transition is crucial to any Just Transition programme. Although support packages would need to be flexible – in order to take account of the different situations in which workers find themselves – a general outline or timeline for such a scheme could be agreed. It might include: consultation requirements; education/training/re-skilling; compensation to cover relocation costs or living costs for those finding new work or who are facing significant change in the nature of their work.

Achieving such a programme of support packages will require significant interdepartmental working from the Government, with particular involvement from the enterprise networks, SDS and Job Centre Plus.

Support for communities - It is likely that some areas will face more challenges than others because of the geographically concentrated nature of many energy-intensive industries. Responsibility for a clearer understanding of which areas need to be monitored and the likely impacts of environmental transition on those areas must fall to the Scottish Government, the relevant local authorities and enterprise networks, employers bodies and trade unions with high densities of membership in the key communities.

Funding - Many elements of a Just Transition programme, while paying for themselves in the long-term, will require an initial – or indeed an ongoing – investment to make them possible.

Monitoring and further research - The lack of research regarding many areas of environmental transition needs to be addressed. In particular, information needs to be collated on (1) the skills base required in a low carbon economy; (2) the effect that the extra costs of environmental regulation is likely to have on pay, conditions and levels of employment; (3) the impact of environmental transition on job equity; and (4) the regional impact of environmental policies on jobs and skills.

STUC
Feb 2009
Scottish Parliament

Transport, Infrastructure and Climate Change Committee

Tuesday 3 March 2009

[THE CONVENOR opened the meeting at 14:00]

Climate Change (Scotland) Bill: Stage 1

The Convener (Patrick Harvie): Good afternoon and welcome to the eighth meeting in 2009 of the Transport, Infrastructure and Climate Change Committee. I remind members and everybody else present that all mobile devices should be switched off. We have received apologies from Alex Johnstone and from Shirley-Anne Somerville, who expects to arrive a little late.

The first and only item on the agenda is continuation of our consideration of the Climate Change (Scotland) Bill at stage 1. This is the penultimate evidence session. Next week, we will take evidence from the Minister for Transport, Infrastructure and Climate Change. Today we have our last two panels of external witnesses, so to speak. First, we will hear from the Confederation of British Industry Scotland, the climate change business delivery group and Scottish Renewables. After that, we will hear from Scottish Natural Heritage, the Scottish Environment Protection Agency and Scottish Water.

I welcome the first panel: Matthew Farrow, head of the environment group at CBI Scotland; Brendan Dick, director of BT Scotland, and Grant Hodges, of PricewaterhouseCoopers, who are both here to represent the climate change business delivery group and Scottish Renewables. After that, we will hear from Scottish Natural Heritage, the Scottish Environment Protection Agency and Scottish Water.

I welcome the first panel: Matthew Farrow, head of the environment group at CBI Scotland; Brendan Dick, director of BT Scotland, and Grant Hodges, of PricewaterhouseCoopers, who are both here to represent the climate change business delivery group; and Jason Ormiston, chief executive of Scottish Renewables. I am aware that Brendan Dick might have to leave before we finish questioning the first panel.

Brendan Dick: Climate Change Business Delivery Group: I have to leave around 3 o’clock.

The Convener: That is understood.

First, I thank you all for the written evidence that you have submitted. Today is an opportunity to explore some issues beyond that and to develop further the points that you raised.

CBI Scotland has taken an interest in climate change, for example by creating a website and holding regional and national events. What is CBI Scotland doing to educate its members on climate change and to develop that agenda?

Matthew Farrow (Confederation of British Industry): Just to clarify, I am based at the CBI offices in London. I am head of the United Kingdom-wide environment team and work closely with colleagues and members in Scotland.

Climate change is a huge issue for British and Scottish business. We are committed to working with the Government, at both Scotland and UK level, to meet the very ambitious targets that we have. Although meeting those targets is a challenge for us all, it can be done at an achievable cost and there are real business opportunities in it.

We raise awareness among our members in two or three ways. We run a series of climate change forums throughout the UK, whereby we look to work with particular companies on particular issues. We will be running a forum on energy efficiency fairly soon. Our website has a climate change section—a sort of microsite that updates members on the reports that we are putting out and on the issues with which they can engage. E-mail communications go to members to update them on policy lines that we are working on, or things that the UK Government or the Scottish Government is doing.

In working with companies, I tend to find that there is broad support for the line that we have taken, which is that, despite the financial turmoil and recession, climate change is a key issue that Governments and business have to ensure remains a priority. There is a desire among businesses to understand what climate change means for them. They hear about the overall targets and measures such as the bill that we are discussing, but they want to know what they can do on the energy efficiency of their operations, or to understand what support there is for innovation from Europe or the UK Government and the Scottish Government.

The Convener: Some businesses that are involved in marketing green products tend to break down their potential customers into groups, depending on how easy they are to bring on to the agenda, and whether they are true believers or sceptics. Do you take the same approach to educating the business community and your members? Do you have a sense of the balance between those who are keen to sign up to the climate change agenda and learn more, and those who are a bit more resistant?

Matthew Farrow: Some companies are in the thick of the agenda and have been for some years; I am thinking, for example, of the big energy companies—climate change has been a huge issue for them—and companies that manufacture environmental technology, such as insulation products. Then there are the companies that use a lot of energy, such as heavy industry and big
retailers. They are interested in understanding how they can improve their energy efficiency; increasingly, they are also getting pressure from customers and shareholders about their carbon liabilities and policies.

We find that some companies, although they are not opposed to acting on climate change, find it much harder to relate it to their business. I am thinking of a small media company or a small tourism company. It can take longer to connect a small tourism company to the issues relating to tourism, such as moving people differently—adaptation is a huge issue. With media companies, there are issues around information technology and energy efficiency. Inevitably, though, some companies find it harder to relate the debates in the media or among the broad business community to their operations.

**Rob Gibson (Highlands and Islands) (SNP):** Are any of the more reluctant companies members of the group that Brendan Dick is a member of?

**Brendan Dick:** The climate change business delivery group?

**Rob Gibson:** Yes.

**Brendan Dick:** I do not detect any sense of reluctance in any of the members of my group. First, it is fundamentally a group of people who, on a personal and a corporate level, understand that doing nothing is not an option. The group’s members must have a commitment to doing something. Secondly, however, there is the challenge—the hard bit—which is twofold. First, how do we, as organisations and as companies, achieve the objective of changing our environmental impact in a way that is economically sensible? Secondly, one of the fundamentals that we are about, as a group and as individuals, is trying to champion the cause. In effect, we are all giving up free time because there is no serious infrastructure behind the group. In many respects—this relates to what Matthew Farrow said—that can be the hard part.

I do not detect many organisations or individuals who do not believe that we need to do something—the challenge is what. That is quite complex. Large organisations have some capacity to deal with it. In BT we are trying our best, but one of the big challenges for the group is promulgating the messages and the ease of use going forward. That is, arguably, a challenge for Government as well.

**Des McNulty (Clydebank and Milngavie) (Lab):** A tension seems to exist in the business responses between, on the one hand, concerns about impacts and risks of legislation and, on the other hand, a sense that there are some significant opportunities to be had. In that context, do you think that we need to have an analysis of the impacts, risks and opportunities, prior to the introduction of the legislation? If you do, what would be the best role for business in conducting such an analysis?

**Brendan Dick:** I can certainly give a view; I am sure that others can, too. The idea has merit. By coincidence, the reason that I have to dash off is that I am going to Inverness to jointly host a dinner this evening with Highlands and Islands Enterprise, for businesses in the Highlands that are trying to engage in the business of delivering green services, in the UK and abroad. There are clear opportunities.

A number of businesses that are engaged in the issue, including BT, are learning from what we have been doing in Scotland, the UK and abroad, and turning it into physical products or services such as consultancy that we think will have a market. There is merit in their doing that. Business can play a role, because many of us have experience of looking at the risks and challenges. If we start from the premise that doing nothing is not an option, the question is not just how we can identify the risks but, critically, how we can find ways of dealing with them. That is the key thing that business can bring to help the Government and the committee to take the debate forward.

**The Convener:** I want to explore a little bit further the various activities that are happening at the moment. Brendan Dick is the Prince of Wales’s ambassador for corporate responsibility in Scotland. What does that role involve in relation to climate change, and has it given any additional weight to the work that the business delivery group is doing?

**Brendan Dick:** Each year, the Prince of Wales has an ambassador for corporate responsibility in Scotland. That individual can pick a theme, and I chose the environment. Being in the role has been interesting and in some respects quite challenging.

As you can see from the membership base, the climate change business delivery group comprises mostly large organisations that are already engaged in the challenge, although there are some exceptions. I have learned from what I am doing as Prince Charles’s ambassador that there is a challenge in getting smaller businesses involved. I am sure that many of you are familiar with the May day network, which he set up and which operates here in Scotland and in the UK. Both the business delivery group and Scottish Business in the Community are using that network as a tool to engage organisations in the agenda. Within the May day network, there are steps that businesses can sign up to, or commit to. Network members can be local authorities, voluntary sector organisations, or others.
To be honest, the frustration has been not in getting big businesses engaged—that is doable, and I think they are all engaged—but in getting the mass of smaller businesses in Scotland engaged. Organisations that are at the leading edge of the challenge—either because of the industry that they are in, as Matthew Farrow mentioned, or because they are large—are doing things, but how can we get the mass of small and medium-sized enterprises in Scotland engaged, and indeed how can we get the mass of consumers at home engaged? That is the big challenge in the short term.

When we examine the targets that have been set and what can be done, our experience at BT is that we can begin by going for the low-hanging fruit. We can start to get people and businesses engaged in better, more efficient uses of energy by encouraging people to do simple things such as changing their travel patterns and buying low-energy light bulbs. The frustration in my year as ambassador has been that more people have not become engaged in the May day network. However, with some help from the Government, we managed to find funding for a post to drive that forward next year.

The Convener: It has been suggested that Scotland is well placed to respond to the climate change agenda and maximise the benefits that can come from the transformation that climate change requires of us. Does Jason Ormiston agree with that, and if so, why?

Jason Ormiston (Scottish Renewables): I represent the renewable energy industry in Scotland. We have 240 members who are keen for renewables to be successful in Scotland, the UK, Europe, and more widely. It is clear that Scotland enjoys the natural resources that are necessary for us commercially and economically to exploit the potential with a range of different technologies in all three energy sectors—heat, electricity and transport. We know from the historical legacy of our hydro stations that affordable and reliable green electricity can be supplied from those power stations.

We know from our experience since 2000 that the renewable electricity sector has been able to step up to the plate. There has been significant investment in the development of renewable energy technologies, especially onshore wind, and we are now getting signals about the significant potential of offshore wind, and similarly of wave and tidal power.

14:15

Although the desire and the aspiration exist to provide heat as sustainably as we possibly can—that means reducing our demand for heat and then supplying the heat that is needed from as green a source as possible—it is fair to say that we are not there yet. An awful lot of work needs to be done to create the framework, which—to repeat a phrase that Brendan Dick used—needs to make economic sense for SMEs and others, so that they can make the case to themselves for installing those technologies and promoting energy efficiency. The UK Government has a long way to go before it can put that framework in place.

However, if the framework is put in place, we are talking about a green industry that could employ tens of thousands of people, if not more, by 2050. It would be a major sector that could show some world leadership. On that basis, we are talking about jobs and significant economic benefits, and about businesses reducing their own energy bills.

We have published case studies of businesses that are off the gas grid. Previously, they had to use petrol and oil for heating purposes, but they have now switched to biodiesel and biogas—and to anaerobic digestion, ground-source heat pumps and other such technologies—and have subsequently saved tens of thousands of pounds a year, based on last year’s high oil price. People are making that switch because it makes economic sense, and the frameworks that we put in place must make economic sense for such action to take place.

The Convener: The committee will spend some time over the coming weeks on getting the legislative side of the framework—the bill—right, but even if the bill is perfect, Government action is required to ensure that we meet the targets. Would you care to say anything about the Government action on, for example, investment in marine, in relation to investment by Government or incentives for business to invest in that sector?

Jason Ormiston: There is a missed opportunity in part 5, chapter 3 of the bill. There is—rightly—a focus on energy efficiency and a strong commitment to action, but the chapter is a little weak on renewable heat, and it could be strengthened to promote determined activity from the Scottish Government. There is nothing on electricity or transport, but there is an argument for trying to deliver through the bill a commitment from the Scottish Government to have action plans for all three energy sectors.

On a wider scale, I do not expect the bill to pinpoint financial support for things such as wave and tidal, but the Scottish Government, the UK Government and Europe could do more to support fledgling technologies in that sector. The level of finance is not sufficient to build an industry quickly. There are opportunities through the renewables obligation—the financial support mechanism—to bring forward wave and tidal, and it might provide a strong market pull, but that would require a great
deal of capital investment up front, which the RO might not deliver. More could be done by the Scottish Government, the UK Government and in Europe.

Charlie Gordon (Glasgow Cathcart) (Lab): Should—or could—the bill have considered the skills that will be required to move to a low-carbon economy?

Grant Hodges (Climate Change Business Delivery Group): Throughout the process, business needs—according to our group—some clear signals about the areas in which Government believes the targets should be met. We need a road map that tells businesses which targets will be met from heat, and which will be met from renewables technology, and which gives them a steer on where the Government wants effort to be focused.

That would naturally lead to the question whether we have the skills now, or whether we need to consider different sorts of training. We need to think about the skills that are needed, but first we need to work out the road map for meeting the targets so that we can find the skills gap.

Charlie Gordon: It is clear that certain skills might be needed to take advantage of what, presumably, might be opportunities for expansion in some of the technologies that are associated with new types of energy, but is there a potential downside? Could it lead to loss of jobs in the real economy?

Grant Hodges: The potential exists for the creation of green jobs to result in a net positive. Many more jobs will arise from a sensible and well-thought-through programme that meets the targets. We are going through tricky economic times. The challenge is to ease the switch of jobs from the old economy to the new economy. There is a risk but, to go back to what Jason Ormiston said, I would argue that Government can do more to encourage investment in renewables, particularly in heat. If Government does that and those industries flourish, that will greatly ease the employment risk that the current financial problems have created.

Charlie Gordon: Can the CBI provide us with some data that points to a net increase in the number of jobs? Other witnesses have criticised the fact that there is no net job impact evaluation associated with the bill.

Matthew Farrow: There are a number of points that I would like to make on skills. Whether the bill should address the issue is an open question. It might be a risk to include everything in the bill; often, we just want to get on and do things.

Skills are a huge issue. You are right to point out that the picture is not all positive. I agree with what Grant Hodges said. There will be just as many jobs in a low-carbon economy as there were in the old economy but, as we all know, transitions are often painful. Specific measures need to be, and are being, taken at European level on the emission trading scheme to ensure that while we reduce emissions across Europe as a whole, we do not put the sectors that are competing internationally in an impossible position by making them pay a carbon price that their competitors in China and India do not have to pay. The result of that will be that they simply cannot compete and those jobs will be lost. The emissions will not reduce; they will just migrate. There are risks, which having the right policy—at the European and UK levels, as well as the Scottish level—will allow us to address.

As regards upskilling, it is important to ensure that Scotland and the UK get the skills benefit. If we set ambitious targets and pull through the technology to deliver on the targets, there is a risk that the supply chains might be overseas—wind power is often given as an example of that. We cannot avoid that happening. Our view is that we need to do as much as we can to meet the targets across all the technologies. It is impossible to say that we will be able to source everything that we need from within the UK. It is important that the Scottish Government and the UK Government think quite hard about the areas in which the UK and Scotland have a particular advantage. The marine sector is a good example, as is carbon capture and storage. As Grant Hodges said, we need to have a road map for the development of those sectors. Specific measures can be taken on skills, but I am not sure whether they should be included in the bill.

When it comes to job numbers, there are many estimates floating around, from President Obama and the Prime Minister, as well as from particular sectors. My view is that one could spend a long time trying to come up with a big number. We know that the opportunities and the jobs are there, so let us just get on with taking action. However, there are data that can be examined. The UK Government is to bring out a low-carbon industrial strategy, which will have a lot of numbers in it.

Jason Ormiston: I would like to provide some perspective. To answer your question, it would be possible to deliver a skills action plan through a renewable heat action plan. To deliver on the 11 per cent target that the Scottish Government is committing to, we will need to increase the number of installations of renewable heat technology— solar panels and so on—from 1,500 a year to 25,000 a year. We do not have the skilled workforce to deliver that number of installations. We need to reach that installation capacity quickly. I view the development of a renewable heat action plan as an important subset of action on skills.
would prefer delivery on that front, instead of skills being dealt with in a distinct part of the bill.

Grant Hodges: I have another point on job numbers. Last week, I was at a meeting that Patrick Harvie chaired and at which there was an interesting presentation that said that the flow-through of jobs from the proportion of the American fiscal stimulus that was spent on green industries was much higher than it was from the stimulus in other areas. You could take that as an indication that there are more jobs to come from spending money on green infrastructure than from other areas of the fiscal stimulus.

Rob Gibson: Matthew Farrow made a point about certain industries being exempted from the ETS. What industries?

Matthew Farrow: I was not saying that some industries should be exempted from a European Union ETS. The way we think that an EU ETS should work—this is broadly how the new deal that was done with the European Commission in December has taken it forward—is by setting an overall cap on emissions for all sectors within the scheme, and then having a debate about whether those allowances should be auctioned or issued free. Our view is that sectors that have evidence that they are subject to carbon leakage and cannot compete on paying a carbon price should get a free allocation on the basis of a benchmark.

I am afraid that this will get quite technical. The European Commission’s approach is that the benchmark should be set for the most efficient 10 per cent of installations throughout Europe. An installation that was in that 10 per cent band would get free, not all but most of, the allowances that it needs. That would allow it to compete internationally and it would not have to buy additional allowances. If an installation was below that top 10 per cent—if it used older or less efficient plant, or whatever—it would get only enough free allowances to enable it to operate as if it had the most efficient plant. Therefore, there is a massive incentive to invest in more carbon-efficient technology.

It is important to recognise that a free allocation against a benchmark for particular sectors is not a get-out-of-jail-free card—the task that is faced is still very difficult—but it would allow them to compete internationally until we have some breathing space. The sectors that we are talking about include the cement sector, the steel sector and parts of the chemicals sector.

Rob Gibson: Those sectors are not noticeably represented on the climate change business delivery group.

Brendan Dick: No.

Matthew Farrow: The CBI had a climate change task force that was made up of about 15 chief executives of UK-wide companies who put together our climate change report about two years ago. It included Philippe Varin from Corus and Tom Crotty from INEOS Chlor. The CBI’s advantage is that, because we are a cross-sectoral body, our work on climate change must be informed by—as the convener said—the whole range of companies at the leading edge and in different sectors. If we are to make the low-carbon economy a reality, we must transform the whole economy; therefore, we must have a debate that includes the wider business community. That is what we tried to do.

The Convener: I think Rob Gibson’s point is understood.

Charlie Gordon: Can the CBI give some examples of best practice in businesses encouraging behavioural changes in this area of policy, in terms of both their staff and their customers?

Matthew Farrow: I will kick off, but I am sure that others will want to come in.

There are some good examples of that. One company—I think that it is General Electric—has a personal carbon calculator on its company intranet. Its employees are encouraged to calculate their own carbon footprints, including from their lives outside work. Other companies send energy efficiency information to their employees’ home addresses to reinforce the fact that energy efficiency should happen not just in the workplace, but outside it as well. There are some good examples around, but I do not have a list of them with me.

When I talk to the big employers, they recognise that, as major employers in Scotland and throughout the UK, they have an important role to play in trying to enthuse large parts of the population. Car fleets are another example. Some companies whose employees have company cars incentivise employees to choose cars that produce lower emissions. Videoconferencing is also encouraged.

I am sure that my colleagues will want to provide some more examples.

14:30

Brendan Dick: There are two aspects to the issue, and the mention of employees is important.

BT and, I am sure, other large organisations have done a lot in recent years to drive the climate change agenda in a way that makes sense for us. We have saved a lot of money by doing that, but there are many other side benefits. Matthew Farrow referred to flexible working, of which we do
a lot—it is how we live. Flexible working saves money and, significantly, an awful lot of carbon.

There are a lot of other examples. In Glasgow, which is Charlie Gordon’s home patch, we have successfully trialled an electronic van for Openreach field engineers. Recycling and other initiatives have helped us to make a massive step change since we started measuring emissions in 1996: we have not yet touched on the key issue of measurements.

Employee involvement is critical. We have a number of initiatives, but our main focus internally is on carbon clubs. Using carbon calculators as a basis, we encourage colleagues—whoever and wherever they are—to set up clubs on a variety of issues that deliver environmental benefits. Those include cycling clubs, clubs that are active in the community and clubs with green agendas. That approach has two or three benefits: first, it benefits the company; secondly, it changes behaviours at home—people in carbon clubs at work are more likely to think about environmental issues when they are at home with their families; and thirdly, if people in large organisations such as BT are more aware of environmental issues, they are more likely to talk about them to friends who work in small businesses. That drives change and also relates to the issue of broader business engagement. Our carbon clubs are internal, but we are exploring whether we can externalise them in a city or geography, so that everyone can take part. We have not done it yet, but larger organisations could help in that regard.

Grant Hodges: I will offer the committee a couple more examples of best practice. Reflecting the fact that people are competitive by nature, we have extended the idea of carbon clubs to competitions between different offices and business units, which are challenged to come up with and implement the best ideas. That approach has the benefits that Brendan Dick outlined, in that it gets people to take changes in behaviour home with them.

Nearly every partner in PWC has been through a three-day programme on the sustainability agenda at Cambridge University. The aim is to increase every partner’s awareness of environmental and sustainability issues, so that the environment becomes a mainstream topic of conversation when they talk to their clients. An audit partner who, historically, has had no interest in the environment can facilitate change by raising awareness of the issue with the finance director of their FTSE 100 company.

Charlie Gordon: What is your view of how the Scottish Government engaged the business community during development of the bill? Do you have any views on the consultation processes that were employed?

Brendan Dick: From our point of view, the processes were successful. I cannot say much more than that.

Jason Ormiston: We have had every opportunity to engage—we are sitting in front of the committee engaging. The renewables industry does not think that it has been left out in any way. The industry is seen as being key to delivery of the bill’s objectives, so we have deliberately engaged with the process in a proactive and positive manner.

Matthew Farrow: I have nothing to add. We responded to the consultation and were involved in discussions about particular concerns.

Cathy Peattie (Falkirk East) (Lab): The bill proposes cuts in emissions of 80 per cent by 2050 and 50 per cent by 2030. Does the panel think that those targets are ambitious enough?

Matthew Farrow: Broadly, yes. The fundamental point is that the targets must be led by the science. The value of the Committee on Climate Change is that it provides advice on that. When the UK Climate Change Bill was being debated, there was a lot of discussion about raising the 2050 target for the UK from 60 per cent to 80 per cent—it had already been raised to 80 per cent for Scotland. The CBI’s view was that we should consider what the Committee on Climate Change said: if its analysis of the science suggested a target of 70, 80 or 90 per cent, that would be what the target should be. From that point of view, the 80 per cent target for the Scottish bill mirrors the UK target, which seems appropriate. As Adair Turner has pointed out, there is an issue about international aviation and how its emissions are counted. If it continues to grow, it will be necessary to cut by 90 per cent emissions in the rest of the economy. Broadly, the 2050 target is ambitious enough.

In a sense, the 2030 target feels a little bit arbitrary, although it is broadly on the trajectory towards 2050, which feels right. I guess that the value of having a target for 2030 is that it emphasises to people that there is a lot to do by 2020, which is where the UK act interim target is focused. However, the following decade is pretty important, too, particularly in relation to energy. Some of the big-ticket items, such as carbon capture and storage, and nuclear power—which I know is a controversial issue, particularly in Scotland—will not come into play until the 2020s.

As the bill emphasises, 2020 is a tough staging post, but in the following decade you have to at least keep up the pace. The 2050 target is extremely challenging and it is science led. Rather than have a long debate about whether the target should have been to reduce emissions from the
1990 level by 82, 85, or 78 per cent, we just need to get on and do some of this stuff.

Brendan Dick: I agree with Matthew Farrow. To start with the getting-on bit, the Government’s role is to work hard and facilitate the creation of a way of measuring everything. That is where a lot of people struggle; it is very difficult to hit a target if you do not know where you are starting from. If an individual or business can measure different causes of climate change, they can start to do something about it. My company has done that and—trying to get early wins is key. Grant Hodges and I were talking about this earlier.

Although using credits might be in the mix on the journey, at the key staging points of 2030 and 2050, the ambition for the country ought to be genuinely to hit the 80 per cent target, not to hit 70 per cent and have bought 10 per cent. That is important, but it is going to be pretty challenging.

We are a nation of 5 million people and we should take a common approach. Some parts of the country—certain towns and cities—are starting to say that they will achieve a 100 per cent reduction. That is perfectly understandable, but we are not in favour of that approach. It is hard enough to get a system and methodology to achieve the 80 per cent target collectively, so distractions, such as I have just described, are probably not helpful.

Grant Hodges: I totally agree that we should ensure that trading exists only to help soothe the pain of the journey, not to mitigate the result at the end point. We have to ensure that we are consistent and honest about what we measure as Scottish emissions, and that we do not run into the danger of, in effect, offshoring our emissions by importing carbon that is being produced elsewhere. The definition of emissions must be purely what we make, plus aviation emissions. We must ensure that we do not offshore our emissions. I cite the example of Ravenscraig.

Grant Hodges: I am very much in favour of a 2020 target. A route map was mentioned earlier. I am really keen on our turning things around and working out what we are going to do and where it should get us for 2020. We could have a sense check of whether the things we think that we could realistically do between now and 2020 will really put us on the trajectory to achieve the 2030 target. That way, we would have a realistic map—we would know what we are doing. We should have a target for 2020, but I do not think that we should just set a top-down number; we should try to work out how we will realistically achieve the target.

Brendan Dick: I am not an expert in the methodology; plenty of people are more expert in it than I am. My primary observation is that a standard process should be created as quickly as possible. What we have tried to do in the May day network, and in other initiatives to encourage smaller businesses to get started, is to make some of the basic stuff simple. That can be refined.

It is important that the experts whom the Scottish and UK Governments can call in come up with something that all of us can sign up to and move forward with and the key is to do that quickly. Things might become more complex and sophisticated as time goes on, but if most people have something that is relatively simple to work to—at work or at home—they will at least know what to aim at.

Jason Ormiston: Cathy Peattie’s original question was whether the targets of 50 per cent and 80 per cent are ambitious enough. We must see those targets as being ambitious, because we are unlikely to achieve them from where we are now. An awful lot of things must happen—in renewable heat, for example, which I talked about—before we are likely to achieve the targets. We are cutting carbon emissions by 1.5 per cent per year, but we need to cut them by 3 per cent per year.

Another issue is the trajectory of carbon cuts. It is important to cut as much as we can, as soon as we can. If we do not do that now, more expensive and more politically difficult action might have to be taken later, if members follow my logic. Early and effective action needs to be promoted.

Flexibility on the science is needed. Many commentators say that a cut of 80 per cent is needed by 2030. If the science says that in the next few years, will the Scottish Government be ready to set the target of an 80 per cent cut by 2030? How on earth would that be achieved?

The Convener: Given those comments, I will ask about something that Brendan Dick said. Some of the news about the science is increasingly shocking, week on week. We know that global emissions have been higher than the Intergovernmental Panel on Climate Change’s worst expectation when it published its assessment report, so the situation is urgent. Brendan Dick talked about community work. I was not clear what you were referring to—did you mean the idea of carbon-neutral communities or transition towns? In my experience, such activity turns the agenda into something positive for people to participate in.

Brendan Dick: My observation is based on my experience. The ambition to be carbon neutral by...
2050 is fine if how it is to be measured and attained is clear locally. The challenge in a nation of our size, where people are broadly starting to pull together to achieve the 80 per cent objective, is to avoid the danger of being diverted. Edinburgh says that it wants to be 100 per cent clean by 2050. That will be fine as long as we apply to that the methodology that we apply nationally—a standard to which everyone is working. If we can squeeze that further in Edinburgh, Biggar or wherever, that is good. However, to run a completely separate process in parallel would be unhelpful because people would have to be engaged in two or three ways.

**The Convener:** I do not understand why that would be any more of a distraction than the concept of carbon-neutral buildings or housing is, when other parts of the economy do not think that they can achieve that level.

**Brendan Dick:** From a business perspective, if we focus all our efforts on the 80 per cent target and the process to reach it, having resources diverted to a different process will be challenging. There is nothing wrong with the aspiration, but I question the practicalities—the resources, to be frank—for dealing with it.

**The Convener:** If the result of various strategies is early, quick and deep cuts, that is what we are looking for.

**Brendan Dick:** If we can implement some of that—with a different hat on, I am engaged in that in Edinburgh—we can make early cuts. If a city in Scotland was to come up with a process to which we could subscribe for hitting 100 per cent, why not use it throughout Scotland?

**Matthew Farrow:** Can I just add a point on measurement?

**The Convener:** Briefly.

**Matthew Farrow:** We found that companies want, in order to measure their carbon footprints, a user-friendly tool that is uniform and applicable to all sectors, so the CBI is working with companies to produce that. We also work closely with the UK Department of Energy and Climate Change because the UK Climate Change Act 2008 requires the Secretary of State for Energy and Climate Change to implement that sort of approach. We hope that within three or four months we will produce a draft that will at least give all companies a standard method of measuring their carbon footprint.

14:45

**Cathy Peattie:** I am interested in what the witnesses believe the level of annual emissions cuts needs to be between 2010 and 2019. Do you believe that a 3 per cent year-on-year cut from 2010 is achievable in the business sector? Do you throw your arms up in horror at that proposal?

**Brendan Dick:** The important thing is that at least we have targets. Obviously, we can debate whether there should be annual targets or another process for getting to our ultimate objective by 2020, 2030 or 2050. Different people will have different views, but what is most important is to have targets to aim at so that people can get on with delivery.

**Grant Hodges:** Many of the available initiatives do not even have up-front capital costs, but are not being undertaken because businesses are busy doing other things. However, there is a lot of low-hanging fruit that would allow businesses to cut their carbon footprint radically and quickly. As we have just discussed, early action is important because of the chilling statistic that a bit of carbon that goes up in the air this year will stay there for 100 years. It is therefore much better to take carbon out of the environment this year than next year. I believe that it is possible for all businesses and all parts of Government to reduce their footprint quickly.

**Jason Ormiston:** That is more likely to happen in the business sector than in the domestic sector. It makes economic sense for a business to cut its energy bill at the moment, but it is much more difficult for householders to respond to such pressures because they are not incentivised to do so and some homes are difficult to insulate. Retrofitting 2.2 million homes in Scotland will be tough because we do not yet have in place the framework to deliver that. However, it is true that businesses are responding.

**Matthew Farrow:** The bill’s approach to the target for 2020 is, in a sense, a bit clumsy. I am not a big fan of annual targets because it is difficult to guarantee year-on-year falls. The yearly figure can bounce around and particular factors can affect it; for example, generators burn more coal if there is a particularly harsh winter, so the emissions rate moves up. The short-term trend is what matters—I think we all agree that we need early cuts. The bill says that we must have annual targets, but because it recognises that it is hard to guarantee immediate and steady cuts year on year until 2020, it says that emissions just have to be less than they were the year before. In theory, that requirement could be met by making only a small reduction in emissions between now and 2020, which is clearly not the way to go.

Our view is that the UK 2008 act takes a good approach. It has five-year carbon budgets that will not lock people into achieving precise reduction levels every year, which are hard to guarantee. However, there is a guarantee that a slice will be taken off emissions over each five-year period. There was a big debate during the progress of the
UK Climate Change Bill about whether there should be annual targets. In the end, the Government approached the matter in a way that works reasonably well. A trajectory must be published for each five-year carbon budget that will show how emissions will fall year on year. Those are not formal targets, but part of a trajectory. If there is a deviation from the trajectory, it must be justified.

That approach makes sense from a Scottish point of view because figures can bounce around one year due to circumstances that are not policy or business failures and which no one in Scotland can affect easily. We would want to note that but not change policy. However, if the figures were off course because the policy was not working, something would have to be done about that. MSPs, for example, would need to hold the Government to account for that.

I feel that the 2008 UK act’s approach is reasonable, but that of the Climate Change (Scotland) Bill is a bit clumsy because it wants annual targets while not locking itself into them too much.

Jason Ormiston: Whether to have annual or five-year targets is an interesting debate. However, it would be a big mistake to use weather patterns as a justification for missing a target. The problem is that we have poor-quality, badly insulated homes. That problem does not exist in Scandinavia. If we had high-quality, 100 per cent perfectly energy-efficient homes—zero-energy homes—weather patterns would not be a problem in the context of cutting carbon emissions. There is a problem only because of the poor quality of the housing stock. Heating accounts for 50 per cent of our energy use. That is a key point. I would hate to hear weather patterns being used as an excuse for targets being missed.

The Convener: We must move on. I ask people to be brief.

Matthew Farrow: The question is how we get from where we are to Scandinavian levels of housing-stock quality. The UK commitment on zero-carbon homes must be achieved in Scotland, but the real problem is the existing housing stock. Scotland has worse housing stock than the rest of the UK, in the context of energy efficiency rating.

Dramatic action is needed, but there is so much inertia in the system. There is an issue to do with skills, as Charlie Gordon said, and people do not want people to come into their houses and rip out the walls. It will take pretty powerful incentives, such as council tax rebates, to get action beyond that of the few per cent of people who go out and find grants to put energy efficiency measures in place. I agree with what has been said, but the issue is how quickly we can get to where we want to be. That brings us back to the road maps—I think that that has been a common message for the committee from witnesses.

Cathy Peattie: We need to start somewhere. I will not be around in 2050, but I hope that my grandkids will be. How soon can we start measuring what we do, so that we can say, “That worked, but that didn’t work”? Can we start doing that in five or 10 years? Is it realistic to start measuring progress in 2010, or should we put off doing that for another five years or until we have got the infrastructure right?

Jason Ormiston: The target should be based on 1990 figures. We should think retrospectively about how we have performed—we have performed poorly—and then consider the trajectory from now, based on a 3 per cent annual cut, as long as the science justifies that. That is the benchmark that we require.

A few weeks ago, the Scottish Parliament had an opportunity to support Patrick Harvie’s call for increased spending on energy efficiency. Although more money is going into the energy efficiency pot, we need to do an awful lot more. Careful thinking about that is needed.

The Convener: I must ask that questions and answers be kept brief and to the point, so that we can make progress.

Des McNulty: I am interested in action between now and 2020. Would it be reasonable and appropriate for Scotland to set the higher of the two targets that will be discussed at Copenhagen, whatever happens at that conference?

Matthew Farrow: We need to work towards the higher target. That is the advice of the Committee on Climate Change, although it acknowledges that it will almost certainly be necessary for the UK to buy credits, because the higher target is simply not achievable through domestic action. The right approach in principle is to aim for the higher target and get as close as we can to it, even though we will need to buy some credits and even if nothing happens at Copenhagen. I suspect that a deal will be reached at Copenhagen, but I do not know how robust it will be. We must hope that whatever happens we will get closer to achieving a robust deal in succeeding years. If the whole system fails apart, there will be a different debate, but our not getting what we want at Copenhagen should not be used as a justification for dropping the higher target altogether.

Des McNulty: Can Scotland achieve the higher target? You said that the UK probably cannot do so.

Matthew Farrow: I do not know. I would seek advice from the Committee on Climate Change, which does good analysis of what different sectors
can do—it will do more for the autumn report. The Scottish Government partly funds the CCC, whose purpose is to provide such advice.

Jason Ormiston: If the question is whether Scotland can meet the target—as opposed to whether we will do so—the answer is that we absolutely can deliver an 80 per cent cut by 2050. We have expressed a desire to show leadership, so even if Copenhagen decides against the higher target, we should remain committed to it, because we have the resources to do so—others can soon catch up.

Rob Gibson: We heard about route maps for businesses and we need action plans for different sectors. Have the witnesses calculated the contributions that different types of business will have to make to help Scotland to reach its targets?

Matthew Farrow: We have done some work on that at a UK level, although the results of one of the two pieces of work have not yet been published. We have done a cost curve for the UK as a whole, which shows what each technology and policy option needs to deliver in terms of tonnes of carbon, and in about two months’ time we will publish a series of road maps that spell out what needs to happen in various sectors—buildings, industry, energy and transport.

Those pieces of work are at a UK level. We are considering whether we can produce the data at the Scottish level, but it is sometimes difficult to disaggregate them. However, the Committee on Climate Change is doing a similar analysis, so it might be a source of specific advice.

Rob Gibson: Has it, too, not had a problem with disaggregating the data for Scotland? We are trying to find out what the Scottish emissions are. How can we do that if the UK Committee on Climate Change is unable to be precise?

Grant Hodges: That is a difficult question. I suspect that all four of us will say that we do not know the answer. However, I will make a couple of points. First, you asked about different sectors of industry, but I would turn that matrix round and say that it is clear that we should focus on the major area of heat. My statistic will be slightly wrong, but heat accounts for roughly 50 per cent of carbon emissions. A huge amount of the efforts that have been made so far have been in other areas and have not touched on heat, so if we focus on heat, we can achieve a lot quickly.

Secondly, we should focus on demand. We have talked a lot about energy efficiency, which is great, because we should certainly focus on insulation and the energy efficiency of buildings, but we also need to change people’s behaviour. We should try to do that quickly, because there is a risk that people will consume energy efficiently but in large quantities, whereas what we need is for them to consume less energy.

I accept that I have not answered your question about different sectors of the economy, but if we focus on heat and demand, we can make huge strides.

Rob Gibson: I am sure that some businesses will be unhappy that they are unable to provide their services in order that people can consume all that electricity or heat or whatever, but other businesses can benefit from that. That is why I asked the question. Are there businesses of different types that we know have done the calculations?

Brendan Dick: Grant Hodges is right to say that the area has been challenging. We have been at the game for quite some time—we have been measuring components for years—and it is only now that we are getting granular. We are now focusing on the figures for individual locations—not just the offices that we populate but exchanges and so on in our network.

We are probably getting to a stage where UK and global businesses that already have measures at a high level are becoming quite granular. I am sure that the same is true of many public sector organisations, such as local authorities that have properties all over the place. They are facing the same challenges.

Rob Gibson: Indeed. I am sure that you want support from the Government and other agencies, but how should they offer assistance? Surely it is not just through targets. It must be more than that.

Jason Ormiston: Initially, we would prefer incentives for people to respond to the problem in sensible ways. That will require some money, but things such as the UK Government’s initiatives on renewable heat and the feed-in tariffs that it proposes to promote for the installation of microgeneration, especially in retrofit, will make a difference. We hope that the UK Government will set the incentives at the right level so that a significant difference is made.

It is important to promote cultural change. People sometimes hold up their hands in despair and say that, although people talk a good game on climate change and their own activities, how that translates into day-to-day activity is another matter. We are probably all guilty of that from time to time. Trying to get that kind of cultural shift among people is probably the biggest challenge that we face. It comes back to the need to incentivise people to do what makes economic sense.

That shift will eventually occur, especially given the ways in which schools are tackling the issue. Kids are getting it, but people from the older
generations generally do not get it as much, which is an issue that needs to be addressed. There need to be financial incentives for action.

15:00

**Rob Gibson:** The Carbon Trust has done a good job in calculating carbon management for some businesses, as John Stocks reminded us last week, but it does not have the resources to roll that out for all businesses. Is that the kind of thing that needs to happen?

**Brendan Dick:** Jason Ormiston was right to mention incentives, but I think that there are two things that the Government can do in the short term. It must somehow find a way—the Carbon Trust is a good example—to get every business, public sector organisation and voluntary sector organisation to understand how to start the journey. A basic capability has to exist in relation even to simple measures, and that extends into the home too.

To extend that forward, one thing that Government can do is relatively unique is to enable cultural change, working with other organisations but acting as a catalyst itself. Individual organisations are less capable of doing that, and even for big organisations it is difficult to pull things together. People need to be given the capability to understand and measure, and to see the way forward. There are some simple technologies—as I am sure you know better than I do—that can be deployed in the home to help with that. The big thing is just to get us started on that journey.

**Jason Ormiston:** In the longer term, pricing environmental impact into people’s activity will be useful. I am talking about the cost of climate change and carbon. Everything that we buy may have a carbon impact and, if that is the case, we have to pay for it. That will perhaps lead people to take a more sensible route.

**Rob Gibson:** That is what the Office of Gas and Electricity Markets would say that it is doing to you at the moment.

**Jason Ormiston:** That is another debate.

In the longer term, we have to move towards that type of carbon marketplace. There are many different ways to do that, but carbon needs to be priced into people’s activity. That does not happen yet with regard to the externalities of climate change.

**Matthew Farrow:** Given that public resources are limited in Scotland and throughout the UK, there is a risk that every lobby group will say that they want incentives for their particular activity.

You need to do two things. You need to look at where you can get most bang for the buck. You should also consider schemes that are revenue neutral but which provide incentives or disincentives. We have looked quite hard at whether it is possible to have green business rates, for example. That is complicated and it is not clear that it is possible—the carbon reduction scheme, which might achieve similar effects, is coming in anyway—but the idea is that very energy efficient buildings get a cut in business rates, while the least energy efficient get an uplift. The Italians have a scheme for buying appliances in which people get a grant if they buy a very energy efficient appliance and pay extra if they buy the least efficient one. At a time when public authorities do not have a lot of cash to spend on some of this stuff, it is worth considering those issues.

**Alison McInnes (North East Scotland) (LD):** Matthew Farrow mentioned aviation earlier. Can you give us a clear view on whether aviation and shipping are correctly identified in the bill and on how they are tackled?

**Matthew Farrow:** I will kick off, as I mentioned the issue. There is not a huge amount of disagreement. As I understand it, the bill says—as the UK act does—that Scotland’s share of international aviation and shipping is a legitimate part of what we are trying to cut and has to be included in a target in some way. There are complex issues to do with how that is done methodologically, particularly with regard to shipping and how we account for the ships that come to our ports, for example in terms of a proportion of their journey.

The bill says that we will seek to include aviation and shipping in formal targets as quickly as possible once the methodology has been sorted out. In the meantime, we will carry on doing everything that we can to address aviation and shipping emissions, and to ensure that the rest of the economy is doing as much as it can. As Adair Turner said—and as I mentioned before—if we find that aviation and shipping cannot or do not reduce very much, it must be recognised that, as a society, we have to do more elsewhere. That seems to be a rational way to approach the issue.

**Grant Hodges:** This goes back to Jason Ormiston’s earlier comments about pricing and externalities. The price of aviation has to reflect fully the carbon cost and there have to be viable alternatives. There will always be a sensible rationale for taking long-distance flights, but what about flying to and from London? We need the carbon—the externality—to be priced and we need good, viable alternatives, so that people can make rational decisions. That should reduce the carbon impact of that mode of transport.
**Des McNulty:** The Scottish Government has said that it wants to take advice from the UK Committee on Climate Change in the first instance, but there is a mechanism in the bill that would allow it to set up a separate Scottish committee in due course, if that were needed. Is that the right approach? Is there an argument for having a Scottish committee now, or should we suck it and see, as the Scottish Government suggests?

**Brendan Dick:** I think that the current approach is right. The UK committee seems to be doing the right things. Keeping the option of filling in the gaps, whether via a Scottish committee or through some other body, is the best thing to do at this stage.

**Jason Ormiston:** This is not a huge issue for the renewables sector, but my experience of engagement with some institutions that are based down south is that they do not have as much exposure to Scottish issues as they should and that their analysis and decision making can therefore be a problem. Given that we represent only 10 per cent of the population and impact, I am concerned that we might get lost in the bigger picture for the UK committee. That would be a mistake, because we reckon that a third of the renewable electricity that is required to deliver the 2020 target is going to come from Scotland. As we move towards 2050, that proportion is likely to increase, so it would be a mistake for the UK committee to ignore Scotland. The suck-it-and-see approach might be the most sensible. If there are signs that we cannot count Scotland's impact, because the UK committee is not able to focus its resources on that, there should be a quick switch to an independent committee.

**Matthew Farrow:** I think that that is the right approach. In my experience, the UK committee's work is of a very high quality. The report that it has put out is independent and is sobering stuff. It is there for politicians, business and the whole population. As Jason Ormiston said, there might be a capacity issue. If there are specific issues that have a Scottish dimension that is not captured by the UK work and the UK committee does not have the resources to look into them, I guess that you in Edinburgh would want to commission particular research. I am not sure that recreating the UK committee at a Scottish level would be the best use of your resources, so it is probably right to take a suck-it-and-see approach.

**Des McNulty:** We heard last week from the Scottish Trades Union Congress that, although it had some doubts about whether we should try to replicate the scientific expertise role of the UK Climate Change Committee, there might be some scope for taking a specifically Scottish approach to the application of the recommendations in a Scottish context, given the specific circumstances of the Scottish business and regulatory landscape. Do you foresee that we will end up with a different division of the committee's functions in Scotland compared to the rest of the UK?

**Brendan Dick:** A different Scottish approach to application might well evolve. If we get knowledge at a UK level, why not use it? However, if, over time, the application in Scotland seems different, a different approach to that is fine. My industry, telecommunications—I know that Rob Gibson looks at this—has unique challenges in Scotland. We have managed to work on those in a Scottish context but within an overall UK regulatory framework and using UK understanding and knowledge.

**Rob Gibson:** The bill sets out annual reporting duties to Parliament on progress towards emissions targets and on proposals and policies to meet future targets. Do you have a view on the proposed reporting arrangements and can you identify any potential issues relating to collating information from the business sector and small and medium-sized enterprises in particular?

**Grant Hodges:** There will always be difficulties in collecting the data. The issue of consistency has been raised a few times. You must give a clear signal on how you want data to be collected and must provide clear methodologies, so that there is consistency. The bill includes provisions on waste, for example, that should lead to consistent data. Inconsistency of data was one of the big problems that we faced three or four years ago, when we were trying to put together area waste plans. Collecting the data will be a problem, but it needs to be tackled head on.

The other big problem that I foresee is the “So what?” question. If reporting shows that targets are not being achieved, what is the sanction? Who is the policeman—is it the Transport, Infrastructure and Climate Change Committee or Audit Scotland? At the moment, it is not clear to me that we can be confident of delivery against the targets. That goes hand in hand with reporting, because it does not matter what we report if there is no one to take that on.

**Jason Ormiston:** We must have some faith in the ability of the Scottish Parliament to scrutinise performance and to put pressure on the Scottish Government if it is not delivering—that is members' role. What will you do to ensure that the Scottish Government delivers on its targets?

The quality of statistics in the energy sector is not great; much more work needs to be done on the issue, especially in Scotland. I hope that the Scottish Government energy team is thinking about how it can tackle the issue of statistics,
because we struggle to get a handle on the situation, especially in the heat sector.

Rob Gibson: You are asking us to scrutinise performance, but we need to have good data. We are asking how you will collect data. Through your involvement in carbon management, surely you are evolving methods that will allow data to be more accurate.

Grant Hodges: Yes.

Brendan Dick: We are putting a vast amount of effort into examining how we capture data; as I said earlier, we are now getting down to a granular level. Grant Hodges is right. For various reasons—because we are bigger and have been collecting data for longer—we are probably a bit ahead of other organisations. During the early stages of the process, data capture requirements need to be relatively straightforward, or it will be really tough for all organisations—not just businesses—to meet them.

Jason Ormiston: The accountancy profession may shoot me for this, but the annual audit process for a business could include assessment of its carbon impact over the year. If we could find a way of measuring that, it could be included in general accepted accounting practice—I think that is what it is called, but I am not an accountant. In the longer term, that would allow us to measure how businesses are responding to similar pressures.

Grant Hodges: As an accountant, I think that that is what we need. Another factor that will be an ally in data collection when it is implemented is the carbon reduction commitment, which requires records to be kept and systems to be in place by spring 2010 and starts to have financial bite in spring 2011. Every business with a utility bill of £1 million and more will be captured by the CRC, which will provide a good chunk—although not all—of the data that members will need.

Rob Gibson: Can we re-educate accountants to deal in carbon as well as pounds or euros?

Grant Hodges: Yes.

Rob Gibson: Good.

The Convener: That is the kind of answer that we rarely get.

Matthew Farrow: We must distinguish between two issues. The first is monitoring of the absolute amount of emissions from the economy. I am not sure that we want a bottom-up way of doing that—the main concern is timeliness of data, on which we have already touched. The second is monitoring of why emissions are not being reduced fast enough. That is where bottom-up evidence from business is beneficial. We see our role in that as crucial, and we publish an annual document on UK-wide policies on climate change in which we specify what is working, what is not working and what should be done to fix that. That is different from trying to count every unit of carbon that comes out of Scotland. There are ways in which to do that already.

15:15

Cathy Peattie: There has been some discussion about what can be done locally and the importance of that. Do you think that the placing of duties on public bodies is an appropriate mechanism for driving change in the public sector? How might such duties have a knock-on effect on the business sector?

Jason Ormiston: I can answer your first question, on the duties on local authorities. Some local authorities have tried to undermine some of the national policies on the delivery of renewable energy that have come out of the Scottish Executive and the Scottish Government over the past few years. It is important that the bill gives the Scottish Government the powers—if it does not already have them—to impose a way of thinking or decision making on local authorities, so that they support the effort rather than undermine it. That has been a problem, but the bill could have a big impact there. I was therefore pleased to see the duties in part 4. That part of the bill is very important. A third of the budget is given to local authorities, and if they do not play ball, that causes a problem.

Brendan Dick: Local authorities are key to this. It comes back to the need to engage the broad base of small organisations and, critically, consumers. The Government can set the juggernaut running, but it cannot drive the juggernaut everywhere. Maybe I should not use the word "juggernaut"—it should be something smaller, such as an electric van, perhaps. Local authorities are a key channel for delivery, but there is a need for action across society—it is not just about local authorities or other public sector bodies.

My understanding, from talking to people offline, is that the Convention of Scottish Local Authorities is starting to look at the issue pretty hard. It is possible to achieve consensus and, at a local level, you will find that local authorities and businesses are at one in trying to make it happen. Some local authorities deliver services through local offices. That certainly happens in Edinburgh, where I live. Therefore, there may be a role for local authorities' local offices to play in securing a street-by-street culture change by telling people what they can do, which we have not quite cracked yet.
Grant Hedges: There is another role for local bodies in dragging through technologies by being a purchaser of those technologies. Local authorities should be early adopters of new heating technologies, for example, which generate off grid. Through their buying power, they can help to bring such technologies through.

Cathy Peattie: Do you believe that the duties on public bodies should be stated in the bill? Are there any examples from the business experience to suggest what such duties might incorporate?

Brendan Dick: I do not have a strong view on that.

Cathy Peattie: Are there any examples from the business sector that it might be helpful to consider in deciding how the duties should be applied?

Brendan Dick: In terms of just getting to the baseline measures?

Cathy Peattie: Yes.

Brendan Dick: Having been through the journey ourselves—we are not the only organisation to have done so—we are now offering a consultancy service to any external body, whether in the private or the public sector, on how to get baseline measures started. That tends to be for large organisations—we have not worked with the SME sector yet, but it is possible to do that. I had a conversation with a local authority in Scotland about that but, by extension, it is about how business can work in partnership with local authorities to start to have an impact through culture change in broader society. There are things that can be done.

In terms of the particulars in the bill and so on, it is maybe not quite that structured.

Alison McInnes: As you know, the bill requires the development of a climate change adaptation plan. What are you doing to increase the resilience of business to changes in the climate? Do you think that the Scottish Government is leading in that area? Is there anything else, in relation to adaptation, that we need to define in the bill?

Jason Ormiston: Adaptation is not a core area of focus for Scottish Renewables, as we try to prevent the problem in the first place. I am speculating a bit here, but I wonder whether our ability to invest in our housing stock to respond to climate change is well enough understood. That might well be associated with some of the energy efficiency measures that we are making. If we are going to get damper in the decades to come, there could be health issues and housing problems. If we bring in energy efficiency, we could also adapt to some of the problems that climate change might bring.

Matthew Farrow: Adaptation has been the Cinderella of the climate change debate for a long time, and politicians and business groups are all guilty of that. We are trying to redress the balance in the CBI. We have a cross-business working group looking at adaptation and we will produce some thinking on that later this year.

The bill contains a requirement to produce a report for Scotland. I am not sure that the bill can go much further than that, but I guess that the question is about how good the report is when you are scrutinising it. Should a timescale be set for the report? I do not know whether the bill has such a requirement, but such reports tend to be delayed. The basic point is that it is important that the Scottish Government puts adaptation further up the agenda.

Businesses such as utilities are thinking very hard about this, because they have to when they are making 30-year investments. They are often looking for a better framework from Government. The bill is probably okay, but you need to make sure that you get that report, that it is good quality, and that you challenge it when it comes out. I am sure that businesses will do likewise.

Grant Hedges: Matthew Farrow is absolutely right. Adaptation has been overlooked and needs to be taken more seriously. Business premises will be taken care of through the carbon reduction commitment, which will provide businesses with an incentive. Utilities companies which are looking at generation will be driven by another agenda to do with renewables obligation certificates and so forth. That leaves domestic dwellings, which is the area that Jason Ormiston touched on. Scotland has a phenomenal proportion of old housing stock. Whatever we can do on energy efficiency and reducing demand in the existing domestic housing stock is an obvious area on which to focus adaptation.

Shirley-Anne Somerville (Lothians) (SNP): As the witnesses will be aware, the Economy, Energy and Tourism Committee is taking most of the evidence on renewable heat and energy performance in domestic buildings. However, as you have not had the opportunity to give oral evidence to that committee, would you like to make any comment on those parts of the bill while you are here today?

Jason Ormiston: I have had three opportunities to give evidence to that committee, so that question is probably not directed at me.

Grant Hedges: I cannot really add to what I have just said about heat efficiency.

Matthew Farrow: We have all made brief comments on that this afternoon. I was going to say that heat is an undercooked element of the bill, but that would be an appalling pun. Heat is the
part of the bill on which more could be done. It produces a big chunk of emissions and there is not much policy around on it. At the UK level, the Government has recognised that it needs to do a lot more on heat, and it is talking about a renewable heat incentive. The question is whether Scotland wants to do something in addition to and more quickly than that, but we certainly need to make much more progress on heat.

On energy efficiency, we have all made points about the desperate urgency to improve the quality of the housing stock. Domestic housing is going to need some sort of dramatic incentive such as council tax rebates or something like that to get the thing moving.

For business premises, I mentioned earlier that you could consider business rates. At the moment, only public buildings have to display an energy performance certificate. We think that there is a case for requiring private commercial buildings of a certain scale to do that as well, just to raise the profile a bit. There are things that can be done.

Jason Ormiston: I made a comment earlier about the bill being a little bit lopsided in its desire for action plans and energy efficiency. Perhaps that is a good model to follow, but it is not followed in the heat section, and there is nothing on electricity or transport. We would like to see some commitment to action planning in all three energy sectors.

It will be interesting to see what comes out of the action plan on energy efficiency. We did some work a couple of years ago on delivering 60 per cent carbon cuts by 2050—at that point, that was considered the target to go for. Scotland would need to reduce its energy demand by 36 per cent by 2050 to achieve that target. The level of roll-out of generating technologies that would be necessary to fulfil the usual energy demand, which has increased significantly, would be politically unacceptable. It would be more politically acceptable to reduce energy demand by 36 per cent by 2050.

I would like the energy efficiency action plan to consider what trajectory we want that curve to be on, how to achieve it and how to do it as quickly as possible. At the minute, energy demand is probably creeping up year by year, as opposed to flatlining and then falling, which is a concern.

Shirley-Anne Somerville: Do the witnesses have any comments on the forestry, waste or muirburn provisions, which Rural Affairs and Environment Committee is considering?

Jason Ormiston: I have no comment on the muirburn provisions. We submitted a consultation response on the Forestry Commission measures, but we do not have a clear view on the leasing proposals. Our members are more interested in joint ventures with the Forestry Commission: they have worked with it on a number of significant projects in the past, but the joint venture approach would be more formalised. We support a move towards joint ventures between our industry and the Forestry Commission.

Matthew Farrow: I will comment on the waste proposals. The power to require the procurement of recyclate-based materials is important because, although recyclate markets have not collapsed, they have been badly hit by the recession, which has affected the economics of many recycling processes. I hope and imagine that the consistent public sector procurement of recyclate-based materials would prop up that market.

The carrier bag issue is endlessly rehearsed and is a symbolic issue, and to be honest I would say that the proposal for carrier bag charges is probably not the best way to increase diversion from landfill. The effort that would be put into that policy could be better expended elsewhere.

Grant Hodges: The idea that we will get better standardised waste data is a positive, and overdue, step forward. The reduction of packaging is important, and the provisions on that are valuable but will need huge co-operative work with the EU. I am not sure what stand-alone measures we can take in Scotland, but we should certainly do everything that we can to, for example, thin down the amount of metal that is used in Coca-Cola cans.

I suggest that the debate on carrier bags has moved on. A few years ago, the introduction of a tax on carrier bags would have been good, but many retailers have now come up with their own solutions. I wonder about the costs of enforcement and whether the tax is necessary now.

The Convener: Do you have any comments on the financial aspects of the bill—either the costs of setting up the framework and achieving the targets or the cost of not meeting the targets—in addition to the written evidence that you have submitted?

Grant Hodges: Businesses need clear signals. That brings me back to the route map, which we have often mentioned. We need really clear signals of the behaviour that the Government wants to incentivise so that we can all get on that bus. It will be costly to us, so we will not make the investment unless we have clear signals and know which way to go.

Another cost is the cost of compliance. We have touched a couple of times on the carbon reduction commitment that will come into force in a year or so, and I make a plea to ensure that any obligations that are imposed under the bill are consistent with that commitment. There is no reason why they should not be, but we need to ensure that we do not have two different measures
that are intended to achieve the same objective but duplicate work and achieve only one reduction in carbon. That would be pointless.

A possible cost, which we touched on earlier, is to Scotland’s reputation. We must ensure that we do not achieve the targets by offshoring our production and using trading schemes. We need to protect Scotland’s clean, green reputation.

15:30

Matthew Farrow: It is important that people recognise—I think that they do—that the recession has not changed the Stern report’s basic point, which is that it is cheaper to tackle climate change than not to tackle it. The message that I get from CBI members is that that remains true, despite the huge problems and distractions right now.

The recession makes some things easier and some things harder: Governments are willing to think more radically—for example, the debate about fiscal stimuli opens up opportunities to make progress on some agendas—but it is much more difficult and expensive for business to raise funds for investment. Ernst and Young published a report last week that indicated that decarbonising the whole UK electricity system, which we have to do, will cost the UK about £274 billion. There is no alternative to that, but it has to be paid for.

The message from us all is that we need a clear policy framework, as is broadly the case in the UK bill, and we need road maps for delivery to reduce uncertainty, make it a bit easier for business to get on and do things and, I hope, cut out some of the risk capital element.

Jason Orniston: We have something like 93 months to get on the pathway to radical cuts in carbon emissions. The bill will be enacted towards the end of the year, so we have to wait eight months for it to be enacted, but how long will it be after that until it has an impact? The issue is urgent, so we must keep going. The bill must be as tough as it can be because we are looking for transformational change throughout Scotland—a big cultural shift is required and the bill will underline that.

The Convener: That is a positive note on which to end. I thank you all for the time that you have spent answering questions.

We will suspend the meeting briefly and resume with the second panel at 15:35.

15:35

On resuming—

The Convener: We will crack on with panel 2. I welcome Colin Galbraith, the director of policy and advice, and Clive Mitchell, the strategy and communications manager, from Scottish Natural Heritage; Dr Chris Spray, the director of environmental science, and David Gorman, the head of environmental strategy, from SEPA; and Geoff Aitkenhead, the asset management director, and Mark Williams, the business strategy and climate change manager, from Scottish Water.

Dr Spray must leave early to catch a train, so I am sorry that we are starting to take your evidence a little late. We will crack on with general questions. What role have your organisations played in helping Scotland to combat and adapt to climate change? We will start with whoever would like to kick off.

Professor Colin Galbraith (Scottish Natural Heritage): SNH has worked for a number of years on climate change and, in particular, on its possible impact on the natural heritage. We are picking up definite signs of that impact now.

We have also begun to examine how the natural heritage can help with adaptation to climate change. It is quite exciting to consider how we can manage our woodland, peatland and coastal areas to help us to adapt to any changes that might occur. I am sure that that sounds nice, but when we think about where all our communities are—especially in the west and the north—and where our road system is in relation to the coast, we can see that managing coastal areas might be important for the economy as well as the natural heritage.

We have worked with the Government and other agencies in the past year or two to develop our plans, and we are developing an action plan that we hope to launch later this spring and which will fit alongside the wider adaptation framework and the bill.

Dr Chris Spray (Scottish Environment Protection Agency): Similarly, SEPA has worked closely with the Scottish Government on climate change. In December, we published our climate change action plan, which focuses on several key elements that we can bring to the party. We have been heavily involved in flooding and flood risk management. We have thought long and hard about that and the ramifications of climate change for flooding with other parliamentary committees.

We are keen to develop ideas on the science, the data from monitoring, regulatory aspects in which we can help, advice to business and communication. We have a climate change plan, which we are happy to send to committee
members if they have not seen it and which is available on the web.

**Geoff Aitkenhead (Scottish Water):** Scottish Water has worked on adaptation and mitigation for some time. On adaptation, we have developed a 25-year water resource plan that considers the security of supplies for all our customers throughout Scotland, and we have also worked on and given evidence on the Flood Risk Management (Scotland) Bill. We are working on flooding issues with other agencies, particularly local authorities—I single out the work that we are doing with Glasgow City Council on the Glasgow strategic drainage plan, which concerns adaptation and coping with future rainfall.

On mitigation, as a big energy user, we are considering various ways of reducing our energy consumption and contributing more to renewable energy.

**The Convener:** As fairly high-profile bodies, how have your organisations tried to improve their records on emissions? By what level have your organisations’ emissions reduced in recent years?

**Professor Galbraith:** Two issues come to mind. First, I think that our relatively new corporate building in Inverness still has the lowest carbon emissions of any office building in Scotland, if not in the UK. The emissions level is about 8kg per square metre per year, so it is well below the 40kg per square metre per year that is regarded as normal. That was achieved within an economic costing done by Government, and we are very proud of the building.

Secondly, we are closely considering the overall carbon budget. We have an annual reduction target of 4 per cent, on which we want to build year on year and which will quickly become serious for us. We have introduced videoconferencing as a routine way of holding meetings: we have many staff on the islands and in remoter parts of the country, so videoconferencing achieves huge savings in staff time, cost and carbon. We are making a start, but there is a big job to be done and it will take a year or two to pick up pace.

**Dave Gorman (Scottish Environment Protection Agency):** We think that we must lead by example, and I will give a few examples of what we are trying to do. We initially set a target to reduce our CO₂ emissions by about 10 per cent. We joined the local authority carbon management programme, which the Carbon Trust runs, because we thought that it would provide a good, structured approach. On advice from the programme, we set a target to reduce our emissions by 25 per cent. The target is proving to be a challenge, but it is the right way to go.

We have a general internal environmental policy, as part of which we try to maximise biodiversity around our estate. Another significant thing that we have done is to cut the number of UK flights that we take by 50 per cent—there are pretty draconian rules on what staff are allowed to do.

We think that we have made a good start, but we do not own all our buildings, and persuading landlords to let us do as much as we would like to do is an issue. It is not straightforward, but we think that we are doing okay.

**Dr Spray:** SEPA and SNH are promoting a new joint laboratory in Aberdeen, which is being built as we speak. We hope that the new building will be even greener than the SNH headquarters.

**The Convener:** It is nice to see some healthy competition.

**Geoff Aitkenhead:** Scottish Water, in common with the rest of the UK water industry, is on a rising emissions trend. For a number of years we have been improving the quality of our product and the quality of discharges to the environment, and each four-year regulatory period—2002 to 2006 and 2006 to 2010—will add approximately 10 per cent to our energy consumption.

We are doing a variety of things inside the building—we are trying to drive down travel and energy use as much as we can do, and we purchase energy-efficient equipment and build energy-efficient features into the design of new plants—but the bottom line is that we are on a rising trend.

**The Convener:** What can be done about that?

**Geoff Aitkenhead:** We take every opportunity that we identify. When equipment reaches the end of its life we replace it with energy-efficient equipment, and new facilities are designed to be energy efficient. For example, the new water treatment works for Edinburgh—just north of Penicuik—has turbines built into the raw water mains and will generate up to 65 per cent of its own energy requirements. We take opportunities to build efficient plants whenever we can, but we have a huge stock of long-life assets, and in recent decades we have invested in order to comply with European directives and regulations, which have driven up energy consumption. That situation is common to the water industry throughout the UK.

**The Convener:** Is that experience common to the water industry throughout Europe, or is it to do with how directives have been transposed?

**Geoff Aitkenhead:** I think that it is common to the water industry throughout Europe. We are all endeavouring to comply with the same directives,
and by and large we use the same technology to do so.

Mark Williams (Scottish Water): For a number of years, the industry has acknowledged that it must get to grips with the issue. We have been proactive in trying to ascribe where emissions come from throughout our processes, and I would describe the industry as being quite well advanced in carbon management and in the context of understanding where, among all our activities and technological processes, there might be opportunities to reduce emissions.

Scottish Water has been proactive and up front. We will publish our carbon footprint every year, and the information will be clearer and more open to scrutiny: it will show where we are going, why emissions have been rising, and what we are doing about it.

At present, our figure is around 470,000 tonnes of carbon dioxide equivalent a year, which covers the power that we use in all our activities, such as pumping and treating water, providing the public service and protecting the environment. However, we have to get to grips with the process emissions from our asset base—the methanes, the nitrous oxides and all the other emissions that can sometimes be neglected. As I say, Scottish Water is being up front: we will publish our figures so that we can be open to scrutiny.

15:45

Shirley-Anne Somerville: I have a question for the witnesses from Scottish Water. You mentioned your Edinburgh plant. I have heard that work on energy efficiency was not ingrained in the planning process—questions on energy efficiency and microgeneration were not considered right at the start. Will you assure us that, in any new capital projects, decisions that are taken at the start of the planning process will be based on your work to address climate change?

Geoff Aitkenhead: I can assure you of that absolutely. I am not sure of the background to your comment, but the Edinburgh plant was designed with sustainability in mind. We are very conscious of the plant’s location in the green belt, and in energy use and other ways it is designed to be sustainable. Such principles are being applied to our other projects and, as I said earlier, we take every opportunity to adhere to the principles of sustainable development.

Alison McInnes: Both SEPA and SNH have talked about improvements in their buildings and organisations. How effective have you been in managing change and influencing your supply chain? Could we learn from any of your procurement practices?

Dr Spray: We have certainly started incorporating into our procurement practices many of the ideas that we have discussed.

Dave Gorman: It is a difficult issue, but we try to buy equipment that is energy efficient, we use recycled paper, and we send out a questionnaire when we buy goods from suppliers to push them hard on the issue. When Chris Spray considers his laboratories, he tries to buy efficient equipment. As others have suggested, many such measures are simply what you would always do when considering something new. It is natural that things improve as time goes by.

Something that we have been trying to do—something that we thought would be more influential—is help the Scottish Government with better procurement from a sustainable point of view. I would not say that it is easy, but every time we look at things we see steady progress.

Professor Galbraith: SNH has similar programmes for the sustainability and traceability of any equipment that we buy. When working on a scale such as ours, it can be difficult to be crystal clear that we are buying the best option for cost effectiveness and low-carbon use. Work will have to be done in the years ahead so that we can focus more clearly on what we are purchasing, but we have moved in that direction.

Alison McInnes: Is there anything that we could put in the bill to speed up the progress?

Professor Galbraith: Whether measures go in the bill or the adaptation plan that will accompany it, leadership will be required if we are to change behaviour in SNH and SEPA and in organisations more widely. The adaptation plan might allow for more focus; without a steer, things can become quite difficult.

Dr Spray: The procurement process for the two buildings that we have referred to has gone through detailed climate change consideration.

The Convener: This issue might come up again during our questions on public sector duties.

Rob Gibson: The SNH building used Scottish timber instead of Russian timber. The Russian timber would have been cheaper but, when carbon is taken into account, the picture looks very different. We would like to see more such decisions. Does Scottish Water use products from Scotland, or are there large carbon accounts for the bits and pieces of equipment that you bring here?

Geoff Aitkenhead: We have a wide supplier base, and we run a supplier development programme so that we get a full understanding of the performance and behaviours of all our suppliers. There are performance indicators in that
programme, part of which relates to the carbon-reduction agenda.

**Mark Williams:** The procurement and supply chain is tremendously important for us as an industry, and we are trying to understand what we need to be looking for within the supply chain, such as the pumps and the various bits of kit that we buy. The industry in the UK has tremendous buying power to influence the right behaviours and innovation of the right technology. There is quite a lot of collaboration at UK level—in which Scottish Water is just one player—that will I hope incentivise the right behaviour among a number of suppliers. The process of sharing data on equipment reliability and efficiency is quite strong at UK level.

Scottish Water’s standards and specifications for the kit that we want to buy are subject to rigorous scrutiny and are reviewed regularly. The most recent review focused on the energy performance of the kit that we buy. As Geoff Aitkenhead said earlier, we have long-lived assets. The best way that we can continue the evolution towards a more efficient asset base is to ensure that, as and when pieces of kit come to the end of their life, we procure the right pieces to replace them.

**The Convener:** I turn to the development of the bill and the process of consultation—both the formal consultation and the dialogue that the Government might or might not have had with you during that period. How was SNH’s and SEPA’s expertise, on the policy or science side, incorporated into the development of the bill? Do you feel that your organisations were involved in that sufficiently?

**Dr Spray:** We were delighted with the amount of work that we did with the Scottish Government. At various times, we had people working in Government areas and the Government came to ask us for information. We were more than delighted with the content, quality and extent of our work with the Government.

**Professor Galbraith:** Our experience was similar. We were heavily involved in the development of the thinking behind the bill and in the science in particular, and we are very comfortable with that. It is worth saying that the science is still evolving: we have heard increasingly doom-laden scenarios from various international bodies, but the reality is that the science is moving and being refined. We are happy with our involvement in the process.

**The Convener:** Do any members of the panel have anything to say about the strategic environmental assessment that has been carried out on the bill?

**Clive Mitchell (Scottish Natural Heritage):** We were involved from the pre-discussions on the scoping report all the way through the process. We found it to be a very engaging process. We worked closely with the Scottish Government and we feel that the process has added value to the bill. A clear report was produced in December that indicated how the comments from the various consultation authorities had been taken on board. Where necessary, those points have been reflected in the bill as it has been introduced to Parliament. We thought that the process was useful and very well done.

**Dave Gorman:** I reiterate what Clive Mitchell has just said. As a competent authority, SEPA sees plenty examples of bad SEAs, but the SEA on this bill was good. It was clear, it covered the issues and it seemed to respond when SNH and SEPA raised issues. We were very happy with it.

**Cathy Peattie:** Do you think that the 2050 target and the interim targets are achievable? If so, do you have any evidence for that?

**Professor Galbraith:** Given that I am an optimist by nature, I think that the targets are achievable. However, we as a country have a big job to do. We have the potential to deliver. We are small enough for the various sectors to be reasonably well integrated and we can deliver. My take is that we have to deliver, because climate change is an all-embracing threat. It is a threat not just to natural heritage and wildlife nationally and internationally: it will also impact on our lives in ways that we have not thought of. If we deliver the targets, Scotland will have the opportunity to play a leading role by example internationally not just in mitigation but in adaptation. The reality for us is that climate change is here, now. We are at the early stages, but it is here. We have to adapt as well as mitigate.

**Dave Gorman:** SEPA views the targets as being absolutely achievable, but the question of exactly how they are to be achieved is more difficult to answer. There is ample evidence to enable us to answer “Yes” when we are asked whether there is a pathway to the targets—we would simply point to the 500-page UK Committee on Climate Change report. Similarly, when we are asked whether the targets are achievable, we can point either to that report again or to the Stern report. A mountain of material has been published in the past few years.

The targets are achievable, but there are questions around the acceptability and feasibility of the pathways and the costs for various sectors of the economy. In sectors such as the electricity and power sectors, there are answers to those questions at the moment, but areas such as aviation and replacements for the fuel that aeroplanes use are more problematic.
In conclusion, we agree with Colin Galbraith that the targets had better be achievable and the solutions workable, because we do not seem to have much choice, in any case.

**Mark Williams:** Scottish Water believes that the targets are achievable, but we need a lot more clarity about the road map for achieving our aims. We need to understand exactly where we can most effectively spend our money in order to achieve the desired outcomes. However, that clarity is not there yet.

**Geoff Aitkenhead:** I should add that Scottish Water is determined to play its part in achieving the targets. Even from our position of being quite a high consumer of energy, we can see ways of becoming self-sufficient through renewable energy generation on our sites.

**Cathy Peattie:** A few minutes ago, Colin Galbraith talked about science moving on and developing. Is Scottish science robust enough to enable the targets to be met and to report against them?

**Colin Galbraith:** We are enormously lucky in having the resource that is our universities. We have the potential to play a leading role in global thinking in relation not only to adaptation and mitigation, but to measurement of that. As we heard earlier, we cannot measure accurately the whole carbon budget for the country at this point, but if we ensure that the universities, institutes and agencies across our country make a collective effort to do that, we will be able to do it. However, we would probably need to come up with a mechanism that would bring us together to measure progress on the targets. It sounds a little anoraky, but measuring is really important, as it will allow us to provide positive feedback as well as the doom and gloom. We have the potential to do what I describe, but it might need a bit of new thinking to ensure that the effort is appropriately gathered together.

**Dr Spray:** I fully agree. There are a number of elements to the issue. One is the importance of the quality of the data that we get, and our ability to audit those data and to challenge people in a positive way to prove them. Another element is the need to improve the evidence base relating solely to Scotland. Instead of sending the message that Scotland will be like the Maldives in 50 years, we can see ways of becoming self-sufficient through renewable energy generation on our sites.

**Professor Galbraith:** I can see merit in having annual targets, but work and efforts need to begin now. One of our concerns is that things may come very late in the cycle. It is important to achieve culture change and get changes in industries now, so some form of targeting early on is important. I take the point that there may be good reasons for annual variations, but the main thrust of the message must be to get on with things. It is encouraging that the CBI said a lot about that. We agree that there must be certainty and that we must get on with things.

**Dave Gorman:** The previous panel made many interesting points. I think that the targets serve a purpose. An 80 per cent emissions reduction target will tell us that people need to transform the nature of what they do and that every sector needs to do something. Some people from whom the committee has received evidence have said that they accept that every sector needs to transform, except their sector for certain reasons. The existence of an 80 per cent target means that everybody should understand that we will be in a very different place in 2050. However, 2050 is a long way off, and we tried to say in our evidence that we do not know at the moment what the right pathway is. Others, such as the UK Committee on Climate Change, have more expertise than SEPA on that.
I understand that the Scottish Government will ask about the right pathway. We know the wrong answer to its question: annual emissions reductions of 1 per cent would be no use. A 26 per cent reduction in the UK level by 2020 looks like a minimum now, and a 34 per cent reduction looks more sensible. There is enough to say that we need to get on with things, as others have said.

We have said in our evidence that the long period from 2010 to 2020 seems to be key—we want to get things right during that period. The Government must take its time and not pluck numbers out of the sky. The judgment that is to be made is between having a very stretching target and a target that we will fail to reach because it is too stretching, in which case the bill and the process that would be put in place would lack credibility for stakeholders. We do not know exactly what the pathway should be, but we recognise what it should not be.

**Clive Mitchell:** I think that a previous witness likened the situation to paying off a mortgage; the sooner the process is started, the easier things will be. We endorse all the messages that you have heard about the steep early reductions that are required in order to meet the challenge.

**The Convener:** Mortgages tend to be a bad model for pretty much anything at the moment.

I would like to follow up on what Dave Gorman said about reductions of 1 per cent a year not being enough—he used the phrase “no use”—and the period from 2010 to 2020 being key. Can you be a little bit more explicit? You said that you recognise what is not the right track. Were you referring to what is currently in the bill?

**Dave Gorman:** I was thinking particularly about the Scottish Government’s technical note, which gives a variety of scenarios. I gave a personal view. We have not done enough work on the subject to give a credible answer, but I think that the tracks to consider are the scenarios that push towards 2, 2.5 and 3 per cent reductions, not those involving 1, 1.25 and 1.5 per cent reductions. It was said earlier that it is a leadership thing. Stem made a point about getting on with things now, because doing so will be cheaper. That is what I had in mind.

**Dr Spray:** I would like to make a final personal point, which I realise is out of position—I apologise to the committee for having to go. I make a plea that when you discuss muirburn you consider our need for a national carbon strategy for soils in Scotland in particular. Scotland is in a unique place in the UK and globally in respect of the amount of carbon that is stored in its peatlands. The issue is not so much that one should look at muirburn; it is how we manage it.

Many other things damage peatlands, of which drainage is one. I think that my colleagues in Scottish Water will agree that the impact of the loss of dissolved organic carbons in autumn across virtually every upland in the UK is huge—and there is a fantastic cost to the water industry of stripping it out to give us good-quality water. In Scotland’s case, the peatland carbon stock is extremely important. I appeal to the committee that managing it accurately and stopping its loss is one of the most important of all the things that will be considered.

**The Convener:** I am sorry that we did not have time to explore the issue with you in more depth. Thank you for your time.

**Alison McInnes:** The committee has heard a good deal of evidence that international aviation and shipping emissions should be included in the bill rather than dealt with subsequently by order. Do you agree? Why should those sectors be singled out? I realise that that is not a policy area for the witnesses, but we are interested in your views.

**Professor Galbraith:** The more holistic the bill is, the better. It is important that we get a proper carbon account in due course, and that we consider our international responsibilities. Clive Mitchell might want to add something.

**Clive Mitchell:** I echo what Professor Galbraith said. All emissions end up in the same atmosphere, so all sectors must play their full role in reducing them.

**Dave Gorman:** I will sit on the fence. We do not have a strong view on whether the matter is dealt with by order or in the bill, as long as it is dealt with, as long as methodologies are developed quickly and as long as we start to see what will be done about such emissions. If the Scottish Government thinks that it is necessary to take a particular approach, we do not have a strong view on that.

**Geoff Aitkenhead:** Our focus is entirely on making our own contribution. However, everyone must make an equal effort.

**The Convener:** SNH and SEPA already have an advisory function to Government—that is less the case for Scottish Water, although the witnesses from Scottish Water might have views on the matter. Will you talk about your advisory functions in relation to climate change and whether they are linked in with the advisory functions of the UK Committee on Climate Change? How do you expect the situation to develop? Might it change if a distinct Scottish committee is established?

**Professor Galbraith:** SNH’s role relates to the natural heritage and enjoyment of it, which takes...
us clearly into areas such as habitat and species management and how people enjoy the natural heritage in the areas around their homes, or as tourists and visitors to the country.

In the past year or two I have been struck by how relevant our work, in particular on habitat management, is to mainstream Government. Chris Spray talked about the carbon store in peatlands. We have been considering the synergy between our traditional core natural heritage remit and carbon management. If we look after our peatlands and woodlands we get not only natural heritage benefits for local people and visitors but a carbon store—in the case of peatland we also get water retention, which can link with flood mitigation. We talk to Government departments regularly about climate change and our traditional areas, and the relationship is good.

On the UK Committee on Climate Change, we certainly need to link into its route map. We have not done that very clearly in the past. It is hard to say what would change if there were a Scottish committee. What I have taken from this meeting is that the relevance of the UK committee is perhaps greater than we have taken on board.

Dave Gorman: SEPA has much involvement with the Scottish Government and we hope that we give useful advice on many areas, from flooding to waste provisions and the design of good regulations, for example on the carbon reduction commitment.

Like SNH, we have tracked the UK committee, but we have no formal relationship with it. Our relationship is with the Scottish Government, although we would expect to attend UK committee events that are held in Scotland. It is difficult to see how the situation would change if there were a Scottish committee—I think that we would input to such a committee’s processes while remaining slightly at arm’s length from it. I do not think that our overall advice-giving role would change.

The Convener: Is there any danger that separate organisations, which would keep appropriate distance between themselves, might be seen to give conflicting advice?

Dave Gorman: The key to addressing that is their roles. I found it helpful that last year’s Scottish Government consultation on the bill defined three roles. One role, which is for the UK Committee on Climate Change, is concerned with setting the right level of target, based on economics, feasibility, need and science. The third role—which we think is perhaps a role for Audit Scotland, rather than SEPA—involves auditing and performance. The role in the middle involves some of the science of monitoring validation, data gathering and so on, in which our agency and SNH see ourselves playing a part. We talk about those sorts of issues with SNH all the time, so there would not be a big danger as long as we are clear about who performs which role.

The Convener: Do you have any views yet on whether a separate Scottish committee, or a separate advisory function that is given to an existing Scottish body, would be appropriate, or are you all, like the previous panel, saying, “Let’s wait and see”?

Professor Galbraith: We probably are still in that position, although we can make the obvious statement that we have to use the best available science on climate change. In my personal view, it does not matter whether that is in London, Brussels or Scotland: we need to use that expertise.

There may be a second level in relation to how we take that expertise and implement it in any part of the UK. There are particularly Scottish issues—even within SNH there are purely Scottish dimensions in relation to coastal management and woodland and peatland management—and we might need to consider how advice from that committee could be applied to our operational focus. I would certainly like us to link to the UK committee much more clearly than is the case with our other links.

Clive Mitchell: If we consider the distribution of reserved and devolved powers and the challenge of climate change, it is clear that a dedicated Scottish committee would have to work very closely with the UK committee. We need to see how the current arrangements work before we try to invent something new.

Geoff Aitkenhead: I have two observations. First, we strongly favour the multi-agency approach to dealing with the issues that relate to climate change, as we do for flooding and the other areas in which we are involved. We work at UK level with UK Water Industry Research and Water UK.

Mark Williams has personal experience of attending the UK Committee on Climate Change to report on what the water industry—and Scottish Water—is doing. It might be worth hearing his view on that.

Mark Williams: Scottish Water covers the whole of Scotland. We represent critical national infrastructure and we have real front-line experience of how climate change might impact on our business. It was useful to have the opportunity in the consultation exercise to advise and to share our experience. As an industry, and as Scottish Water, we have a voice and an input.

To pick up on the advisory roles that others have mentioned and the multi-agency way forward, I am encouraged by the Scottish Government’s
approach over the past few months to seeking advice on the way forward for adaptation and mitigation. Through a proper integrated partnership, we can cover the bases—which we do not all perhaps fully understand at the moment—so that we can arrive at the best solution. Scottish Water has to get more involved and we need to follow through on some of the understanding that we already have.

Rob Gibson: On reporting duties, which follows on from that, you have made it clear that we need accurate data. SEPA’s submission suggests that we need to move rapidly towards that, and Colin Galbraith talked about the universities and excellent scientific institutions in Scotland. How do we draw all that together? Is the proposed reporting mechanism robust enough? How can it be improved?

16:15

Dave Gorman: We wanted to say something reasonably firm about that. We have no particular issue with the Scottish ministers reporting to Parliament. We made our point through analogy with the waste sector, which I understand. In producing information on waste for the Scottish government 15 or so years ago, one got round to it as part of the list of things that one had to do. The information was reasonably accurate for the purpose of providing a notional account of what was happening with waste—sending waste to landfill cost £3 a tonne. Suddenly, waste cost more like £45 a tonne to send to landfill, so it became important to know what was going on and to have the data quickly and to verify and publish them quickly.

That is strongly analogous to dealing with climate change, when we are relying on top-down models, estimates and extrapolations of limited information. That will not continue when statutory duties to report are adopted and when we need to know more quickly how we are doing. We have tried to major on that by saying that somebody should be charged with gathering that information more quickly and with verifying and publishing it more quickly. Jason Ormiston made the same comment about energy; I would bet that it could also be made about agricultural emissions, aviation and several other sectors.

Professor Galbraith: SNH agrees with David Gorman. There must be a reporting mechanism, which must be seen as part of the culture change that we must put in place. If targets are set without a requirement to report effectively, it becomes difficult to measure whether progress has been made. A mechanism to draw the information together must be established. When a statutory approach is taken, the game will change a bit from where we are now—in the realms of modelling and so on, which I agree will be insufficient in three, five and 10 years.

Clive Mitchell: One of our practical difficulties when trying to understand Scotland’s emissions and when trying to marry the various UK and Scottish reports to energy reports is that comparing like with like quickly becomes difficult. Data are often presented slightly differently—they are aggregated or disaggregated differently—which makes some comparisons difficult. We would like the presentation of data to be standardised quite quickly.

As Dave Gorman said, we gather and present data for particular reasons—a one-size-fits-all approach is not taken. One word of caution is that we must avoid becoming lost in a data black hole because we are trying to find the perfect solution to quantifying and measuring greenhouse gas emissions and so on before we take action. We have enough data to know what we should do in the short term. We know that improvements to the presentation and content of the data need to be made, but we should not necessarily let that stop action.

Rob Gibson: Indeed. Reporting to Parliament allows the scrutiny that results in our saying that more action is needed, or whatever.

On standardisation, one argument is about collecting data in Scotland, but another issue is the ability to measure progress against British and European targets and, eventually, worldwide targets—we will deal with the emissions trading scheme in a moment. Do you agree that we should make efforts to ensure that the data that people collect in Scotland can be compared with those from other countries as well as with those from London?

Clive Mitchell: Yes.

Mark Williams: It is not easy to standardise reporting, but we are on a journey towards it. At UK level, water companies have agreed reporting protocols. We are trying to share those globally and to share our knowledge with North Americans and Europeans. There is much enthusiasm for not reinventing the wheel and for going with what seems to work. However, we should not become confused. Accuracy and precision are needed. We have some precision on our operational emissions, but we need to do much more on that.

As I said, our operational footprint is about 470,000 tonnes CO₂ equivalent. We have assessed the capital programme that we deliver, which contains much more—a ballpark figure for that is 1.4 million tonnes CO₂ equivalent over four years. However, more granularity is needed as we drill down into that, so that we understand what we need to examine. That touches on cross-sectoral boundaries. We all use the same types of concrete
and steel, so it is really important that we have the same standardised ways of reporting. We must recognise that we are at the start of a journey of standardisation. We must be prepared to take some measures now, but we must look to develop a common understanding in the future.

Rob Gibson: I should have thought that that would be quite easy for some of the water companies that are owned by the Compagnie Générale des Eaux.

Mark Williams: We are talking about the embedded footprints of capital infrastructure. Many different grades of steel and concrete are used, so we need to find a standardised way of working out the whole-life costs of the decisions of that we make. That standardisation involves identifying models that drive the right behaviours in the long term.

Rob Gibson: I mentioned the EU emission trading scheme. SEPA is already involved in administering some of that scheme and measuring emissions from many installations. What expertise in measuring and reporting has SEPA built up, and how could that be developed further to deliver the bill’s requirements? That is a major practical exercise that could help us enormously.

Dave Gorman: Others may disagree, but we think that some of our core expertise lies in the activities that you have described. We do such work not just for the emission trading scheme but for the Scottish pollutant release inventory, which is required by another European directive, and when reporting on waste data. The work comes down to persuading companies to make their submissions on time and checking those submissions for sense. If a company in West Lothian claims to have sent 1 billion tonnes to landfill in the previous year, we may suspect that there has been an error.

We also need to check that the assumptions that are made in processes are standardised, as we discussed earlier. Usually carbon dioxide is measured not directly but using a proxy such as fuel. Trying to understand the assumptions that should be made in complicated processes such as those at Grangemouth is meat and drink for certain of my expert colleagues, whose aim is to piece together the actual picture. We have expertise both in that work and in gathering and publishing data. We hinted in our evidence that SEPA might be one candidate for taking on more of that activity because we understand it.

Rob Gibson: A recurrent theme for the committee is the interval between the times when emissions occur and when data are presented. Has SEPA’s involvement in collecting data both under the pollution directorate and for the ETS helped people to speed up the use of data after their collection?

Dave Gorman: We aspire to publish all our information quickly. The SPRI data appear within eight months of the end of the calendar year to which they relate, which means that the data are much timelier and, we hope, people will take more interest in them and companies will react more quickly to their position in the league table of emissions. That is a bottom-up process—we gather and aggregate figures from individual sites—but much of the climate change information that we get comes from top-down disaggregation, which is more complicated and takes longer. The quicker information is published, the more interest and policy relevance it will have.

Rob Gibson: What is SPRI?

Dave Gorman: It is the Scottish pollutant release inventory. Under a European directive, larger companies are required to report emissions.

Rob Gibson: Can you imagine our using the bottom-up approach that you have described to build up a picture of the situation in Scotland that could inform a future Scottish committee on climate change more accurately on what we are emitting?

Dave Gorman: Absolutely.

Cathy Peattie: The bill allows for duties to be placed on public bodies via secondary legislation. What do you think climate change duties on public bodies might look like? What discussions have you had with the Scottish Government on the issue?

Professor Galbraith: We have not had many discussions about such duties with other bodies, but they seem sensible in principle. In other cases, such as biodiversity, duties have led in part to enhanced interest and activity. We therefore support the principle but, as with any new responsibility, we need to consider the impact that a duty might have. Our particular issue is how management for climate change would impact on or relate to the management of the natural heritage, although, as I said, we see great potential synergies in that. In many cases, on local authority land, management for biodiversity—the wildlife and habitat—would go hand in hand with tackling climate change. We support such public duties.

Dave Gorman: We have discussed that with people, although I am not sure whether we said what they wanted to hear. Basically, we think that there should be duties now and that we should not have a voluntary approach. In business, there are many voluntary approaches on environmental matters, but they are usually an assemblage of what was already going to happen.
We agree with Colin Galbraith that a duty would mean that the environmental folk in organisations could get the attention of the senior folk on what that duty means or might imply. If, as we have said, tackling climate change is urgent and we need to take action in the period 2010 to 2020, why wait to see whether the voluntary approach works? Some organisations will say that pound signs will be attached and that there will be difficulties, but let us face those issues later. We are happy to have a duty placed on us, and we think that a duty should be placed on every other body in the public sector.

I am sure that Cathy Peattie will ask what the duty should be. That can be discussed, but at least it should be clear and everybody should know that they have a part to play. Our simple view is, “Let’s do it now.”

Geoff Aitkenhead: We are content for duties to be placed on public sector bodies. We have a duty to adhere to the principles of sustainable development, which was enshrined in the act that set up Scottish Water. We might discuss further the detail of what the duties might be, but I believe that they should fall into two categories. One should be on direct emissions from public sector bodies, and the other should be on emissions from another body as a consequence of policies or regulation that a public sector body promotes. We all need to be encouraged to step back and take a holistic view.

Clive Mitchell: A third component of the duty should be on sustainable adaptation to climate change, to avoid the risk that one part of the climate change agenda might conflict with another.

Cathy Peattie: I am interested in what the duty should be, but I am more interested in how compliance would be measured. Public bodies can have the best intentions but, as Dave Gorman said, delivering might be a different question.

Dave Gorman: I agree with the points that Geoff Aitkenhead and Clive Mitchell made—this is a question of horses for courses.

Direct emissions reporting should be straightforward. The single outcome agreements could be used for local authorities, and there are other processes for other bodies, such as the Scottish Government’s greener leadership programme. A duty relating to policy decisions would be less straightforward, but statutory guidance could be issued to require bodies to design a framework that shows how they will take account of climate change. The framework could then be checked.

The key is that the process should be testable in court as that always sharpens the mind. People should be able to take a decision to judicial review if they think that a body has not taken account of climate change. As a regulator, SEPA is always aware of whether we have taken into account the issues that our founding statute says that we should take into account. For example, we must take account of economic impact and rural issues and, if we do not, a citizen is within their rights to test our decision in the courts.

On the point about policy impact, Government guidance that bodies are required to follow is the way forward. That is less easy to test, but it is still visible.

The Convener: Before we move on, I have a supplementary question on duties on public bodies. We have discussed procurement. Is it achievable to have a substantial public duty that relates to green or sustainable procurement? Anything that was done would have to be permitted under the relevant EU directive, but that is broader than it was a couple of years ago. Is there scope for a stand-alone duty?

Geoff Aitkenhead: There is. It is incumbent on us, duty or not, to pursue a sustainable development strategy. It would be subject to definitions and consideration of the details, but the concept is right.

16:30

Clive Mitchell: I agree. We spoke earlier about measuring emissions on our estate and about procurement. We have recently discussed approaches to the carbon management plan with Carbon Trust. Such work is generally designed for local authorities or organisations with more than 1,000 people, which is somewhat bigger than Scottish Natural Heritage, but we are volunteering to take up the new carbonlite programme to validate the work that we have been doing to reduce our emissions. The programme will also cover procurement, and we hope that it will enable us to meet the target of a carbon reduction of 4 per cent that Colin Galbraith mentioned earlier.

Cathy Peattie: The bill requires the development of a climate change adaptation plan. What are the witnesses doing to increase the resilience of Scotland to changes in the climate, and what else could the bill do?

Geoff Aitkenhead: Adaptation is of primary importance to Scottish Water in the short term. We are experiencing the effects of climate change now, and we must be sure that we can safeguard public water supplies and deal with flooding and the run-off of surface water.

We have developed and published a 25-year water resource strategy. We finalised it after hearing comments on it, and we will refresh it annually as new data come to light. The strategy has led to investment proposals, which are in our
business plan for 2010 to 2014, to augment supplies in various parts of Scotland and to deal with compensation flows in rivers in certain areas. Those well-laid investment plans for between now and 2014 will see us investing tens of millions of pounds.

We have worked with a number of local authorities on the production of surface water management plans. Scotland has an extensive network of sewers—more than 40,000km—and we cannot renew all of them in our efforts to deal with the storms and rapid run-off that we get now. The run-off is partly a consequence of climate change and partly a consequence of surfacing in the built environment.

If we cannot renew the sewers, how do we deal with surface water? The answer is: on the surface. The Flood Risk Management (Scotland) Bill picks up a lot of issues in flood risk and surface water management plans, and we were really pleased that they were included. There will be a multi-agency approach involving Scottish Water, local authorities, SEPA and private developers, as we try to achieve the right specifications for porous surfacing and sustainable urban drainage systems. We are doing a lot on the adaptation front.

Professor Galbraith: The adaptation plan will be fundamental to the implementation of the bill. It is good to see that there is one, as it is unusual in the European context to see such a bill and plan together. That is an encouraging development.

I have mentioned our action plan, which will be divided into two parts. The first part will cover action that we at SNH will take on the running of our organisation on our own estate, in nature reserves for example. The second part will be more aspirational when it comes to adaptations and will consider habitats in various parts of Scotland. We acknowledge the importance of natural heritage in coastal management, but we also acknowledge the wider importance. How can we manage the coasts over the next 50 to 70 years when the reality of climate change will be more intense than it is at the minute?

I echo what Chris Spray said about the importance of Scotland’s peatland. We reckon that something between 170 and 200 years’ worth of Scottish emissions are locked up in our peatland. Part of the adaptation strategy is to look after the existing peatland resource in terms of drainage, overall exploitation and management. We must do that, and we are optimistic about what we are doing, including through landowner buy-in.

That wider, more holistic look at how we manage all our habitats needs to be linked to getting people involved in the issues at the local level. That is important as part of the wider culture change, and we are doing a lot, but we have a lot still to do to get the message out and make it more widely known than has been the case thus far.

Cathy Peattie: How do you get people involved? Other partners clearly need to become involved but, as we know, people can be dismissive of some of your plans. For my part, I agree with them, but people tell me, as the local MSP, that the plans are absolute nonsense and ask me why this or that is not happening. Who are your partners? How can you get over to people at the local level and elsewhere that things need to change and that your important plans need to be put in place?

Professor Galbraith: One of my fears is that we manage by disaster. There was a big change in public opinion in America after hurricane Katrina. It is unfortunate that we need a disaster of that nature before opinion changes.

It would be good to build partnerships with local authorities and, indeed, local non-governmental organisations. NGOs have a major role in tackling climate change and are articulate—they are good at putting out the message. We have to look at how we can build wider partnerships and, in getting out the message, we must take opportunities when they arise. The Parliament has a key role to play in doing that: politicians can tell people about the significance of the threat and the importance of the adaptation plan.

Dave Gorman: It is unfortunate that my expert colleague had to get up and walk out half an hour ago—as you know, he had to leave the meeting early.

We think that we have got off to a good start but know that we have more to do. We have published our climate change plan, in which we set out some of our actions. Flooding is clearly a big issue for SEPA, as is trying to point out its consequences. We are working with SNH and others to improve the data and get the information out to people—Chris Spray talked about that earlier—and we need to make things real for people by talking about floods not in Asia but in Scotland. Together with SNH and others, we have done some of that work. For example, in 2006 we published “A handbook of climate trends across Scotland” in which we set out the evidence that climate change is happening. It is probably time for us to look at producing another version of that publication.

We are keen that account is taken of adaptations in the river basin management planning process, which has been put in place to deliver the water framework directive objectives. We are considering how that might happen.

The key point for SEPA is that the science that Chris Spray’s folk do needs to be robust enough to take account of future climate change. If they
achieve that, the data can be used to underpin our regulatory assumptions. It is useless for us to ask Scottish Water to do things that are based on old models of how rivers behave or how much flooding and rainfall will occur. A large part of what we are trying to do is an assessment of whether the models that we use are fit for purpose. We are trying to put information that is currently available in paper form—historic old spreadsheets, ancient documents and the like—into a format that can be made more easily available to the public. We want to enable people to see the trends and understand them better. That is the stage that we are at.

Cathy Peattie also asked what more the bill could do. It could be used to amend the Water Environment and Water Services (Scotland) Act 2003, which requires the WFD implementation. In making that point, I should make it clear that adaptation needs to be reported on and built into the process.

Charlie Gordon: The bill includes a requirement for an energy efficiency action plan to be drawn up. Could or should the bill do more on energy efficiency and using renewables in heating?

Professor Galbraith: Energy efficiency should be the start point. We should be trying to save and reduce what we have at present—that is a useful wider environment principle—and anything that can be built into the bill to encourage that should be put forward.

Clive Mitchell: One recommendation in our submission was on the need to recognise the partial nature of part 5 of the bill. I refer to what needs to be done on heat, transport, renewable electricity and so forth, which the previous panel mentioned, too. The comprehensive Scottish climate change programme should be renewed in line with the provisions in the bill. We need to decide how to go about meeting targets up to 2022, in line with the first three budget periods and as recommended by the UK Committee on Climate Change.

It might be useful to develop energy hierarchies for transport and electricity along the lines of the well-established waste hierarchy, which prioritises avoiding use, efficient use, low-carbon use and so on, as the basis of the interventions that are required. The Scottish climate change programme should include the comprehensive package of mitigation and adaptation measures that is required across the board.

Dave Gorman: We do not have a particular role on energy efficiency apart from in process engineering, but we think that what is in the bill seems sensible and, as others have said, it will be nice to see the plan when it is eventually published.

We cannot help but contrast the provisions on energy efficiency with the ones on waste heat, and we believe that there should be a requirement for a similar renewable heat plan with a waste heat component. The European targets are for 20 per cent of energy production to come from renewable energy, with waste heat forming about 14 per cent of that. We are currently at about 1 per cent or less than 1 per cent, which means that we need to grow 1,000 per cent in 10 years. From that perspective, it is obvious to see that, as a minimum, there must be a commitment to a renewable heat plan with a waste heat component.

A lot of heat that is produced from fossil fuels is simply thrown away, and the UK’s performance on combined heat and power is not inspiring. We firmly believe that, if it is possible within devolved powers, we should examine waste heat as well as renewable heat. The two technologies should be developed in tandem because they both address the same issue.

Geoff Aitkenhead: Energy efficiency action plans are clearly important to us given our position but, as the previous panel said, we must consider total demand as well as energy efficiency and drive energy use down wherever we can.

On the point about public duties and the impact of policy on various areas in the public sector, the impact assessment of any new policy or regulation must take into account the demand for energy that it will create. In a sense, the water industry is a victim of that, as we are still implementing directives that were written in the 1980s, before the carbon reduction agenda was even thought of. Nobody at a European or global level has stood back and asked whether those directives should be rewritten or whether we should think about finding new ways of promoting energy-efficient and carbon-efficient ways of working.

Dave Gorman: We strongly agree with what Geoff Aitkenhead has just said. As a regulatory organisation, SEPA encounters difficulties in trying to protect local environmental quality without driving up the use of chemicals and energy as we do so. We have discussed that matter with Scottish Water, but the issue involves not only water but air and other aspects of the environment.

In addition to a duty on the public sector in general, there should at least be discussions about putting a duty on regulators. Many of the things that will drive the work of Scottish Water will come from the Water Industry Commission for Scotland and SEPA, and who knows what the conflicts are between, say, the need to protect food and the need to protect the environment? It is challenging to make regulators think about carbon. An obvious way of ensuring that they do would be...
to get Europe to issue directives, but that would involve years of discussions and we might get faster results if we explored the matter in Scotland.

**The Convener:** That is a helpful suggestion.

**Shirley-Anne Somerville:** The Rural Affairs and Environment Committee is examining the forestry and muirburn sections of the bill. Dr Spray, who wanted to talk about that, has left. Does anyone else want to talk about that or anything that is not in their written evidence?

**16:45**

**Professor Galbraith:** Muirburn is an important management tool for large areas of the uplands of Scotland. It has a long tradition behind it, and there is an issue in that tradition moving with the changing climate.

We support the inclusion of the concept of muirburn in the bill. In particular, given that spring is happening earlier in the uplands every year, it would be helpful if there were some flexibility to allow burning to take place in the autumn as well as in spring. Many land managers have difficulty getting all of the necessary burning done in a reasonable time, so some ability to allow burning at the end of the summer and into the autumn would be useful—I believe that it is intended that that will be included in the bill.

It might surprise members to hear someone from a conservation organisation talk about muirburn in that way, but we think that that technique—when it is done properly and conducted within the law—is an important part of the management of the uplands. Of course, that practice has to be well defined in the muirburn code.

**The Convener:** I want to ask about the financial resources that might be available or required to enable your organisations to meet the duties that might be imposed and to help Scotland achieve the targets. Is Government taking those resources into account sufficiently?

**Geoff Aitkenhead:** There is an opportunity to get that right. Anything that Scottish Water invests in or pursues comes as a consequence of objectives that are set for the business by the Scottish ministers. Once those objectives are set, the Water Industry Commission for Scotland determines the charges that Scottish Water can apply to finance whatever is required. The mechanisms are in place, and all that we need to know are the objectives that ministers wish to set.

**Professor Galbraith:** The science has moved on enormously in the past two or three years, and we have kept up with it. As the argument moves on, there is a great need for a clearer evidence base—that is one of the key messages that I will take away from today’s discussion. Resources will be needed for that, and they will need to come from Scotland, the UK and the European Union.

Some of the things that we have spoken about in discussing climate change adaptation have obvious resource implications. I do not think that the country is yet in a position to assess the need fully, but it is hard to see how we will be able to adapt to climate change without resources being clearly targeted in future years.

**Dave Gorman:** A couple of weeks ago, when I gave evidence to the Finance Committee about the bill’s financial memorandum, we said that it was a reasonable document given the uncertainties about exactly which direction we should go in. However, we were talking about the financial implications of the provisions rather than of the time and effort that need to be invested in persuading people to change. Jason Ormiston and others touched on that issue earlier. It is great to have incentives for microgeneration and waste heat, but what other incentives will there be and how quickly will they drive change? Those are not necessarily questions for the bill, but they are certainly questions that must be answered.

**The Convener:** And they are certainly among the many questions that we will have the opportunity to put to the minister next week.

I thank our witnesses for their attendance.

*Meeting closed at 16:48.*
WRITTEN SUBMISSION FROM CLIMATE CHANGE BUSINESS DELIVERY GROUP

Written views to the Transport Infrastructure and Climate Change Committee

The CCBDG welcome the opportunity to give evidence to the Transport, Infrastructure and Climate Change Committee on the Scottish Climate Change Bill. We have previously set out principles we believe should guide thinking on climate change in Scotland. We have been consistent in promoting those principles and believe they are worth repeating here.

Action on Climate Change – strategic importance to Scotland

Scotland has an international reputation founded upon a perception of a clean and green environment. Scotland’s attractiveness as a great place to visit, study, work and do business in part depends upon that image. Therefore it is of strategic importance to Scotland as a whole that efforts on climate change lead, rather than lag, world effort.

Carbon saved today is better than carbon saved tomorrow

Early reductions in carbon emissions are more important than reductions in years to come. The objective must be to ensure that the cumulative amount of carbon released into the atmosphere is as low as possible, as quickly as possible. In other words the greatest imperative must be on the tasks to be undertaken now to shift Scotland smoothly to a low carbon economy and society.

Consistency with the UK, EU and UN frameworks

Scottish businesses trade on a local, national, UK, European and global basis. Therefore it is important that the Scottish framework on climate change is consistent with UK, EU and UN frameworks. The greater international co-operation there is the better, and consistency between economies will ensure no new barriers to trade are erected.

Delivery

The powers of the Scottish Parliament, while substantial do not represent all the powers that can deliver carbon emission reductions. Therefore, to meet the aspiration of Scotland leading in the UK and Europe it follows that the powers that do lie in Scotland need to be used more effectively, more quickly and to a greater magnitude than anywhere else in Europe. We believe it is vital to ensure that this will be the case without putting Scottish business at a competitive disadvantage in the short term. In the long run we believe that making the right investments now, will put Scotland at a competitive advantage by becoming an advanced low carbon economy early, for example by making the most of the significant renewable resources we have on our doorstep.

Climate Change – priorities for action

1. First and foremost, the CCBDG believe the greatest role for government in Scotland is to help bring about a change in consumer behaviour in order to reduce overall demand for energy.

2. Beyond reducing overall demand for products and services that emit carbon, the three critical areas for reducing Scotland’s carbon emissions are decarbonising electricity, heat and transport. Despite all its challenges and the progress yet to be made, delivering renewable electricity looks relatively positive compared to the challenge that must be met in heat and transport.

3. Decarbonising energy for heating is one area where there has been little progress. The potential carbon savings are great and there is a clear role for government to stimulate markets. The UK wide Renewable Heat Incentive will clearly provide a
market intervention that should help the expansion of renewable heat. Nonetheless the CCBDG believe the Scottish Government must act to make sure heat in Scotland sees a dramatic revolution in the way it is generated. Government itself can take a lead in incorporating renewable heat and Combined Heat and Power systems into its own estate.

4. There remains a long way to go in delivering low carbon road transport. While we acknowledge that fiscal powers relating to VED and product standards lie with Westminster, there are international and UK examples where municipal and regional policy has stimulated a market for lower carbon combustion engine vehicles and electric vehicles. There is much the Scottish government could do, particularly in partnership with local authorities to move Scotland to the leading edge of low carbon road transport. For example procuring electric vehicles for public sector fleets which will stimulate both the infrastructure required and a market for electric vehicles in the UK.

5. Finally, we recognise the potential for conflict between Government priorities, particularly in terms of development and carbon emissions. The aim to deliver 35,000 new build houses a year is challenging in itself, and without absolute clarity and certainty in relation to policy it will be impossible to achieve. Planning policy, building standards, affordable housing policy and policy on future energy generation and consumption must become much better aligned. We believe that the incorporation of zero carbon home standards into new build social housing in advance of 2016 is an important lead the Scottish public sector can take now – particularly in this difficult economic climate.

Response to Call for Views

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

In principle, the CCBDG believe scientific evidence should determine the rate of emissions reduction. We support targets and a framework consistent and aligned with the scientific recommendation of what is required to ensure global average temperature does not increase by two degrees Centigrade, widely acknowledged as a dangerous tipping point resulting in drastic impacts across society, nature and the economy.

The CCBDG therefore support both the Government’s minimum targets, although we recognise there may be a benefit in setting a 2020 target in law too.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

We originally supported a carbon budgeting approach although we are content with this framework for grouping the targets into batches, provided they are aligned with UK and International targets.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

The difficulty of meeting a 3% annual target should not be underestimated. Our original preference was for a carbon budgeting approach and an alignment with the UK framework
would have been simpler. However, the spirit of what is trying to be achieved is the same and we believe it is more important to ‘just to get on with it’.

Q.4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

While trading has an important role to play in tackling global climate change and should not be artificially restricted, we strongly agree that the focus of this legislation must be to reduce Scottish Source Emissions. We note that the UK Climate Change Committee has recommended a set of figures up to 2020 that specifies domestic, traded and credit purchase. This amounts to a 34% cut predominantly through domestic emissions reduction, and 42% total through domestic emissions reduction and credit purchase. We would support the adoption of this model for the purposes of both consistency and effectiveness.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

We acknowledge the difficulty government has in defining the term ‘attributable’. We agree that greenhouses gases emitted from Scotland should be the spirit of this legislation, but we should not ignore the effect of Scottish demand on global emissions. For example, we may no longer manufacture most of the steel needed in the country, but we certainly import it and it is therefore an important factor in assessing pollution generated by the Scottish people. However, we also recognise the necessity for consistent measurement and we appreciate the difficulty in assessing the end to end carbon emissions associated with any given product. Ultimately, we hope that international agreements will ensure that the price of carbon is built into every stage of the production and distribution process.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

The CCBDG agrees with this approach and believes the Climate Change Committee’s first report has made very instructive reading.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

Once again, we agree with the arrangements for scrutiny. Given the extremely long term nature of these legislative targets, it is vital that government is held properly to account for
early progress towards them. Parliament has an extremely important job to do in protecting the interests of future generations.

**Q8** The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

**What are your views on this proposal?**

The CCBDG believe it is right to impose duties on public bodies with regards climate change, and we recognise there is an argument to do so in primary, rather than secondary legislation. We believe this is particularly relevant to Scotland given the scale and influence of the public sector.

Local authorities and the private sector may benefit from the universal application of policy measures and setting expectations as early as possible. Many of the potential requirements on local authorities for example, could include: a duty to meet specific targets and a duty to consider climate change impacts through all public procurement and planning. The remits of SEPA and SNH might also include an obligation to deliver cuts in climate emissions.

We also recognise the role of the Scottish Government in guiding local authorities in particular to ensure some consistency of approach across Scotland.

**Q9** The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

**What are your views on this proposal?**

We welcome this focus on adaptation, believing it has been somewhat overlooked until now.

**Q10** Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

**What are your views on this proposal?**

No specific view.

**Q11** The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

**What are your views on this proposal?**

Given that we believe all of Scotland’s agencies and public bodies should play their part in delivering action on climate change it follows absolutely that the Forestry Commission can have a particularly special job to do. We support the Scottish Government’s proposals.

**Q12** The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

**What are your views on this proposal?**

We believe the ultimate aim of energy efficiency must be to reduce energy demand but we are mindful of the complexities of affecting consumer behaviour.
Improving the energy efficiency of existing housing stock is paramount but the current rate of progress is insufficient to meet the carbon emission targets in this Bill. By 2050, only one third of housing stock will have been built between now and then. So two thirds of stock will be ‘old’ properties. The onus is on this current generation to bring about very significant change. To make that happen every tool at the disposal of the Scottish government (local tax incentives, business rates, planning changes, significant increase in grants for householders, etc) should be used to stimulate both the improved household energy efficiency and develop the potential for microgeneration. 

For example, measures could be developed to incentivise local authorities to deliver emission reductions and specific climate-friendly actions such as through procurement strategies, renewable energy development plans and energy efficiency initiatives. Business rates in respect of renewable energy developments such as wind farms could be payable directly to the local authority in which the wind farm is located for example. Permitted development rights could be incorporated in the bill to enable easier installation of low-carbon and renewable devices on buildings.

We also recognise that a ‘street-by-street’ area-based approach to energy efficiency measures may prove to be more effective and we are concerned that the current approach is inefficient, expensive and is less likely to complete the job efficiently and within the timescales required.

Finally, there is a role for government in ensuring that skills are enhanced in order to deliver the wholesale improvement of the energy efficiency of Scotland’s existing homes.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?

The CCBDG agree with this approach for non-domestic properties. However, we believe there is much more yet to be done for both domestic and non-domestic building standards not least by developing much greater clarity in the standards that are expected.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

The CCBDG welcome the Scottish Government’s nominal target of 11% renewable heat by 2020, although we note the UK government has an indicative target of 14%. Nevertheless, an 11% target represents a market expansion of over 1000% in just over ten years. This is very ambitious. We believe this is the area where the least has been achieved to date, but the area with the greatest potential to deliver significant reductions in carbon emissions.

We are not believers in government ‘picking’ technological winners but given the scale of the renewable heat target we believe that all sources of renewable heat need to ‘remain on the table’ and deployed where best suited. We do not believe at this stage it is appropriate to be backing one technology over another and believe there will be a role for all the main heat technologies in time, including ground, air and water source heat pumps, solar thermal, biomass and biogas.

Furthermore, we believe there is potential for renewable heat deployment in the industrial and commercial sectors and this should be given sufficient weight in policy development. The economies of scale are greater in industrial and commercial uses of heat and there may also be greater potential for closed loop waste to energy systems in these sectors. We also note that the carbon intensity of heating fuels is higher in these sectors, thus delivering better carbon savings per pound of investment in renewable alternatives.
Finally, we are strongly supportive of a market intervention at the UK level that would incentivise the generation of heat from renewable sources. Without a Renewable Heat Incentive, we do not believe the market will deliver a significant uptake of renewable heat technologies by 2020.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas: Waste prevention and management plans;
Waste data;
Deposit of recyclable waste;
Procurement of recyclate;
Reduction of packaging;
Deposit and return schemes;
Charges for carrier bags.
What are your views on these proposals?

The CCBDG is broadly supportive of additional measures to improve waste management and recycling, provided that measures are proportionate.

We welcome the very real progress that has been made in recent years, and believe Scotland’s dramatic increase in recycling rates over the past seven years is illustrative of what can be achieved by the right combination of a legislative framework and public resources. We are optimistic that further progress will be made in the next few years.

Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

Generally positive, there appears to have been significant effort deployed at engaging with stakeholders and the wider public.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

No specific comment at this stage.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

No specific comment at this stage.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

No additional comments.

Q20 Do you have any other comments on the Bill?

Above all else, the CCBDG is concerned about the potential for speedy delivery. It is fully committed to taking action on climate change, and member companies are investing hundreds of millions of pounds into low carbon technologies. We know first hand of the barriers, the complexities and the difficulties of moving to a low carbon business model.

We would use this opportunity to urge policy makers and government to pick up pace, focus harder on delivery and develop a greater sense of urgency - especially in the areas of renewable energy for heat, renewable energy for transport and renewable electricity.

The combination of measures to bring about energy demand reduction, incentives for renewable heat and renewable transport and further significant progress in waste management and renewable electricity mean it is perfectly possible for Scotland to meet its ambitious carbon reduction targets.
About the Climate Change Business Delivery Group

The Climate Change Business Delivery Group formed in early 2007. Representing a broad cross section of Scotland’s corporate and business sectors, with 100,000 staff employed either directly or indirectly in Scotland, the membership is convinced that climate change threatens future prosperity in Scotland and every other part of the world.

The group understands how hard it is to grow business and ensure significant year on year reductions of greenhouse gas emissions. They are, however, deeply committed to making a difference both within our businesses and as individuals – and firmly believe that Scottish specific climate change laws can help achieve that.

Current membership:

Ian Marchant, Scottish & Southern Energy and Chairman
Gordon Dewar, BAA
Brendan Dick, BT Scotland
Mary Grant, First Scotrail
Fergus McConnell, Taylor Wimpey
Peter Lederer, Gleneagles Hotel
Ian MacKay, Royal Mail
Grant Hodges, PWC
Susan Rice, Lloyds TSB
Ken Ross, Elphinstone
Satty Singh, MS Namara
Mike Straughen, Wood Group
Michael Tracey, William Tracey Ltd
Andrew Murphy and Lesley Ballantyne, John Lewis
Scottish Renewables welcomes the opportunity to provide written evidence on the Stage 1 scrutiny of the proposed Climate Change (Scotland) Bill which is one of the most significant pieces of legislation ever considered by the Scottish Parliament. Scottish Renewables is Scotland’s leading green energy trade body. We represent over 240 organisations involved in renewable energy in Scotland and include many environmental NGOs in our wider associate membership. Further information on our work and membership can be found on our website – www.scottishrenewables.com

Scottish Renewables believes that the harnessing of renewable energy sources in a sustainable manner provides a unique opportunity to not only tackle climate change but to provide economic benefits to Scotland. The setting of statutory targets to reduce emissions is vital if we are to send the right signals to industry and wider society that significant changes are required to establish a low carbon economy.

However the setting of statutory targets on their own will not deliver the kind of changes needed unless accompanied by strong action that can be scrutinised by the Scottish Parliament. This is why we are proposing a robust supporting framework to accompany the Bill which will involve aligning the consideration of the financial Budget Bill and the financial spending review to the delivery of climate targets.

If Scottish Renewables can be of any further assistance to the Committee, we will be happy to provide further written or oral evidence in support of our statements.

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

Interim point targets will be useful in providing milestones on the way to delivering the 2050 goal, but the primary focus should be on the delivery of the target for the individual carbon budget cycle. The Bill should allow for subordinate legislation to adjust the level and year of any interim targets including the 2050 target. However this provision should only be included if there is an accompanying statutory purpose of the Bill to contribute towards a stabilisation of global average temperature levels at no more than 2 degrees celsius beyond pre-industrial levels. This important aim was adopted by the EU in 1996 and has been repeatedly reaffirmed including at the 2007 G8 conference. It is important that the purpose of the target is explicit on the face of the Bill, allowing flexibility to revise approaches and targets to deliver Scotland’s contribution to the global challenge in the decades ahead. Any proposed change in target levels should be supported by strong scientific consensus analysed and reported on through the UK Climate Change Committee and/or relevant Scottish body.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

The setting of annual targets within batches over a 12 year period is feasible provided the targets are compatible with the first three 5-yearly budgets recommended by the UK Climate Change Committee. The danger in early batches failing to deliver, would result in disproportionate pressures to reduce carbon emissions in a shorter period of time.

The electoral cycle of the Scottish Parliament is likely to provide an ultimate form of scrutiny for governments but detailed scrutiny of the carbon budget must take place in parliament aligned with the carbon assessment of the spending review and annual Scottish Budget Bill.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020,
the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

The requirement to meet at least 3% annual carbon emissions in the period to 2020 appears to be questionable. There is insufficient explanation as to why the period up to 2020 is aspirational rather than mandatory in setting annualised carbon cuts. The perception is that annual carbon emission cuts of 3% is unlikely. If the Government does not have the confidence that annual cuts of 3% are achievable, then this should be identified and explained now, with a clear understanding that in certain future years the carbon emissions cuts will be considerably greater than 3%.

Q.4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

International trading in carbon has a role to play in providing flexibility but could undermine the need to act now in Scotland to reduce emissions across all sectors and to capitalise on domestic renewable resources. There are issues regarding the credibility and regulation of international credits that need to be resolved before they can play a significant role. If they are to be used in the future a strict limit should be imposed and we would support a limit of at least 80-90% of carbon emission reductions being achieved through domestic effort or elsewhere in the EU.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

Scottish Renewables supports the inclusion of a Scottish share of international aviation and shipping. The reality that Scotland is part of an ‘island nations’ and dependent upon air and sea transportation for its people’s travel and exchange of goods cannot be under-estimated. However, there are issues surrounding, for example, the arrival of imports at a Scottish port or airport for onward delivery to a destination outside Scotland (or in the case of goods passing through say from Stranraer to the Cumbrian border) and whether there will be sufficiently robust systems to record the end user of a carbon commodity.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

There is a growing body of opinion that the UK Climate Change Committee may not have the resources and/or stretch to provide detailed advice on Scotland-only carbon emissions and the consequences of climate change. Scottish Renewables would support an independent Scottish body, which will work closely with the UK Climate Change Committee and other public bodies such as Audit Scotland, and may incorporate the role of the Sustainable
Development Commission in Scotland. With increasing concerns about the need to secure carbon cuts in the first few years of the Bill’s passing, a stronger focus on what is happening and what corrective action should be applied, is more likely to be forthcoming in a dedicated Scottish body.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

The recent experience of minority government in Scotland has resulted in a shift of the balance of power in favour of the Parliament over the governing executive. This is a welcome development and in the current climate suggests that parliamentary scrutiny of carbon emissions cuts would be robust.

However, there is no guarantee that the current political situation will continue any time into the future and there are concerns that majority government can lead to parliamentary committees being less able to openly question the performance of the governing parties.

With this in mind, Scottish Renewables supports the reporting duties as stated in the Bill, but believes that the carbon assessment of individual budget lines in the spending review needs to also be comprehensively undertaken to enable scrutiny from parliamentary committees. There needs to be a form of legislative commitment in the Bill to this approach otherwise a meaningful way of assessing how government spending is directly supporting the delivery of targets will be opaque.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

Approximately one-third of the Scottish Government’s revenue is transferred to local government and a similar significant proportion funds the National Health Service in Scotland. The Local Government Concordat clearly shows that the Scottish Government has a strong belief that Scottish local authorities have their own responsibilities and priorities to decide upon. However, the difficulties in committing local authorities to delivering Scottish Government policies within the Single Outcome Agreement process, together with Community Planning arrangements having less binding obligations on a local authority area, would suggest that local government will require early direction on their key role in cutting carbon emissions. Whilst some local authorities have made clear and significant progress in both the delivery of policies and services with due cognisance to the impact of climate change, there are too many local authorities who appear to be dragging their feet with the complaint that they are insufficiently resourced to transform their services without additional government funding.

The Scottish Government and COSLA need to work together and urgently on changing this culture and if significant change has not come about within the next 3 years, early implementation of a duty on local authorities and/or other public bodies should be considered.

As much as this might appear as using a ‘stick’, there are ‘carrot’ incentives which the government could consider to encourage a more positive approach to combating climate change including incentives to reduce energy bills and establish locally owned or community owned Energy Service Companies.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change,
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proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

Scottish Renewables broadly welcomes this approach and the experience of the past twelve months in consultation on such matters has been constructive.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

Scottish Renewables does not have a view on this provision.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

The Commission owns and manages a very large estate which is likely to include a significant number of sites suitable for generation of electricity from hydropower and wind. Whilst the Commission has in-house project development expertise it may prove commercially sensible to work in partnership with other players in the renewables industry to realise any potential, especially where it is desirable to promote rapid deployment.

However we believe that the energy generation by any such joint venture should be limited ‘to generate power from wind, hydro and micro power’ and that there is no suggestion that the Forestry Commission would form joint ventures to develop bioenergy projects of any scale. If bioenergy Joint Ventures were proposed, these may allow a situation to arise where Forestry Enterprise Services is effectively selling timber to itself. Real or perceived, serious market distortion in the wood fuel market may arise.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

Scottish Renewables is pleased to see that the issue of energy efficiency is included in the Bill, however, we are disappointed that an Energy Efficiency and Microgeneration Action Plan is long over-due. The action plan needs to set out what the current energy demand is and what it needs to be in order to reduce carbon emissions. Setting this out will clearly help industry and the general public to appreciate the scale of the challenge which we face.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?

Scottish Renewables would support moves incorporated into the Bill to require minimum energy efficiency standards to be met within the public and private sectors in Scotland. However, all avenues should be explored, such as using fiscal incentives to reward energy efficiency and/or microgeneration.
The Scottish Government should progress the extension of General Permitted Development rights for air source heat pumps and wind turbine technologies as a matter of urgency, as well as turn its attention towards solutions for tenemental properties.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

In our response to the Scottish Government’s consultation on the draft Renewable Energy Framework, Scottish Renewables set out a rationale of action which would further the promotion and deployment of renewable energy in Scotland.

Whilst we welcome the attention paid to renewable heat in the Bill and the recognition of urgent action in this area there is perhaps a missed opportunity to consider electricity and transport as well. Determined action needs to take place on all three fronts and would be keen to see the Bill promote this with clear, measurable actions from the Scottish Government (see following paragraph for an example).

In terms of the specific wording of the Bill, it could be more detailed by specifying the role of heat in domestic and commercial/industrial sectors and expectations of how each sector will reduce its carbon emissions over a period of time and indicating the powers that Ministers may implement to assist in that transition.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas: Waste prevention and management plans;

- Waste data;
- Deposit of recyclable waste;
- Procurement of recyclate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

What are your views on these proposals?

Scottish Renewables is broadly supportive of these measures.

Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

Scottish Renewables welcomes the opportunity to put forward the views of its members on both proposed legislation and policy development on specific measures. The consultation process for the Bill has been constructive and encouraging.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

No specific comment at this stage.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

No specific comment at this stage.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

The Bill should have a positive impact on sustainable development as it will reduce emissions and also provide impetus to investment in a low carbon economy.
Q20 Do you have any other comments on the Bill?

The Bill contains highly commendable aspirations as a piece of enabling legislation, however it is the detail of the implementing legislation that will be more important and we look forward to seeing this. The Bill’s efficacy will be whether secondary legislation and government action will achieve the targets which are core of this legislation. There is considerable debate about what to do in the event that targets are not achieved. It is difficult to see how financial penalties against a government would be feasible, however, this legislation is not being enacted in isolation: international, European and UK obligations may come to bear on the performance of the devolved administration in Scotland.

Furthermore, the general purpose of the Bill should be to accelerate government action and delivery in the short term as well as the setting of targets for the long term. This means that areas such as carbon accounting of government action through the Scottish Budget, infrastructure planning, action on renewable energy and energy efficiency, building regulations and such like, are inter-related in making the Bill effective in practice. If the Bill is successful in truly facilitating the climate change proofing of Scottish public policy, then it will achieved far more than other initiatives aimed at mainstreaming core values and principles in Scottish life.

In the time since the Scottish Government was formed in 2007, amid a blaze of expectation for a Scottish Climate Change Bill and the subsequent ‘sustainable’ economic growth strategy, circumstances have changed. The UK Climate Change Act is now in place. Recession has hit most of the developed world and its implications for developing countries have barely featured on our horizon. The progress of the Climate Change (Scotland) Bill through its stages of parliamentary scrutiny may provide an opportunity to look again at how we approach ‘sustainability’ within our economic strategy. Even with the challenges of tackling climate change, Scotland has a strong competitive advantage to develop a low carbon economy, with economic benefits which are in balance with our natural environment and social concerns.
SNH views climate change as the most serious threat over coming decades to Scotland’s natural heritage. In addition to its environmental consequences, climate change is likely to have major social and economic implications for people in Scotland and elsewhere. SNH aims to understand the effects of climate change on the natural heritage, and to help deliver the contribution that the natural heritage can make in limiting it and adapting to it.

The impact of climate change on Scotland’s natural heritage is likely to be profound, causing very significant changes to our ecosystems and landscapes within a timescale measured in decades. Current indications are that by the 2080s Scotland will be warmer, especially in summer, with snowless winters in some parts; winters may become wetter and summers generally drier. The range of many species and habitats may shift northwards, or up hillsides. However many species and habitats may simply be unable to keep pace with the rates of climatic change, and some species may become extinct.

The most obvious changes in Scotland may be to coastal, marine and freshwater ecosystems. As sea levels rise, saltmarsh and machair habitats will be lost where man-made defences or natural topography prevent them moving inland. In the seas around Scotland there have already been shifts in ranges in algal, plankton and fish abundance. Rivers may become more affected by low flows in summer and by flash floods in winter washing out spawning beds for salmon. Wetlands may dry out in summer allowing woody species to colonise or causing peat to erode with consequences for greenhouse gas emissions.

Flexibility is likely to be key to making sure that infrastructure and land use are resilient to future climate, weather patterns and weather events. The natural heritage has an important role to play by making sure that ecosystems retain sufficient integrity so that they continue to provide essential services, such as flood mitigation, productive land capacity and water supply.

SNH is currently developing a policy statement and action plan on Climate Change and the Natural Heritage. A summary of the draft policy statement is annexed, which describes the main expected impacts of climate change on the natural heritage.

SNH’s key contributions in responding to climate change will be:

• helping to understand and publicise the effects and consequences of climate change for the natural heritage;
• advising on infrastructure and land management practices which help to mitigate climate change;
• guiding adaptation so that nature can, as far as possible, adapt to a changing climate and so that people can make best use of natural processes in preparing for climate change;
• promoting action by organisations and individuals by setting an example in the management of SNH’s own operations, and through our wider environmental education work.

Climate change should not only be considered ‘a problem of the future’. Its effects are already beginning to be evident in Scotland. Documented effects \(^\text{17}\) include:

• increasing average annual temperatures;
• increasing peak day temperatures (the 24-hour maximum);
• increasing length of the growing season;
• increasing sea surface temperatures;
• rising sea levels from thermal expansion of the oceans as well as melting glaciers and ice sheets;
• acidification of seas from increased carbon dioxide absorption.

We therefore strongly support the proposals for the Climate Change (Scotland) Bill.

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

We welcome the 2050 target. As discussed in the policy memorandum associated with the Bill, this is based on the desire to avoid dangerous climate change. However, ‘avoiding dangerous climate change’ is not mentioned in the Bill itself. In contrast, the UK Act (Section 6, 3a) requires that the advice that ministers receive on targets is to be based on developments since June 2000, the date of the Royal Commission on Environmental Pollution report Energy – The Changing Climate, which is referenced in the UK Act. We recommend a similar clause be included in the Scottish Bill, to provide a firm foundation if there should be any need to vary targets in future. The reference to ‘avoiding dangerous climate change’ need not be quantified, as understanding of the thresholds is likely to develop with scientific knowledge.

The target to reduce emissions by 50% in 2030 should be tightened. The overall effect of interim targets should be to achieve marked early reductions in emissions to follow an overall emission reduction pathway like the lower curve in Figure 1 (as discussed in the consultation paper on the proposed Bill during 2008). This approach is consistent with scientific advice that what is most important is the total change cumulative emissions over the period – represented by the area under the curve.

Faster early reduction will help avoid the need for major annual reductions in later years. The Bill proposals for an interim target of 50% in 2030 only amount broadly to achieving a linear pathway between now and 2050. We recommend that a further interim target for 2020 be introduced, set in the light of the recommendations of the UK Climate Change Committee. In our response to the consultation on the Bill we recommended reductions of at least 40% by 2020. If such a target were set, it would put Scotland on track to achieve a 2030 target of 55-60%.

It should be borne in mind that some of Scotland’s emissions may be difficult or impossible to avoid, for example those arising from historical disturbance of peaty soils, including drainage, dehydration and erosion, for example by tree felling and draining certain peaty soils to plant forest. This legacy – arising from earlier land management decisions - could remain as a significant ‘hard core’ of emissions by 2050. Further work is required to establish in detail the nature and amount of such emissions. However, their existence means that emissions from other sectors will have to be reduced by much more than 80% in order to meet an 80% target overall.

An intended overall percentage reduction of only 3% in each of the final years of the period up to 2050 will require a much higher proportionate reduction in ‘controllable’ emissions.
The targets should avoid relying on uncertain technological advances to secure rapid reductions later on. Where reliance is placed on technological advances (e.g. on carbon capture and storage, nuclear fusion, wave power, hydrogen economy), firm policy frameworks should be put in place, including regulatory controls and expected timescales, to make sure that such technologies are operational by specific dates.

Otherwise there is a risk of lock-in to existing forms of high-carbon infrastructure. In particular we have recently commented that there should be a moratorium on new coal power plant until such time as a firm timescale can be set to implement carbon capture and storage requirements. We think that imposing a requirement for carbon capture readiness – meaning only that there is space on site and that general feasibility studies have been undertaken – is insufficient.

In contrast, there are many practical measures that can be taken now using existing technologies (such as energy management, combined heat and power, electric vehicles, and renewable energy development), and more effective use of measures to help change behaviour and lifestyles. Interim targets should reflect the availability in the short term of these many practical measures.

Finally, we note that Scotland could be a role model for the international community in delivering these challenging targets.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are views on the setting of targets in batches from 2010 to 2022?

We support this approach provided the targets are compatible with the first three 5-yearly budgets recommended by the UK Climate Change Committee (2008-2012, 2013-2017 and 2018-2022). For the reasons set out above, we believe that the annual emissions reductions sought in this period should be higher than the annual emissions reductions sought in the last decade leading up to 2050.

Part 5 of the Bill is limited in scope, covering only selected aspects of forestry, energy efficiency and waste. To give effect to the targets or budgets we suggest that the Scottish Government produce a new Scottish Climate Change Programme, initially covering 2009-2022. The programme should cover all major sectors over which the Scottish Government has direct control, especially:

- Heat;
- Transport;
- Renewable electricity;
- Land use and land use change (including forestry and agriculture).

It should also cover areas that are important to achieving emission reductions in Scotland but are administered by the UK Government or the EU (e.g. emissions trading, product standards).

It would be helpful to develop ‘energy hierarchies’ for energy use in buildings and transport, similar to the well-established ‘waste hierarchy’. These, for example, would give priority to demand management and avoiding energy use, followed by energy efficiency, renewable generation, low-carbon generation, through to higher emission generation as the least desirable. Emissions should be quantified on a life cycle basis. The less that is achieved at the top of the hierarchy, the more infrastructure may be needed to deliver solutions further down the hierarchy, with a likely consequence that there will be more conflicts with the natural heritage and other environmental factors.
Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

As discussed above, we favour emission reductions that lead to steeper reductions in the early years. We note that the provisions of the Scottish Bill are considerably less demanding over the period to 2020 than those of the UK Act which requires a minimum of 26% emissions reduction by 2020. We hope that the recommendations of the UK Climate Change Committee for 2020, for an ‘interim target’ of 34% and an ‘intended target’ of 42%, can be reflected in the final Bill.

Q4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

We agree with the principle that the Bill should ensure that action to reduce emissions is strongly weighted to domestic effort. We note that the UK Act contains a clause that limits the amount of carbon credits that can be purchased, and that the UK Climate Change Committee recommends limiting this to 10% for the ‘interim target’, so that 90% of the reductions are achieved through domestic effort or elsewhere in the EU.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

We agree with this definition, which is consistent with international reporting obligations. However, we recommend that the Bill also provides for reporting of emissions based on consumption of goods and services in Scotland. This issue was discussed in the consultation paper on the Bill. There is a risk that emissions associated with Scottish manufacturing might fall but only as a result of our importing similar goods from other countries, with the result that global emissions due to Scottish people might increase while Scotland satisfactorily meets its internal emissions targets. Scottish Government should keep itself well informed on such patterns of consumption so that mechanisms and policy measures can be designed to avoid this risk. Tracking emissions based on consumption is consistent with the adoption of ecological footprint as an indicator in the National Performance Framework, so most of the relevant data and information should be readily available.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

19 The ‘interim target’ of a 34% reduction by 2020 assumes that the EU target to reduce emissions from the EU by 20% in 2020 remains in force. The UK CCC set a more ambitious ‘intended target’ of a 42% reduction by 2020 to apply if the EU adopts a 30% target for 2020, as they have stated depending on post-Kyoto international agreements.
What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

We agree with the approach to rely on the UK Climate Change Committee until such time as there is a demonstrable need for a dedicated Scottish Committee or equivalent body. It may be important to make sure that the UK Committee is resourced so that it is able to present its advice so that it is directly relevant to Scotland (e.g. relevant legal, regulatory, policy and governance context). If there is a need to establish a Scottish Climate Change Committee, it should either be founded as an extension of the UK Committee, or required to work closely with the UK Committee, adding supplementary advice as needed. The composition of any such body should reflect understanding of the impacts of climate change on the natural heritage, and also social aspects of climate change, including both the social impacts of climate change and issues such as facilitating behaviour change.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

We agree with the proposals. Improvements are required in both the timing and content of the Scottish inventory of greenhouse gas emissions. There is currently a lag of approximately 2 years between production of the UK emissions accounts and disaggregated accounts for the devolved administrations. On the content, we have found major presentational differences in various inventories and reports, for example the treatment of emissions associated with land management and energy sectors, which makes it difficult to compare like with like. It is important that the inventories and reporting of emissions of greenhouse gases inform policy decisions in Scotland. We welcome the development of the Carbon Impact Assessment methodology by the Scottish Government, which should help to remove these discrepancies and achieve better alignment and reporting across economic sectors, relating financial spending and greenhouse gas emissions.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

We welcome these proposals and would be content with any reasonable duties imposed, that is, consistent with the degree of action required to reduce emissions, adapt to the impacts of climate change and making sure that ecosystems retain sufficient integrity so that they continue to provide essential services. As indicated in our opening remarks, we aim to lead by example.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are views on this proposal?

We strongly support this. As indicated in our introductory remarks and answer to Q1 climate change is already happening and we need to adapt to a changing climate in the future. This means making sure that infrastructure and long term decisions about land management and land use are resilient to future climate, weather patterns and weather events. The natural heritage has an important role to play by making sure that ecosystems retain sufficient integrity so that they continue to provide essential services, such as flood mitigation, productive land capacity and water supply. This requires that approaches to adaptation allow the natural heritage to adapt to changing climate so that it can continue to support the ecosystem functions that help society to adapt. Further details on our approach and recommendations on adapting to climate change may be found in our policy statement and Action Plan on Climate Change and Natural Heritage.
We welcome the Scottish Government’s progress on developing a Climate Change Adaptation Framework and have assisted its development. We understand that after 2012 this will become the reporting and action framework required by the Bill following the first UK Climate Change Risk Assessment, expected in 2011 under the UK Act. We recommend that the Scottish Adaptation Framework should form part of the Scottish Climate Change Programme as suggested in our response to Question 2, so that the Climate Change Programme contains both mitigation and adaptation strategies.

We recommend that the timing of the requirement to report is tightened from “as soon as reasonably practicable” after the UK Risk Assessment to specify a number of months. We welcome the proposals for 5-yearly reporting: a good comprehensive report every 5 years is likely to be of more value than a less detailed but more frequent analysis. It is important that this process stimulates the action required and this aspect of the Bill may need to be subject to similar independent monitoring and scrutiny arrangements that prevail for emission reductions.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are views on this proposal?

We support this. Fire has been part of upland environments for many thousands of years. It occurs naturally as a result of lightning strikes and it is probably also one of the most useful, and oldest, land management tools. Each year, less than 5% of moorland is burnt for agricultural, nature conservation and sport interests to enable the provision of fresh food sources on rough grassland or managed moorland for livestock, game and wildlife, and the management of older vegetation, which can act as a source of fuel for wildfires. However, it is a powerful tool, which needs to be used with skill and understanding if it is not to do more harm than good. If not undertaken at an appropriate time, or according to good practice, muirburn can exacerbate erosion on some slopes and soils, damage peat-forming vegetation such as sphagnum mosses reducing the ability of the bog to sequester carbon, result in fire spreading to the underlying peat leading to severe erosion, cause displacement or death to wildlife, especially birds and reptiles and recolonisation rates. The Muirburn Code sets out the constraints to limit the potential damage to risk of damage to agricultural, forestry, game, biodiversity, landscape, and archaeological assets. Consequently, we recommend that there is a requirement for Ministers to consult with relevant authorities, including SNH, before varying the permitted times during which muirburn may be made. Consideration of changes to the dates of the muirburn season should not be in isolation, on the basis of one possible driver of change. In some cases it may be difficult to disentangle changes attributed to climate change from other factors including land management. Decisions would also need to take into account the extent to which restricting muirburn season would reduce the amount of muirburn undertaken. This may have detrimental impacts on some habitats, including Natura and Biodiversity Action Plan habitats that are maintained by rotational muirburn.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

We support the work that FCS does, and in particular we welcome the way that forest management has developed into a multi-use, public-benefit process over the last 20 years. We strongly support multi-benefit forestry and would regard moves to single benefit forestry, even for carbon sequestration, as a potentially retrograde step. The development of joint ventures for renewable energy projects would be covered by existing safeguards in the planning process, and could be compatible with the delivery of multiple benefits. Some of the...
income from renewable partnerships could be earmarked to secure continued management of the national forest estate for multiple benefits. We would support this.

The outcomes associated with the proposals to lease-off some forest areas are less predictable. It is possible that management for the natural heritage could be perceived as being less important in areas leased off. The lease-off could lead to less income for the remaining areas of the national forest estate and therefore fewer resources to support management for natural heritage benefits in those areas. This could lead to a weakened and ‘de-commercialised’ FCS, less able to lead by example and influence the private sector to undertake positive management for the natural heritage.

Establishing some firm principles to guide any leasing arrangements could reduce the likelihood of such undesirable outcomes:

• In the details of the lease and the use of any income, specify that the income should be spent in producing a balanced range of public benefits, not just carbon sequestration. The range of benefits should reflect the priorities, needs and outcomes sought in the areas that are being leased out.

• Require that the lease should be subject to formal review, for example through forest plans, every 10 years or so. It is extremely difficult to set the details of a lease for a period of 75 years which will cover all future options. For example, 75 years ago the most important use of timber from forestry was for pit-props, and decisions at that time could not have foreseen the management required for recent conservation issues or some of the difficulties associated with that, such as capercaillie leks and deer fences. Therefore, the terms of lease should provide for flexibility to require changed management for changing circumstances.

Q12 TO 16  (energy efficiency, waste, adequacy of consultation)

No comment.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government on the consultation proposals?

We are satisfied with the SEA process conducted by the Scottish Government, and its responses to the comments made by the consultation authorities. Consideration of the Screening Report commenced during pre-consultation stages of the proposals, with a report published in August 2007 and a determination in September 2007. A Scoping Report was published in September 2007, and the Environmental Report accompanied the consultation paper on proposals to introduce a climate change bill in January 2008, with comments invited in April 2008. A revised Environmental Report was published on the Scottish Government website on 4 December 2008, with clear responses to all of the comments made by the consultation authorities and relevant changes to the Bill (as introduced). We consider that the SEA has been a constructive process, adding value to the policy development.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

No comment.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

Despite our strong concerns about climate change and its impacts on Scotland’s natural heritage, we would be concerned if efforts to address it have the effect of narrowing down perspectives on sustainable development away from the broad suite of goals set out in the Scottish Sustainable Development Strategy and in Scottish Government’s 2007 Spending Review, to become overly focused on the single issue of carbon reduction.

Sustainable development has many angles, which are captured very broadly within the five strategic objectives of Government. Measures to address climate change will have to be designed sensitively, and with supporting policies and programmes, if they are to avoid making achieving these five broad objectives more difficult. Higher energy prices without improvements in energy efficiency could lead to greater levels of fuel poverty. Some approaches to restricting car use could make remote communities more fragile. Higher
energy costs could affect costs for business. The Stern Review and the UK Climate Change Committee both emphasise the need for integrated policy interventions to reduce the likelihood of adverse outcomes, and both emphasise the long-term costs of failing to make early reductions in emissions: these are issues to be considered and designed around, rather than barriers to taking action on climate change.

We believe the need is to think in terms of what a sustainable low-carbon society that is well adapted to our changing climate will be like in 2020 and 2050, and actively steer Scotland’s development towards that vision. Decisions on major infrastructure will be crucial, as they may set a pattern for decades ahead. That is what is needed if the aspiration of Scottish Ministers is to be fulfilled that Scotland should be a leading nation in dealing with the issue of climate change.

Q20  Do you have any other comments on the Bill?

No comment.
There is now a scientific consensus that the planet is warming and that the degree of recent changes can be explained only by the effect of human activities. The impact on Scotland's natural heritage is likely to be profound, causing very significant changes to our ecosystems and landscapes within a timescale measured in decades. This statement sets out SNH's perspective on climate change and our role in responding to it.

SNH views climate change as the most serious threat over coming decades to Scotland's natural heritage. In addition to its environmental consequences, climate change is likely to have major social and economic implications for people in Scotland and elsewhere. SNH aims to understand the effects of climate change on the natural heritage, and to help deliver the contribution that the natural heritage can make in limiting it and adapting to it.

Increasing amounts of greenhouse gases in the atmosphere are leading to increasing global average air and surface temperatures, widespread melting of snow and ice, and rising sea levels. The climate is becoming more chaotic with more frequent and more extreme weather events, such as heat waves, heavy rainfall, drought, and high winds. The severity of these problems in particular places will depend on a variety of local factors. Current indications are that by the 2080s Scotland will be warmer, especially in summer, with snowless winters in some parts; winters may become wetter and summers generally drier. The range of many species and habitats may shift northwards, or up hillsides. However many species and habitats may simply be unable to keep pace with the rates of climatic change, and some species may become extinct.

There will always be a substantial amount of natural variability, giving rise to a wide range of weather events and weather patterns over months to years. Flexibility is likely to be key to making sure that infrastructure and land use are resilient to future climate and weather conditions. The natural heritage has an important role to play by making sure that ecosystems retain sufficient integrity so that they continue to provide essential services, such as flood mitigation, productive land capacity and water supply.

Our key contributions will be:

1) Helping to understand and publicise the effects and consequences of climate change for the natural heritage.

There are huge uncertainties over the likely effects of climate change on Scotland’s natural heritage, or of how these changes can be influenced or managed. We aim to invest in research to improve that understanding, so as to enable our effort on adaptation to be well targeted.

2) Advising on infrastructure and land management practices which help to mitigate climate change.

We strongly support the need for major global reductions in greenhouse gas emissions in order to avoid a dangerous level of climate change – taken as a 2°C warming - beyond which there is potential for severe disruption of global ecosystems.

A wide range of measures is required, including energy efficiency, the use of renewable sources of energy, more sustainable modes of transport, and encouraging walking and cycling. In advising on such infrastructure, SNH will take into account its benefits in mitigating climate change and enabling adaptation to the impacts of climate change alongside the need to protect the natural heritage. We will advise on how Scotland’s rich renewable energy resource can be harnessed with least impact on the natural heritage.

We will encourage land management which protects the carbon stored in peatlands and other organic soils. These soils represent a very significant carbon reservoir, which if released into the atmosphere would be equivalent to around 170 years of greenhouse gas emissions from Scotland at current rates. We will also support the creation of new woodland with a view to carbon storage where it does not conflict with natural heritage interests.
3) Guiding adaptation so that nature can, as far as possible, adapt to a changing climate and so that people can make best use of natural processes in preparing for climate change.

We will support action to help both society and nature adapt to the effects of climate change. Climate change places new importance on considering the interdependence between species, habitats, and associated natural processes, and the benefits or services that people receive from these. SNH seeks to maintain the resilience of ecosystems so that they continue to provide the services that support human life as well as biodiversity. Restoring natural processes in freshwater systems can help in abating flood risks, and managed coastal realignment can allow natural habitats to provide protection against sea-level rise. Reducing other pressures on ecosystems, e.g. from pollution or habitat attrition, and maintaining diversity, will help nature to be more resilient to climate change.

As the climate changes, many species will need to be able to disperse into new areas where the climate remains suitable – usually northwards or upwards. Improving the connectivity between habitats through ecological networks can help species disperse into new areas. Protected sites will remain important for biodiversity conservation because characteristics such as greater habitat diversity and natural processes will continue to favour high biodiversity. They will also provide source populations and colonising habitat for dispersing species. For species that are unable to disperse, but still have suitable habitat within Scotland, their survival may be assisted by translocations but these can be high risk and costly and are a last resort. We will take a risk-based approach to eradication of invasive non-native species, taking account of both potential benefits and costs of action. For a few species, the effects of climate change may simply result in no suitable climate space in the UK and consequently their extinction.

4) Promoting action by organisations and individuals by setting an example in the management of SNH’s own operations, and through our wider environmental education work.

We will set an example in the management of our own operations. We aim to reduce our greenhouse gas emissions by at least 4% per year. We will work closely with Government and other public bodies to develop good practice and high standards in carbon reduction which can be applied elsewhere within the public sector. We will also review our operations to ensure that our offices, properties and visitor facilities on nature reserves are well prepared to withstand the effects and added risks associated with climate change. We apply sustainability criteria within our procurement processes, relating to energy and resource use, waste minimisation, recycling, and biodiversity impacts. We will encourage others to reduce their emissions too, and to take action to adapt to climate change, through our general environmental education work and by attaching conditions to the grants we give to other organisations.

These four roles will guide SNH’s work in responding to climate change. Our Climate Change Action Plan sets out in some detail the actions we intend to take over the next five years.
WRITTEN SUBMISSION FROM SCOTTISH ENVIRONMENT PROTECTION AGENCY

1. Introduction

1.1 SEPA’s main role is to protect the environment and human health. We do this by controlling activities that can cause harmful pollution and by monitoring the quality of Scotland’s air, land and water working to enable those we regulate to comply with the legislation as well as delivering a number of services such as flood warning and environmental business advice.

1.2 SEPA welcomes the Climate Change (Scotland) Bill and the strong framework it contains to address climate change in Scotland. SEPA feels that there are areas where further provisions are necessary to help Scotland achieve its targets. On balance, SEPA believes putting in place provisions for these measures now would further assist us on the pathway of reducing emissions towards the 80% target as well as protect Scotland’s environment and communities.

1.3 Flooding and floods management is clearly a key issue, and a major part of SEPA’s activity. However given the parallel development of the Floods Risk Management (Scotland) Bill, we have not commented further in this evidence.

2. Key messages

2.1 We need early action where possible and a Bill to support this.

2.2 To set a clear pathway for reductions of Scottish emissions and the move towards a low carbon economy, international credits must be a purely supplementary measure to firm domestic action.

2.3 Parallel reporting on consumption emissions and communication activity on end user demand is needed to provide an overall picture of our climate change impacts.

2.4 We need to measure and monitor Scottish emissions closely- existing systems are unlikely to be sufficient to meet changing demands.

2.5 We need statutory duties on local authorities, government departments and the wider public sector to consider the carbon impact of their decision making and procurement activities. We need provisions for regulators and planning authorities to take account of carbon impacts.

2.6 We need to greatly improve our utilisation of waste heat and underpin renewable heat and waste heat policy with firm and supportive action.

2.7 The Climate Change Bill should recognise the importance of Scotland’s carbon rich soils, and the need for their effective management. Scotland is in a unique position with a large amount of carbon in peatlands that need to be protected and managed sustainably.

Response to Call for Views

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

SEPA welcomes the 2050 target of 80% emissions reduction and the setting of an interim target of 50% by 2030. SEPA feels that an interim target sends clear signals to business and will set us on the pathway to the 2050 targets.
There has been discussion since the Bill’s publication on the need for an earlier target, possibly for 2020, in order to strengthen these signals. SEPA notes that Scotland will be part of the UK 2020 target of at least 26%. This target is achievable based on the UK Committee on Climate Change’s recommendations set out in its recent report. The report further recommends a 34% interim target (and 42% intended target if international agreement on a global treaty is reached) going beyond the commitment in the UK Climate Change Act of at least 26% in 2020. SEPA understands that the UK government, after having consulted with devolved administrations, will respond to the UK Committee’s advice shortly.

Scottish Government's technical note on Climate Change Scotland Bill: Greenhouse Gas (GHG) Emissions, Annual Reduction and Targets notes that Scottish Ministers will be informed by the advice of the UK Committee on Climate Change before setting the levels of annual targets.

In addition to this, if Scotland reduces its share of emissions in line with the UK target and then continues on an annual 3% reduction to 2030, SEPA believes we would be well on the way to performing beyond the current interim target of 50%.

In summary, the picture on target setting continues to develop, and SEPA is not in a position to comment on the detailed trajectories at this stage, other than to re-iterate that a balance must be struck between early, sustained action, and economic and feasibility considerations.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

SEPA supports the setting of targets in batches. Given the length of the first batch, it is important that not only are the targets credible but also crucial that they are as stretching as possible to avoid possible carbon lock in.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

SEPA notes that there are lead-in times for policies enacted now, but also that there are available measures that could set us on a strong downwards trajectory pathway before 2020. We recognise 3% reduction in the first years may not be attainable, but we need to make sure we don't carry on “business as usual” up to 2020. SEPA is concerned that reductions that could be made prior to 2020 may not occur without strong action.

In line with this, we need to recognise the purpose of the Bill is to reduce the concentration of greenhouse gases in the atmosphere and that earlier action makes this battle a lot easier in the long term. The sooner we start moving towards a low carbon economy and implementing measures that are making a sizeable contribution to emission reductions, the easier it will be to achieve the 2030 and 2050 targets.

Scottish Government’s technical note highlights a scenario up to 2020 that continues on the same pattern as we have done since 1990, rather than increasing the emissions reduction pathway. It is worth stating that such an approach, whilst not being proposed, approximates to only 1% annual reductions, and is completely inadequate.

Emissions reductions since 1990 have not always been attributable to mitigation measures and so to continue on this same pathway could be considered “business as usual”. For example, the decline of the manufacturing industry in Scotland has seen a decrease in Scotland’s emissions but not necessarily global emissions.

Q.4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

The net Scottish emissions account is an ideal concept to use as a point of reference against which the target for reducing greenhouse gases can be measured. SEPA welcomes the establishment of a carbon account for the tracking of carbon units and maintaining a database. SEPA has experience in this area as the body that enforces and administers the EU Emissions Trading Scheme (EU ETS).

As detailed in SEPA’s Bill Consultation response, SEPA believes that there should be limits on credits used by Scottish Government in meeting Scottish targets. SEPA recognises that it would be in contravention with the EU ETS to set a limit that applies to the traded sector before they have purchased international credits and therefore the limit should apply to the net Scottish emissions as a whole after the traded sector have been added to the Scottish emissions account.

International credits used for the net Scottish emissions account should be purely supplementary and applying limits is therefore a necessity. SEPA proposes a limit of one fifth of emissions reductions to ensure that efforts are focused in Scotland. This would strengthen the transition to a low carbon economy and energy efficiency measures and encourage investment in mitigation measures in Scotland.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

SEPA feels this is an accurate view of production emissions for the purpose of the target. However as Scotland’s influence goes far wider than the boundaries outlined as the definition of Scottish emissions, we would like to see provisions in the Bill for parallel reporting on consumption emissions. An end user inventory could illustrate the influence that Scotland’s domestic demand and imports has on international emissions. This could be made up of heat, electricity, transport, goods and services.

This would not only help with communication but also look at the influence that Scotland has on global emissions, for example, by looking at the impact of the steel we import has on emissions, the impact of the plastic goods we import and therefore provide at least an estimate of our influence on emissions globally. A key delivery challenge for this is to ensure the availability of acceptable data at an appropriate level from other countries.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

SEPA supports Scottish Government’s approach to obtaining independent, expert, advice on climate change.

SEPA also believes that there may be merit in exploring the potential for a body to undertake a wide ranging review of the impact of regulations and policies on climate change policy. A ‘Scottish Climate Change Regulatory Review Commission’ could actively invite submissions from stakeholders to identify inadequate, contradictory or outdated provisions. Such approaches have been used across a wide range of policy areas and have the advantage of allowing a transparent, consultative and considered approach. SEPA has in mind the sorts of processes used for the Hampton, Macrory and Davidson reviews (better regulation), the Crerar review of scrutiny, and so on.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

Reporting is clearly a key element of the policy cycle, as good performance reporting drives better performance and more timely intervention where required.

Many of the reporting requirements that SEPA called for in its response to the consultation have been incorporated, however, climate change science with a particular focus on Scotland (for example emissions for peat systems), could also be reported.

In the original Bill consultation there were three levels of duties proposed: advisory, monitoring and reporting/evaluation. However, direct monitoring no longer appears to be addressed on the face of the Bill. SEPA is also concerned about the lack of integration between monitoring from local authorities, the Scottish Government, SEPA and other reporting agencies. It is not clear that current climate change monitoring and reporting frameworks do in fact provide the necessary framework within which policy consequences can be explored.

In SEPA’s view, therefore, there is need to establish a more detailed, faster and more accurate picture of emissions of climate gases within Scotland in order to assist with planning, and meet increased demands for scrutiny. SEPA believes that this will need to involve both increased physical monitoring and assessment of some gases (e.g. nitrous oxides) and an increased capacity to assemble, verify and publish data.

This approach would also contribute to a more detailed understanding of the progress towards the targets and impacts of policies and other mitigation measures on greenhouse gas emissions. As a result this would lead to more robust and detailed reporting.

SEPA would be happy to respond further on the responsible body for this duty. In our response to the Bill consultation, SEPA put itself forward as the appropriate body for such a task. This was on the basis that, SEPA has carried out similar roles in measuring, assembling, verifying and publishing data, for example Waste Data, Scottish Pollutant Release Inventory (SPRI) and the EU ETS. However, clearly a debate is needed as to which body is best placed to carry out this task- from SEPA’s perspective it is difficult to see an alternative body that could logically carry out the task.
SEPA recommends the inclusion of provisions in the Bill to improve the measuring and estimation of emissions, verification and publishing of data, and a power for Scottish Ministers to require other organisations to cooperate with the central measuring/monitoring body.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

Statutory Provisions

SEPA fully supports the proposals in Part 4 and feels that statutory duties on the public sector (including central government directorates) should be part of the way forward in tackling climate change in Scotland. In particular SEPA feels that the duty should be placed on public bodies now, as part of the Bill, with statutory guidance on the meaning of the duty to be developed in due course.

Not only should the public sector lead by example but also the extensive influence that the public sector has on emissions via its own decision making should be recognised. Analogous voluntary agreements in the private sector and voluntary commitment in the public sector have been shown to deliver little more than business as usual in many cases.

Taking account of the carbon impact

As recognised above the public sector and government have a huge influence through their decision making on carbon emissions in Scotland (often referred to as indirect emissions). We are very much at the beginning when it comes to taking account of the carbon impact of policy decisions but there are some good examples of where progress is being made in this area. As our knowledge and skills develop in this area, provisions in the Bill requiring public bodies to take account of carbon impact in their procurement, policy and regulatory decisions would set us firmly on the pathway for reducing emissions and setting up a low carbon infrastructure to which we can build upon.

In addition, SEPA considers that there might be merit within the limits of devolved powers in placing a duty on regulators (including possibly SEPA, SNH, HSE, FSA, Marine Scotland, local authority regulatory services, Audit Scotland, CAA, Water Industry Commission and OFGEM) to consider carbon impact as part of their statutory duties. With regard to SEPA’s own regulatory functions, further provisions could be added to part 5, to amend the Environment Act 1995, to require SEPA to take account of climate change for all its regulatory decisions. Clear, consistent guidance on how to approach this would be needed and could be developed by the regulatory bodies in partnership with the Scottish Government.

Just as importantly, SEPA considers there should be specific duties on planning authorities and community planning partnerships to ensure that they consider greenhouse gas emissions in planning and policy decisions. The initial step in the majority of developments and redesigns is a planning application. Continually reducing emissions will be best achieved by adequately considering emissions at this stage. SEPA is already working with Scottish Government and the other responsible authorities under the requirements of Strategic Environmental Assessment (SEA) to improve the consideration of greenhouse gases at this stage in the process.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?
SEPA note that there could be more pieces of legislation in addition to permitted times for muirburn that may require amendments in order to allow for adaptation to climate change impacts. A provision in the Bill recognising that as we develop our understanding and knowledge of climate change impacts we may need to amend other legislation would be useful.

Also, provisions could be included to amend the Water Environment and Water Service (WEWS) Act so that it is a statutory requirement to consider and report on adaptation under the WEWS Act, e.g. Wetlands Strategy and River Basin Management Planning (RBMP) in terms of adaptation.

SEPA feels that the section on adaptation should make a specific reference to sustainable development so that social, economic and environmental factors are all considered.

**Q10** Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

*What are your views on this proposal?*

SEPA has no specific comments to make on the muirburn proposals. However, as elaborated below, SEPA notes the vital importance of effective management of Scotland’s soil carbon resource in mitigating climate change.

SEPA’s view is that land management practices should aim for positive carbon impacts (or at least carbon neutral) and should aim to improve the resilience of Scottish soils in this respect.

**Q11** The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

*What are your views on this proposal?*

SEPA responded to the separate consultation on forestry provisions in the Climate Change Scotland Bill and our key points on the consultation on forestry provisions were:

- It is important that the provisions ultimately lead to helping Scotland achieve its climate change targets through a net reduction in carbon emissions.
- Renewable energy developments and woodland creation cannot be successful in isolation. Scotland must integrate a variety of mechanisms including: minimising woodland removal, conserving forest carbon stocks by low impact silvicultural systems, identifying core networks/areas to maintain biodiversity, establish energy crops, woodland creation and environmental protection through processes.
- In considering the consultation, SEPA would have welcomed more detail on the proposals and possible implications. For example, the consultation mentions remedying weaknesses in existing forestry legislation – it would be useful to have these weaknesses fully laid out in the consultation.
- Without an overall quantified carbon assessment of the proposals, SEPA has found it difficult to judge the merits of the proposals, and therefore restricted its comments to identifying issues for clarification/resolution.
- With the underlying objective being to help achieve the emissions reduction target in the Scottish Climate Change Bill, we would encourage conditions on the lease so that operators are required to take account of carbon impact.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

It appears that the Bill could be unintentionally weakening Energy Efficiency legislation. The Climate Change Bill repeals terminology in the Housing Act 2006 to improve energy efficiency whereas the Climate Change Bill looks to promote energy efficiency.

SEPA would also like to draw the committee’s attention to SEPA’s response to the Economy, Energy and Tourism Committee’s call for evidence on determining and delivering Scotland’s Energy future. SEPA noted that measures to address energy demand for existing building stock will need to be addressed. Also, we are still seeing major public developments (hospital and schools etc) basing decisions on building costs (now) rather than future costs of carbon, resulting in the wrong boiler type or heating system and inadequate energy efficiency standards. The cost of carbon must be incorporated into the design, planning and decision stage of building projects. SEPA would like to see the provisions in Section 48, 49 and 50 reflect this need.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?

No comment.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

Key messages:

- Promotion and support could extend to the promotion of waste heat from fossil fuels use (working with the UK Government where appropriate).
- There is need to go further than ‘promote’ and to explore opportunities for improved coordination between key actors, use of the planning system and application of best practice standards to underpin the direction of the draft framework for the development and deployment of renewables in Scotland (includes Scottish Action Plan on renewable heat) and SEPA’s Thermal Treatment guidelines.

Waste heat

SEPA welcomes the provisions that Scottish Ministers must take steps to promote the use of heat from renewable sources. Promotion and support could also be expanded to cover the use of waste heat produced by fossil fuel power stations and other industrial processes. SEPA also highlighted this issue in its response to the Economy, Energy and Tourism committee’s call for evidence for determining and delivering Scotland’s Energy Future. SEPA explained that Scotland requires a huge and sustained increase in its ability to utilise heat from renewable sources as well as waste heat from industry, power supply and thermal

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26 [Link no longer operates] SEPA’s Thermal Treatment Guidelines approved by the Agency Board 10th February 2009. Papers for the meeting page 67 to 110.
Legislation to underpin waste heat and use of renewable heat policy

Scotland’s Renewable Heat Strategy: Recommendations to Ministers\(^{27}\) recognises that there are particular opportunities in Scotland because of the extent of areas off the gas grid, and the existence of clusters of potential heat demand and existing waste heat or potential renewable heat sources.

SEPA’s Thermal Treatment of waste guidelines set out the approach that SEPA will take in planning responses to, and licensing of, waste treatment facilities. The thermal treatment guidelines note that the location of thermal treatment facilities needs to consider the future use of waste heat, as an integrated network of facilities will ensure energy from waste is recovered efficiently.

“SEPA recognises that Scotland does not yet have mature or extensive heat-use networks. However, there are immediate opportunities for reliable and extensive heat use by co-locating thermal treatment plants with existing energy and heat intensive industries, or near to public developments such as leisure complexes and shopping centres. Another alternative is to develop facilities in areas with the potential for the co-development of heat-using industries. Low grade heat could be a driver for the development of eco-industrial parks, with a focus on waste treatment, reprocessing and manufacturing using waste materials, renewable energy production and local food production.”

Regulators, government and the renewables sector need to work more closely together to ensure the development and application of best practice industry standards and methods of working. Scottish Ministers and Planning Authorities (working with the UK Government where appropriate) have a central role in putting in place mechanisms to increase the use of waste heat and renewable heat sources. Scottish Ministers will need to interact with the Planning System to take steps to increase the use of heat from renewable sources and the utilisation of waste heat.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:
Waste prevention and management plans;
Waste data;
Deposit of recyclable waste;
Procurement of recyclate;
Reduction of packaging;
Deposit and return schemes;
Charges for carrier bags.

What are your views on these proposals?

With reference to the objectives of the Climate Change Bill, SEPA believes that there must be concrete evidence that the waste provisions provide an overall carbon benefit. SEPA would therefore advocate that a full life cycle assessment and carbon impact assessment is carried out in detail before the implementation of each waste provision to ensure they contribute positively towards the overall 80% emissions reduction target.

SEPA gave oral evidence at the Rural Affairs and Environment Committee on 4\(^{th}\) February and also submitted a consultation response\(^{28}\) in October 2008 to the consultation paper on potential legislative measures to implement zero waste.

Further to this, Section 58 of the Climate Change Bill as could expand so that it covers


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products as well as packaging in deposit return schemes.

A simple but effective example of the benefits of a more flexible approach would be energy efficient light bulbs (one could list many other products that are potentially problematic from an environmental resource and carbon impact perspective e.g. mobile phones and batteries). Energy efficient light bulbs will hit the waste stream in their millions in a few years and therefore provisions for an incentive to the public could help recover their metal, glass and plastic content as well as keep their mercury content, albeit low, out of landfills and energy from waste systems.

SEPA suggest the following approach to widen this potentially useful instrument:

- Make the powers general to any products and inclusive of packaging.
- Ensure the powers can be used for full or partial refund schemes. This will enable either, a full refund on return approach, or a partial refund and part subsidy for recovery approach, which for some potentially hazardous household wastes may be necessary. This is not an uncommon approach to deposit refund schemes. Care would be necessary to ensure retailers cannot pocket part of the deposit. A central clearing house approach would avoid this.

There are clear opportunities to ‘close the loop’ in terms of ensuring that a waste material can be used as the input fuel or raw material for other processes, either within the same overall manufacturing process, or as a valuable raw material for another organisation. This can be achieved one of two routes: (1) within a tiered, proportionate regulatory system that reflects the risks associate with a particular waste or end-use, or, (2) where a case can be made to show that the use of waste materials is no worse than the non-waste equivalent for the environment and human health, as a new product or raw material.

Dealing specifically with the second route, SEPA is relatively unique within the UK as it has provided publicly available guidance on the definition of waste since 2006. Our sister agencies in other parts of the UK are working on their own guidance at the moment but have still not published anything. We supplemented SEPA guidance with specific guidance on the recovery of waste oils in 2007 and it is a piece of guidance around which we have had some success:

- A drilling waste management company recovers waste oil from offshore drilling mud so that is no longer a waste when it is sent for reuse offshore.
- Working with the Quarry Products Association, SEPA published guidance on the recovery and re-use of road planings as a non-waste. This has reduced the costs and bureaucracy for civil engineering contractors and aims to encourage an approach that ‘closes the loop’ on up to 500,000 tonnes of road planings per year.
- We reached a successful end-of-waste conclusion for a company manufacturing biodiesel from used cooking oil and animal rendering wastes. Smaller biodiesel manufacturers are likely to benefit from a change in legislation in 2006 (i.e. an exemption from the requirement to hold a waste treatment licence) to allow small scale manufacturing under certain conditions.
- We are currently working with the Scotch Whisky Association on a framework document which looks at the reuse of outputs from distilleries in a range of activities, including their use as fuels, animal feed and soil conditioner.
- We are working in partnership with the Civil Engineering Contractors Association to develop guidance on the end-of-waste for clean soils from Greenfield sites.
- We are working with Scottish Power and ScotAsh to consider end-of-waste cases for the uses of the various waste ash streams from coal burning power stations.
- Working with the Quarry Products Association to see whether we can, on the basis of an end-of-waste case, allow the use of recovered waste oils as fuel in roadstone coating plants without requiring compliance with the EU Waste Incineration Directive.

Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

The 12 week consultation period provided ample opportunity for SEPA to consider the proposals for a Scottish Climate Change Bill. SEPA organised several internal seminars to discuss the proposal and SEPA’s response was also considered by the SEPA Board in April
Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

In our response to the Strategic Environmental Assessment Environmental Report consultation, SEPA welcomed the undertaking of a Strategic Environmental Assessment on the Scottish Climate Change Bill consultation and considered it to be a very comprehensive document that covers the issues in considerable detail and, importantly, identifies a comprehensive range of SEA mitigation measures.

In its original comments, SEPA recommended that a simplified report was prepared to support the introduction of the Climate Change Scotland Bill to Parliament which clearly sets out the key findings and SEA mitigation measures. SEPA noted that this would help inform decision making on the Bill as it progresses through Parliament; such a note was published on 23rd December 2008.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

No comment.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

SEPA believes that, taken as a whole, the provisions and policies to meet the targets should make a strong contribution to sustainable development. The advisory mechanisms established via the UK Committee have, as part of their definition, a requirement to take account of economic, social and environmental issues.

However, the same does not appear to be the case for adaptation measures. Adaptation measures should consider the social and economic impacts as well as the environmental impacts and there may be a case to re-examine section 45 of the Bill.

Q20 Do you have any other comments on the Bill?

SEPA sees the Bill as setting the framework (Part 1 - 3) but also facilitating the move towards the ambitious targets required. Part 4 tackles the huge amount of emissions influenced by the public sector and Part 5 could therefore possibly expand to include provisions for mitigation measures in other more carbon intensive sectors.

There are further key areas that Part 5 of the Climate Change Scotland Bill could address.

The transport and agricultural sectors make key contributions to emissions. To reduce emissions from vehicles, there is a need to promote sustainable transport and take into account the carbon impact of new transport infrastructure decisions.

In agriculture, this could particularly look at mitigation measures for methane and nitrous oxide and the need to protect carbon content of soils.

A paper published by National Grid in January 2009, The Potential for Renewable Gas in the UK, noted substantial opportunities from biogas. One of the two main biogas processes is anaerobic digestion. SEPA wishes to see a major drive to stimulate appropriate sectoral and on-farm anaerobic digestion utilising both farm wastes and other sources of waste biomass. This could provide a significant contribution to a decentralised micro-generation energy system as well as diversification for the agricultural sector.

Scotland’s per capita water consumption is increasing in contrast to consumption patterns for other developed countries. Supporting measures to require and/or enable more effort to reduce water demand and improve water efficiency across all sectors would help reverse recent trends for increasing energy consumption associated with the supply of clean water and disposal of wastewater.

SEPA has initiated a discussion with Scottish Water concerning future energy use, recognising the importance of this issue to mitigating climate change. It is clear that existing
regulatory needs and drivers will drive increased energy use in water and sewerage management in future, which are incompatible with climate change targets. It is SEPA’s view that radical solutions will be needed in future to avoid this materialising.

The Climate Change Bill should recognise the importance of Scotland’s carbon rich soils, and the need for their effective management. Scotland is in a unique position with a large amount of carbon in peatlands that needs to be protected and managed sustainably. Given the significance of carbon stores to Scotland’s carbon budget (our present carbon “store” is estimated as equivalent 200 yrs of present emissions) it seems reasonable for Scotland to legislate to protect these stores.

Given the sheer scale of the potential greenhouse gas emissions from land, there seems to be a gap in the range of powers and duties on public bodies to ensure effective management and protection.

Scottish public bodies already have a duty to further the conservation of biodiversity under the Nature Conservation (Scotland) Act 2004 and this would seem to allow Scottish Government to require the sustainable management of peatland via further guidance.

There is an opportunity in the Climate Change Bill Part 5 to emphasise the importance of the carbon stores by including provisions that ensure public bodies consider carbon explicitly when carrying out their duties in protecting Scotland’s soils.

Another way forward may be the inclusion of a duty on Scottish Ministers to issue a national carbon strategy for both peatlands and Scottish soils. The Bill could also include provisions for a statutory consultee in the planning process for soil carbon issues, and provision to enable a body to be given regulatory powers if necessary to ensure effective, sustainable management of soil/peatlands carbon.

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29 Bradley et al. (2005) stated that Scotland’s soils contain an estimated 2196 million tonnes of soil carbon, to a depth of 100 cm, compared to a total of 4566 million tonnes for the whole of the UK.
Scottish Water Response to the Call for Views on the Climate Change (Scotland) Bill by the Scottish Parliament Transport, Infrastructure and Climate Change Committee

Introduction

We welcome the opportunity to provide evidence to the Committee on the proposed Climate Change (Scotland) Bill. During 2008 Scottish Water issued a detailed response to the consultation on earlier proposals for this bill setting out some of the challenges for the water industry in addressing climate change.

We are pleased to see additions to the current bill that take account of the need for adaptation. We believe that it is useful and necessary for both adaptation and mitigation to be considered together within the bill. The Flooding Bill promotes multi-agency approaches and surface water management planning and is an example of the sort of partnership approach across wider aspects of climate change adaptation – the requirement to produce a programme must be seen in the context of partnership.

General Statement

We are fully supportive of the aims and ethos of the bill. We understand the scientific basis on which the targets are decided and also the moral responsibility for developed nations to demonstrate leadership on this issue. Our vision is that Scottish Water always demonstrates responsibility in delivering its duties.

The water industry is at the forefront of climate change. We depend on a healthy environment for reliable, good quality water to treat and supply to customers. Further, we act to protect the aquatic environment by treating and safely returning society’s wastewaters without causing flooding or pollution. A changing climate challenges the provision of these services.

In respect of carbon it must be recognised that the water industry is an energy intense sector. The challenge of meeting public health and aquatic environmental quality imperatives has seen a step change in technology in recent years with the advent of tertiary wastewater treatments, membrane technologies and UV disinfection.

Rising Energy Demand

It is estimated that the £4bn we will invest between 2002 and 2010 to meet service, health and aquatic environmental imperatives will increase energy demand by 2.5% per annum. However, backtracking on quality is not an option. We need a good quality environment and we are a critical service supporting a healthy Scotland.

Legislators in Scotland and Europe collectively need to recognise that future quality enhancement must be balanced by holistic assessment of the net benefit or cost. Local enhancement must be considered in the context of the global impact from potential emissions increase.

There is a need for a full review of legislation written in a “pre-carbon” era to identify unintended carbon consequences from EU, UK and Scottish Law. Full carbon assessment should be demanded of all new legislation. Implementation of legislation must consider the wider impact and whether there are policy mechanisms etc by which carbon can be mitigated.

A Scottish Water Climate Change Strategy

Our strategy commits us to be proactive on behalf of customers, to seek to understand the impacts and secure service in a changing climate and to contribute appropriately to carbon mitigation by reducing our energy demand, becoming more efficient and generating renewable energy.
On adaptation we have taken steps to identify the work that will be required to properly assess the risk and respond appropriately. Our intention is that prior to physical investment we will work in partnership with others to understand the service risk, the timeframe over which impacts may be felt, and the response necessary to secure service. This will ensure we commit expenditure as efficiently as possible.

On mitigation, Scottish Water is committed to carbon management and to the production of annual footprint reports of operational activities. Our current footprint is circa 470,000 tonnes CO₂ equivalents. We have been a leading influence on the development of carbon assessment tools in the water industry, in particular to examine emissions associated with investment planning.

We are presently exploring tools that will support the assessment of the “whole life” carbon impact associated with investment planning. This may help ensure that future decisions properly accommodate the need to report, manage and reduce carbon.

We generate up to 5% of our electricity demand from renewables (predominantly hydro), and have assessed our capacity to increase this as part of our mitigation measures. We are currently developing a ‘Carbon Attainment Plan’ that seeks to identify the contribution that each part of Scottish Water needs to make towards managing carbon – making carbon part of ‘business as usual’.

Specific Points

The 2050, and interim 2030 carbon targets

We recognise the scientific basis on which the 80% reduction is predicated, and agree that a trajectory to achieve 80% by 2050 requires a challenging interim target. To do otherwise risks back loading action on emissions reduction, increases the risk of failure to achieve the target and allows a greater net emissions over the period. For this reason, it is sensible and right to introduce an interim target that would allow all sectors to begin planning their carbon management approaches.

We believe that a genuine multi-agency approach is required to agree and secure the necessary actions and funding to deliver emissions reduction cost effectively across all sectors of the economy. To do this will require significantly increased focus on the carbon abatement costs across the economy in order that attention may be focussed on areas where there is greatest opportunity and efficiency.

Annual Targets and Carbon Budgeting

The setting of annual targets that are appropriately scoped and costed presents a significant challenge to Scottish Ministers. This builds on the issue raised above, namely that greater clarity is required on the ability of the Scottish economy to make emissions reductions that will both contribute meaningfully to the long term goals, and do so in a manner that is both cost effective and equitable.

During our earlier consultation response, we expressed the view that clear budget periods over 5 years, with sufficient lead time would be necessary, and that a degree of flexibility in balancing budgets is required. This is because our industry has extremely long lived assets, 8 year objective setting periods and 4 year regulatory investment plans. We need sufficient sight of budgets and the implications for Scottish Water in order to make appropriate plans. The ability to vary targets annually, along with the significant work required on cost effectiveness brings a degree of uncertainty to the process.

Annual targets offer a useful profile within a budget period, but we believe it is more important to produce longer term budgets that will cost-effectively drive the right opportunities and contribute to the overall trajectory of emission reduction.

Public Sector Duty

The public sector is a diverse range of organisations with differing carbon impacts and reduction opportunities. It is imperative that we consider (1) emissions associated with a public body in delivering its duties, and (2) emissions from third parties that are ‘caused’ by
the public body – the public body’s unintended impact on carbon in the wider economy through policy, legislation, planning decisions etc.

With respect to the operational emissions of a public body, an appropriate duty would require organisations to report carbon performance regularly, and develop carbon management plans that demonstrate how carbon is being ‘mainstreamed’ throughout its operational practices. Such a plan may be submitted for approval by the sponsor unit which would itself have a duty to mainstream carbon thinking across its remit. Periodic review of progress against the plan may then follow.

It is unrealistic to expect all public bodies to default to the same trajectory as the proposed targets. This is because each body will have a different mitigation capacity. The key focus must be on cost-effective reduction to ensure that tax and water charge payers get value for money for carbon abatement.

With respect to the carbon consequences of legislation, policy or decisions made by public bodies we believe there should be a duty to consider how, in the course of its activities, seemingly unrelated policies or decisions may drive unintended carbon consequences elsewhere in the economy.

Carbon management is interconnected with all parts of the economy and a multi-agency approach with government, regulators, authorities, NDPBs etc, to take account of the degree to which their decisions impact carbon emissions.

We believe that building the right carbon management tools to encompass whole life costing of carbon will allow us to see the most cost effective means by which carbon could be reduced. Added to which, proper evaluation of the capacity and cost efficiency of investment in renewables across public sector and cost efficiency will enable the identification of suitable carbon mitigation goals.

**Adaptation**

We are pleased to note the provisions for laying a programme for adaptation before Parliament. We believe that only through multi-agency partnerships particularly those associated with critical national infrastructure will we successfully integrate policy and action towards securing a well adapted Scotland. We are committed to continuing to work with Government and stakeholders toward achieving this.

**Waste Management**

Through our waste management facilities in our non-core business “Scottish Water Horizons” we have significant green waste composting and recycling capacity that we are looking to expand. We believe that there is scope to streamline the regulation surrounding such activities to promote sector expansion and the inclusion of carbon beneficial activities such as Combined Heat and Power units.
The Convener: This is the final evidence session in our stage 1 inquiry. We have heard from a large number of witnesses during the past six meetings. Today, we have the opportunity to put questions that have emerged from those discussions to the Minister for Transport, Infrastructure and Climate Change, Stewart Stevenson.

I will break down the session into two parts: first we will consider parts 1 to 4 of the bill, section 45 on “Programmes for adaptation to climate change”; and part 6; then we will concentrate on the provisions on forestry and waste in part 5. We will consider the provisions on energy efficiency in chapter 3 of part 5 when we receive a report from the Economy, Energy and Tourism Committee, which has been considering the matter in detail.

I welcome the minister and his Scottish Government officials: Philip Wright is deputy director of climate change, Fiona Page is head of the bill team, Cameron Maxwell is adviser on climate change policy and Madeleine Cusack is a policy officer on climate change adaptation.

Before we get into the nuts and bolts of the bill, I will ask a general question. How has the Government sought to get its house in order on climate change emissions? To what level have the Government’s emissions been reduced and what plans does the Government have to cut its emissions further, given that it has a key role in setting a good example when asking for substantial long-term reductions from the country as a whole?

The Minister for Transport, Infrastructure and Climate Change (Stewart Stevenson): The carbon reduction commitment largely encompasses what the Government has been doing and will do in the future. A carbon accounting tool is under development to ensure that we are able to carbon proof everything that we do in government to a detailed level. A number of things have been happening since the previous Administration was in office, which we have continued, in relation to how we compensate for some of our travel.

We have done some simple things. For example, at Victoria Quay, in Leith, we have installed an electronic board that shows when the buses are coming. As a result, as a team, we were able to tailor our travel here from Victoria Quay, because we knew that the bus that we were due to
catch—the number 35—was, of course, running on time.

We have also done quite a lot of work on the adaptation sector. We are facilitating discussions with the Scottish Environment Protection Agency, Scottish Natural Heritage, the Forestry Commission Scotland and Historic Scotland. We are working with local authorities on planning for extreme weather events, among other things. The climate change adaptation framework that we are developing has taken input from right across the Government. Also, the strategic board of the civil service has a shared responsibility to ensure that we have buy-in across all the Government’s activities.

The Convener: Are you able to put a figure on the reduction in emissions that the Government has achieved from within its own operations?

Stewart Stevenson: Not at this stage. However, the carbon balance sheet that we are developing will enable us to start to measure that in a way that makes sense and gives us credible figures for our accounting.

The Convener: Do you expect to have those figures before the bill is passed? By taking the lead, the Government can help to promote confidence among the wider public that long-term reductions are not only achievable but are already happening in Scotland.

Stewart Stevenson: You will forgive me for saying that when the bill will be passed is in the hands of Parliament, although there is a shared expectation that that should happen during the current calendar year and sooner rather than later. We will not have completed all the work that I have described within that timescale. However, people should take as earnest of the Government’s good faith the approbation that we have received from WWF Scotland, which has said that the bill is the most ambitious climate change legislation in the world. The process has seen the Government work with all strands of political opinion in the Parliament to common strategic purpose. Our debates and discussions are essentially taking place at tactical levels and do not show us deviating from the core direction in which we seek to move. In general, in everything that we do, we will seek to mainstream—to pick up a word that has been used in other contexts—consideration of the carbon effects of the initiatives that we take.

The Convener: Let us move on to the development of the bill. The formal consultation process followed a degree of informal dialogue with a range of stakeholders. Even now that the consultation has closed, I am sure that the Government is open to arguments from others as to the direction of its policy and the legislation. How have non-governmental organisations, the business community and public sector bodies, for example, been involved in that process since the bill’s introduction?

Stewart Stevenson: You qualified your question by saying, “since the bill’s introduction”. I would like to go back a bit further than that, if I may. The second engagement that I undertook as a minister—which I think was in the week beginning 20 or 21 May 2007—was to engage with the business community on the subject of climate change. The first engagement that I undertook as a minister, across the whole range of my responsibilities, was to engage with the scientific community on the subject.

We meet a range of NGOs regularly. I think that I met Stop Climate Chaos last week. I am getting a nod from my officials—it is sometimes difficult to remember in which week meetings took place. We had useful discussions with Stop Climate Chaos. I know that Mr Swinney has met other representatives of NGOs since then.

Engagement is a continuous process. You are quite right to point to the Government’s willingness to continue—up to 2050, one hopes—to engage with NGOs and a wide range of stakeholders to ensure that, as our scientific understanding and the observational data on what is actually happening to the climate as a result of our and other people’s interventions increase, we continue to modify what is happening.

Last week, I met the climate change business delivery group and Scottish Business in the Community hosted a May day network event in the Parliament. I believe that something of the order of 140 companies have signed up to that initiative so far, and last week’s event was geared towards increasing that number.

That is by no means a complete statement in response to your question, but I hope that it illustrates the activity and the general willingness on our part to continue to engage—and we are not finished.

The Convener: Since the closure of the formal consultation, and more particularly since the bill’s introduction, what impact have those discussions and engagements had on the Government’s intentions for shaping the bill?

Stewart Stevenson: I am in the committee’s hands as to how we approach this subject in detail. In a number of areas, we are looking to respond to the consultations with changes to the bill at stage 2 and further consideration of issues that we might pick up. Of course, the various committees have helped us to consider which areas of the bill could be sharpened. For example, on aviation and shipping, the bill currently states that the minister “may” do something, but it has been suggested that the bill should more properly
say that the minister “must” do something. We are actively considering making that change. That is merely one example; I am sure that we will come to others as we go through the bill.

The Convener: Thank you.

You mentioned the stage 2 process. It has been stated that the Government intends to lodge amendments at stage 2. I gather that you have expressed a general willingness to give further evidence to committees at stage 2, if that proves necessary. What amendments do you intend to lodge and do you expect any additional policy areas to be incorporated?

Stewart Stevenson: We are not currently considering incorporating additional policy areas, but we remain genuinely engaged. Nothing has emerged on that front so far. We have not completed our consideration of the stage 2 amendments that we will lodge, so I cannot give you a complete run-down of where we will get to. I think that, properly, you would expect me to say to the committee that we will, of course, engage with the committee and ensure that you are aware of our intentions at the earliest possible moment.

The energy efficiency of living accommodation is one area where we are considering making a change. Concerns have been expressed to me about the use of the word “promote” as against the word “improve”. We are looking at upping the ante to ensure that there is no ambiguity that could lead to people feeling that we want to dilute commitments that were made in the Housing (Scotland) Act 2006. We expect to lodge an amendment at stage 2 to address that point, so that there is clarity and certainty about the bill’s provisions.

14:15

The Convener: In debates in Parliament, the Cabinet Secretary for Finance and Sustainable Growth has indicated that he is open to the idea of a legislative commitment on a 10-year domestic energy efficiency programme. Is the Government still looking at that?

Stewart Stevenson: We are still looking at it.

The Convener: Thank you.

Members have a number of questions about the targets in the bill, the first of which is the target to reduce greenhouse gas emissions by 80 per cent by 2050. The Government set that target before the United Kingdom Committee on Climate Change was constituted even in its shadow form. What in-house scientific analysis was used to generate that target? At the time, some people argued for a lower target of 60 per cent, whereas others argued for a target of more than 80 per cent. What was the scientific basis for the target? Is it still the latest scientific analysis?

Stewart Stevenson: I have a couple of comments to make on that subject. The 80 per cent target came in with the Government—it was a manifesto commitment. I was not the spokesperson on climate change at that stage, but I think that, as a political party, we took the best advice that we could. It is important that I point to scientific advice because in government—you will have heard me say this elsewhere—we want to ensure that we are driven, both on targets and on other matters, by scientific advice and that we do not impose political overlays that seek to challenge that advice.

That is this Administration’s approach as we set off on the journey to 2050. As I have said before, I will be 104 in 2050, so there is a faint chance that I might not be the minister then. We need an approach that will survive changes of Administration and changes of minister. That is why we have taken the principled approach of being driven by scientific advice.

We are talking generally about the subject of targets. As you will be aware, as well as providing for an 80 per cent reduction in greenhouse gas emissions by 2050, the bill provides for the meeting of an interim target by 2030. It now appears that 2020 would be a more appropriate date for an interim target, so we are very likely to amend the bill on that basis. The 2020 target that we are likely to end up with on the basis of scientific advice—we have not yet come up with an exact figure—is likely to be more challenging than the 2030 target that we put as a minimum in the bill. That is an example of how we are responding.

The process whereby the UK Climate Change Bill started off with a 60 per cent target but ended up with an 80 per cent target was driven by the science. By the same token, we expect the targets in our bill to be driven by the science rather than by potentially short-term political considerations.

The Convener: It is useful to know that you are open to bringing forward the interim target and increasing the reduction in emissions that will have to be achieved. When will you be able to announce the new target? Will we simply have to wait for stage 2 amendments to be lodged to find out what the Government’s intentions are?

Stewart Stevenson: We would like to give the committee the maximum certainty on as many of the changes that we plan to make at stage 2 as we can, so that they can be taken into consideration as you prepare your stage 1 report. In other words, we will seek to give you the most up-to-date position that we can so that it can be reflected in your report. The final position will
probably not be determined until April, and there might be issues that we are unable to bottom out. In some cases, complicated legal drafting will have to be undertaken, whereas the position in other cases will be more straightforward and we will be able to provide an earlier indication of our proposals. It is certainly our intention to work with the committee and to give it as much information as we can as early as we can. We expect to change the 2030 figure, but I am not yet in a position to tell you what the new figure will be. There is no doubt about whether we will change it—we intend to do so.

The Convener: I understand your current position, but you will be aware that, as soon as you have finished giving evidence to us today, we will start to discuss our general approach to the stage 1 report, which we will draft over the coming weeks. If you are unable today to give us a clear timescale for the announcement of decisions, will you be able to do so in writing over the next few days?

Stewart Stevenson: Absolutely. However, you should not imagine that there will be a single decision on a single day. We will make a series of decisions, and some of the simpler ones will be announced early. Clearly, it is not in our interests for the committee not to have the fullest possible information about our intentions at stage 2, but I am seeking to manage expectations about whether we will be able to tell the committee everything that we plan to do at stage 2 in time for its report. My approach is intended to be helpful; I hope that you see it in those terms, convener.

The Convener: I note the position and look forward to seeing the timescale. I am sure that when members come to draft the report they will want to reflect on the issues in light of the facts that are and are not available to them. Clearly, it would be helpful for them to have as many facts as possible when doing so.

Stewart Stevenson: The committee’s first substantial discussions on the report’s content are likely to take place next week. We will seek to give members an update in time to allow them to take account of it in those discussions. However, I repeat that that update is not likely to represent the whole and final story. We are happy to work as a team with the committee clerks to ensure that we synchronise our efforts to the extent that we can.

Shirley-Anne Somerville (Lothians) (SNP): My first question is about cumulative emissions. We heard a lot of good evidence from the Tyndall centre for climate change research about the importance of taking early action to ensure that we cut our emissions as quickly as possible. One issue that the Tyndall centre highlighted was cumulative emissions. Do you intend to monitor and report on Scotland’s cumulative emissions from today onwards?

Stewart Stevenson: Our focus is implicitly on cumulative emissions. I say that because we will set annual budgets, which will enable us to see what will be in the bank from Scotland’s carbon reductions. The trajectory to 2050 will inevitably be lumpy. As I have said elsewhere, there will be a sudden jump when a major coal-fired power station changes technology, for example. There are many uncertainties, but by setting annual targets we will, in effect, be setting targets that relate to cumulative emissions. By the same token, reporting on what is happening will enable us to see how that is affecting cumulative emissions.

We are all aware that reducing emissions is simply a means of delivering control of the increase in temperature. If we postpone all the change to the last year, we will not get anything like the benefit that we would get from more ambitious change on a year-to-year basis. The 2020 target to which I have referred is part of the fairly early action that will get substantial emissions reductions into the budget at an early stage and enable us to start banking some of the cumulative emissions reductions on which we will depend.

Shirley-Anne Somerville: If the measurements are already being undertaken, will annual accounting include clear information on cumulative emissions, or will that be for others to work out?

Stewart Stevenson: Let me make a rather obvious point first: emissions are one thing, but sequestration is another. Sequestration is on the other side of the balance sheet. A range of factors has to be taken into account in understanding how much carbon is no longer in the atmosphere as a result of our action. For example, the increase in forestry planting is extracting carbon dioxide. I do not want to be unnecessarily picky, but the word “emissions” makes up part of the carbon balance sheet but does not tell the whole story.

If people thought that we could be helpful by adding up all the numbers across the reports, and if people felt that such a total would better inform parliamentarians and wider Scotland, it would not be difficult for us to include it in our reporting. We would certainly be open to doing that. In any event, we are already producing the numbers that would enable such a total to be calculated.

Shirley-Anne Somerville: What about the measurement of consumption? The general public can be confused, because they might assume that our emissions have reduced when, in fact, we have simply exported some of our heavy manufacturing and worst polluters to other countries. It might therefore be useful and...
educational if people had a tool for knowing exactly what Scotland is consuming. Does the Government plan to report on consumption?

**Stewart Stevenson:** At the moment, figures are produced on consumption, and they are broadly similar to the figures on our net emissions. Everything is based on working out a national indicator for Scotland’s carbon footprint.

Focusing on two measures simultaneously can lead to a real danger: confusing and conflicting messages can result. We are working internationally to ensure that we all count in the same way, so that we can get a picture for the whole world. Figures on our consumption will deviate from figures on our net emissions. What we propose to do conforms to international practice, in particular to the United Nations Framework Convention on Climate Change. That is appropriate; that should be our focus. We have to focus on the things that we do in Scotland that are responsible for CO₂ emissions.

If Scots consume things while abroad, should that count towards our consumption figures? If so, how could we measure that? It is more straightforward to estimate and measure our net carbon emissions.

**Shirley-Anne Somerville:** I take your point that different figures can appear contradictory. It is often too easy for people to blame developing countries such as China and India for emissions when, in fact, those countries are producing material for our consumption. Is the Government open to considering whether help is available from NGOs that work in carbon footprinting? We might explore that avenue.

14:30

**Stewart Stevenson:** I come back to the general point that we will work with NGOs and others. With divergent figures, there is a difficulty in determining what the Government’s policy and practical response should properly be. That could introduce the real danger of politicians being asked to make judgment decisions rather than rely on the objective, scientific advice that informs ministers’ policy-making decisions and is driven by changing views on how to measure and estimate and how best, ultimately, to deliver on the objective of keeping the increase in the earth’s temperature within certain parameters. Focusing on a single measure for policy and practice gives us significant advantages by decoupling decision making from politics and delivering it back to the scientists. It also enables us to advocate strongly with other countries for a shared basis for action in other jurisdictions throughout the world.

**Shirley-Anne Somerville:** My final question is about sustainable development. It is important that the targets in the bill are met in a sustainable fashion. Has the Government thought about including a sustainable development duty in the bill to ensure that that is the case?

**Stewart Stevenson:** As members will be aware, there are provisions to enable us to take powers over public bodies, which is key in focusing on sustainable development. Sustainable development is key to our maintaining the continuous reduction in our net carbon emissions that is necessary for us to meet our targets, and to meet the budgets that will be published as the legislation is implemented over the period to 2050. We are not alone in that. We need to work with a range of public bodies and local authorities, and to share responsibility with a wide range of other people.

Again, the clarity that comes from focusing on our net carbon emissions gives no place to hide for anyone. There is no great purpose in any sustainable development that increases carbon emissions. Our approach is to have a single purpose and to give no place for people to hide. We will continue to listen to the arguments, but that is where we are for the time being.

**The Convener:** I am a little unclear after that answer. Is the Government considering the option of a sustainable development duty in the bill?

**Stewart Stevenson:** We will consider it further, but we are not yet minded to include such an option in the bill.

**Des McNulty (Clydebank and Milngavie) (Lab):** I am interested in what you said about interim targets, and I want to probe you a wee bit on the substance. If you are considering a 2020 target, how will you determine it?

**Stewart Stevenson:** Using scientific advice.

**Des McNulty:** How will you get the scientific advice?

**Stewart Stevenson:** We will be informed by the first report from the UK Committee on Climate Change and, more fundamentally, by the UK Government’s carbon emissions budget. This is a team game: we are part of the international obligations that the UK Government has signed up to. There are substantial signs that we are working effectively together on that, which will inform our decision on a 2020 target.

**Des McNulty:** How might the target of a 42 per cent reduction in emissions by 2020, which was recommended for the UK by the UK Committee on Climate Change, translate into a Scottish target?

**Stewart Stevenson:** That is the stretch target, and it is predicated on the European Union moving to a 30 per cent reduction target. As yet, we do not know that that will be the UK’s target; there is
scope for more international and national discussion on the subject.

As we have done in relation to other matters, we would like to propose an “at least” target. As I said, it is important that we work with the rest of the United Kingdom on the targets, but we have to get more information on the UK target before we can say how the Scottish target relates to it.

There needs to be a new international agreement. The meeting at the end of the year in Copenhagen—which follows on from the meeting in Bali and, to an extent, the meeting in Poznań—will inform the numbers. The bottom line is that we can make the appropriate orders to set the targets in the light of emerging scientific information.

Des McNulty: You are right to say that the target of 42 per cent is a stretch target for the UK as a whole, but there is a general acceptance on the part of ministers and others that Scotland has some advantages over other parts of the UK in power generation and, to an extent, transport emissions. Setting aside the need for international negotiations, do you not consider that something that is a stretch target for the UK is a manifestly achievable target by 2020 for Scotland?

Stewart Stevenson: I accept the generality of what you are saying. We have certain advantages in that we have greater potential for renewable energy—that is an obvious factor that has been rehearsed in this committee and elsewhere. Nonetheless, it is not yet clear from the scientific advice exactly what steps would need to be taken to deliver a reduction in emissions of 42 per cent by 2020. For example, one of the range of things that we would need to do is quadruple the rate of forestry planting.

We await further advice on the subject. If it can be demonstrated based on scientific advice that such a figure is right for Scotland, we will take account of that, but we cannot discount the European trading schemes and the effects of those schemes that will be superimposed on the UK and Scotland. There is a certain amount of detail associated with the trajectory of effort around the UK trading schemes that will influence the figures that the UK Government chooses and the budgets that it sets for emissions and, therefore, the envelope within which we have to set our figures.

Des McNulty: On annual targets, you referred to the Government’s manifesto and the endorsement of a target for 2050. The manifesto committed the Government to annual reductions of 3 per cent, but that commitment has been set to one side as those reductions will not come in until 2019. Our current emissions reduction is about 1.3 per cent a year. How do we put pressure on your Government and the next Government to get to a 3 per cent rate of reduction well in advance of 2019? Should we reconsider the provisions in the bill to see whether we can achieve that?

Stewart Stevenson: The bill will set mandatory annual targets of at least 3 per cent from 2020, so we are introducing annual targets—that is important. In fact, the stretch target of 42 per cent gives us a more challenging trajectory than that.

We will set our annual targets based on auditable scientific advice from the UK Committee on Climate Change, which will be based on information that is available to us all. Our targets will balance science and achievability: they must be credible and deliverable, and we want to make the fastest possible progress. Our drawing forward of the 2030 target to 2020, and the implication that that will be more challenging than the 2030 target that we are setting, is evidence that our approach to targets and use of annual targets will drive early change.

Des McNulty: With respect, minister, I am not sure that that is right. The commitment to a 3 per cent year-on-year reduction from 2020 is commendable, as is the undertaking to consider the 2020 interim target, but there is no hard and fast definition of what the Government expects itself or its successors to achieve between 2009 and 2020. That is the issue. We have heard from a swathe of climate scientists and environmental groups that what is crucial is not so much what happens between 2020 and 2050 but early action between now and 2020. If we do not take early action and the hard targets kick in only from 2020, we could end up in the situation in which the runaway train has long since left the station.

What can we do between now and 2020? It is a question not only of setting a target for 2020 but about how we bind this Government and the next one to the early action that we all think desirable and necessary. The UK Government is doing that in the form of five-year carbon budgets. Should we do that in Scotland, or should we consider setting escalating targets of, for example, 2 or 2.5 per cent for the years between now and 2019?

Everything seems imprecise at present. I am not denying your good intentions, just highlighting the imprecision of what you are committing yourself to between now and 2020.

Stewart Stevenson: Mr McNulty said that there is no hard and fast target until 2020; that is far from being the case. In early course, we will set targets to cover that period to show exactly what has to be achieved each year. There is a figure for 2020 in the bill, but the targets that will take us to that will be set by secondary legislation. They will be informed by advice from the UK Committee on Climate Change and, like the UK Government’s
target for an 80 per cent reduction by 2050, informed by science.

The Climate Change Act 2008 does not contain anything different from our bill in that respect. We are more ambitious in certain other respects but, in this respect, we are following a similar trajectory to the UK Government and will, through the scientific advice that we will get, reflect the uniquely Scottish conditions in which we find ourselves.

14:45

Des McNulty: Let me just come back on that. The minister’s argument is that he can include in the bill statutory conditions that will not come into force until 2020—Governments 10 years from now will be required to meet those conditions—but, despite knowing less about the situation from 2020 onwards than about the situation between now and 2020, he is not prepared to include in the bill quantifiable year-on-year targets for that interim period. My question is why we can include statutory commitments in the bill for the period after 2020 but not for the period between now and 2020. The minister’s position seems illogical.

Stewart Stevenson: Our position is entirely logical. We have not received substantial suggestions from anyone about how to deliver a 3 per cent annual reduction over the next couple of years, and we await the scientific advice that will help us to set those targets through secondary legislation, which will be an essential part of the implementation of the bill all the way through to 2050. Indeed, as I said, the 2020 target will depend on scientific advice. It will be stretching but set a minimum: it is entirely possible that, on a year-on-year basis, the scientific advice could take us beyond the figure that is in the bill.

It would be no easier for us to include annual targets up to a particular date in the Climate Change (Scotland) Bill than it was for the UK Government to include such targets in its Climate Change Act 2008. The approach that we are taking and the scientific advice on which we will draw will lead to the setting of hard and fast targets, but we need to consider the timing for that process. If we were to make the completion of the primary legislation process await the scientific advice that will enable us to set annual targets, the bill would be substantially delayed. It is far better to progress with the bill by putting in place the infrastructures to take things forward so that we can use the secondary legislation provisions to set the annual targets.

Des McNulty: I have a final question. The Scottish Government committed itself to annual targets—

Stewart Stevenson: We are delivering annual targets.

Des McNulty: I recognise that.

I suppose that I am asking that we look at the issue rationally. It seems that we are nowhere near the 2020 baseline from which we could be confident that the 3 per cent annual reduction could be achieved—even though I support the general direction in having that strong aspirational target. We are much closer to the situation in 2013, 2015 and 2017, for which an informed calculation could be made about the year-on-year reduction that we might realistically expect to achieve. I accept that there might be some imprecision about what could be done in 2012 as opposed to 2013, but we are in a much better position, in terms of the information available, to make an informed assessment on achievable annual targets—or, indeed, on an achievable cumulative target over two or three years—between, say, 2012 and 2015 than we are to make that assessment for the years 2025 to 2028.

The minister’s confidence that he can achieve 3 per cent reductions in the 30 years between 2020 and 2050 seems at the very least inconsistent with his lack of precision about what he expects to achieve between 2009 and 2020. What does the minister anticipate can be done between 2009 and 2020 in terms of annual uplifts or aggregated annual uplifts? Based on the information that should be available now, what does he believe is practically achievable and able to give us some confidence that early action is being taken and that the measures that are being put in place will act as a lever to get real action each year from the current and next Governments?

Stewart Stevenson: I said that there will be annual targets, which makes it clear that we will have to deliver year-on-year reductions. We have not yet got scientific advice that will enable us to set figures for each year. That will be challenging for us and for the UK Government.

The way in which carbon trading will work across the European Union, the UK and Scotland has not yet bottomed out. Until it has, we cannot set the particular figures that Mr McNulty has asked for, but we have put a process in the bill that will enable us to do that. I am not aware of our having the information that would scientifically enable us to set the figures—indeed, the 2020 figure still requires to be scientifically informed. We have a source of scientific advice, and the best approach is to rely on what it tells us. We must deliver across a range of policy areas, but we must be informed by the scientific advice.

The member can be sure that we will set ourselves challenging targets as we go forward to 2020 and, indeed, 2050. The UK Government had
its Climate Change Bill passed last year, but it has not yet come up with its targets—indeed, it does not intend to set targets this year. Members will remember that we must set our targets in the context of the UK framework, which includes areas for which we will be responsible.

The Convener: Can you quickly clarify a point before we move on, minister? We all recognise that, although earlier cuts are harder to achieve, they are more important because they have a greater impact on our climate change performance in the long term. Given that you have indicated that the Government is considering the possibility of amending the bill to set a more ambitious target for 2020 than the current one for 2030, is the Government open to an amendment to the part of the bill that specifies that the annual targets in the first 10 years should be only reductions each year rather than specified reductions? Is the Government open to an amendment to toughen up the first set of targets?

Stewart Stevenson: I cannot give a clear answer to questions of that character without understanding the specific implications of any proposed amendment. The bottom line is that we will be informed by science rather than by politics—that is the important point. We must work with our partners in the UK and the EU to ensure that what we do is consistent with that. We are looking at the advice that the Committee on Climate Change is giving to the UK as a whole; we will watch how that relates to Scotland and how things progress. We already provide in the bill that there must be a reduction year on year.

I sign up to the convener's point—Mr McNulty possibly made it as well—that early action has a bigger impact because we bank the savings over a longer period. That is clearly true. I said to Shirley-Anne Somerville earlier that we cannot leave it until 2049 to do all the work because, if we did, we would not get the benefit of the change in greenhouse gas emissions over a long period. I therefore associate myself with the convener's remarks about the need for early action.

The Convener: I hear what you say about taking decisions that are based on science, and I am sure that the Government takes that seriously, but the committee will also be informed by science and, ultimately, political decisions will be made around this table and in the chamber about any amendments that are lodged. That is the only reason why I asked whether the Government is open to the kind of amendment that I described.

Stewart Stevenson: If the amendments were driven by science and, in particular, the UK Committee on Climate Change, we would of course consider them seriously.

I do not think that we are fundamentally at odds on the issue, convener, but I make the point again that the science is the important thing and that we should use it to move forward. I have a body of quite extensive information that is probably beyond what members would tolerate my reading to them. However, if it helps, I am happy to write to the committee to develop my point and allow it to take account of that information in its deliberations as it writes its report. If that raises further questions—I realise that it might do—we will be happy to respond further if we can within a timetable that is helpful to the committee.

The Convener: I am sure that we would appreciate further correspondence.

Alex Johnstone (North East Scotland) (Con): We have heard evidence from witnesses that suggests concern about the power in the bill to set annual targets in batches. Scottish and Southern Energy has said:

"to set one budget for 12 years may allow far too much leeway to project action into the future instead of the early action that is required".

It has a point, does it not?

Stewart Stevenson: The targets are a minimum. I know that, through its chief executive's leadership of the business delivery group, Scottish and Southern Energy is much seised of the agenda and determined as a company both to do as much as it can on its own initiative and to lead many other businesses to do what they can. Ultimately, it will be helpful if members of the business community who have an objective view of the factual information that will drive things forward are willing to work with the scientific advisers on whom the UK Government and the Scottish Government will depend.

We are talking about five-year batches of annual targets, although there may be targets as far ahead as you suggest. One would, of course, reflect every five years on the experience that one has. Initially, a bigger chunk would be set because we have to make a start, but over time the objective would be to set targets in five-year chunks, which—if I fully understand the point—may strike the balance that Scottish and Southern Energy seeks.

Alex Johnstone: Let us consider the first batch of targets that will have to be set. In its evidence, Stop Climate Chaos Scotland expressed concern that setting the first batch of annual targets by June 2010, which is halfway through a year, would seem to build in an excuse either to miss a target or at least to set a weak annual target for 2010. Is there any cause for concern about that?

Stewart Stevenson: We must create a window in which to get advice to be able to move forward on that. We are actively engaged with the UK
Committee on Climate Change as of now—it may be slightly presumptuous of us to assume that the bill will be passed, but that engagement is necessary. It may be worth making a point that I should perhaps have made earlier: we will have the power to revisit the targets if the science changes significantly.

**Alex Johnstone:** I want to move on to the slightly different subject of emissions tracks. Following a request by the committee, the Government provided analysis of possible emissions tracks, but none related to the stated policy intention of having 3 per cent emissions cuts year on year. Why was the stated policy intention not outlined in any of the seven scenarios that were presented to the committee? Do you agree with SEPA’s opinion that any emissions tracks should be towards the more ambitious end of the scale?

15:00

**Stewart Stevenson:** Excuse me while I get the numbers in front of me to remind me.

We want to be ambitious. The bill has been described as the most ambitious proposed legislation in the world, and we seek to sustain our position as climate change leaders. We provided the committee with a range of scenarios, and we expect to aim for the higher rather than the lower ambition.

For information, the UK Committee on Climate Change’s 42 per cent stretch target relates to scenario 6, which is the most ambitious scenario. There remains uncertainty about whether such a rate of reductions can be delivered in the context of European trading and other matters, but we want to be as far to the right of the table of scenarios as we can be—in political terms, you will identify with such an aspiration.

**Jim Tolson (Dunfermline West) (LD):** We should push for sectoral targets for transport, energy and enterprise, along with international targets. The bill does not include sectoral targets but will require electricity figures to be included in the report on annual targets. Why is electricity singled out for reporting? Could not energy efficiency also be reported on?

**Stewart Stevenson:** At this early stage it is probably important to realise that the means by which we account for greenhouse gas emissions is somewhat indirect. We consider activity in the economy and try to determine the greenhouse gases that are derived from that activity; we do not stick a sensor into the atmosphere to measure the CO₂.

Disaggregation to Scotland level of the big figures that are produced at UK level increases the margin of error, which is currently plus or minus 6 per cent, although it will narrow as we become more skilled at disaggregation. At this stage of scientific understanding, further disaggregation to sectors increases the margin of error to the point at which it is difficult to work out what is happening in reality. Year-on-year figures might suggest that we are travelling in the wrong direction, although such a conclusion might simply be an effect of variation within the margin of error.

On electricity and power generation, there are huge single-point emitters, in relation to which there have been allocations under the European Union emission trading scheme. Measuring emissions from a relatively small number of huge installations will, of course, give us a measure of energy efficiency, but efficiency in dwellings and business premises is an entirely different matter, given that we are talking about a huge number of point emissions.

The setting of sectoral targets will become more possible over time. The approach at this stage, including in the European trading scheme, is helping us to understand what is going on in relation to electricity, but there is not information that would support the development of sectoral targets. The important point is that no one should think that they have been let off the hook and that they need not do everything they can just because another sector must make huge reductions.

**Jim Tolson:** I am sure that you are familiar with this comment from “Strategic Transport Projects Review Report 1: Review of Current and Future Network Performance”. Chapter 4 states:

“On present trends, transport will not contribute to the reduction target.”

Has the Government calculated what contribution different sectors will have to make in helping Scotland to reach its emissions reduction targets?

**Stewart Stevenson:** That brings us back to the commitment to develop a carbon balance sheet, which no other country has made. We are leading the way. There remain uncertainties about exactly where we will end up, but we have to do it and the approach will be refined over time.

I directed the strategic transport projects review, which began before we came to office but on which a substantial amount of work was undertaken afterwards. I needed to ensure that it had an intrinsic net carbon benefit, but that is not the whole story, by any means.

Transport covers more than what is in the strategic transport projects review—for example, use of private cars, for which the curve is, if anything, the most adverse. We have also seen, for example, that buses’ CO₂ emissions have actually risen while the emission of particulates
from buses has been tackled during the past 10 years or so. Therefore, the next stage in improving the quality of the bus fleet must focus on things such as greenhouse gases.

It is clear that there is a series of challenges. We need to consider the nature of, and change people’s attitude to, the use of private transport. It is not simply about technology, however—change in people’s behaviour is needed. The carbon balance sheet will, as we develop it over a long time, be the most effective way of understanding and changing behaviours in transport. It will also, of course, help us in Government to plan actions as we move forward.

The Convener: Is it the case that several of the projects in the strategic transport projects review—which Jim Tolson mentioned—will have a negative impact on the transport sector’s emissions? If the Government still holds to the statement that “On present trends, transport will not contribute to the reduction target”, does it intend to reverse those trends and, if so, by when, or does it intend to allow the rest of the economy to take up the slack for transport failures?

Stewart Stevenson: Transport will make its contribution to the reduction of carbon emissions. We will ask the UK Committee on Climate Change for its advice on that, and it will make recommendations. We are not in a position in which every single thing we do in Government will lead to a reduction in carbon—there is a carbon cost in doing almost anything. The important thing is that we take account of that and make a balanced judgment on whether something is carbon affordable, just as we have to make a balanced judgment on whether something is financially affordable. That will increasingly be part of the decision-making processes for successive ministers and Administrations, which is why the carbon balance sheet will be so important in relation to understanding the minutiae of the effects of ministerial and Government decisions.

The Convener: Is that longhand for, “We do not know yet”?

Stewart Stevenson: There are many things that we do not know in relation to the period between now and 2050. That is one of the great challenges and the reason why it is so important that there is consensus—which I think has been achieved—on the strategic objectives, and proper engagement on the detail of whether individual actions will take us in the right direction.

Des McNulty: That is interesting.

I will move on to international credits. Do you intend—I presume that you do—that the vast majority of targets in the bill will be met through domestic efforts in reduction in Scotland, and not through international carbon credits? Unlike the UK bill, the Scottish bill does not, as it is currently drafted, have a mechanism for capping carbon credits. How can we ensure that the targets are met through domestic reductions rather than by purchasing credits?

Stewart Stevenson: It might be helpful for me to say that we are giving further consideration to ways in which we can limit use of carbon credits and, in particular, to whether we can lodge an appropriate amendment at stage 2 to do that.

I associate myself with Des McNulty’s point that our effort is more important than our ability simply to finance someone else to do things. That will not be a recipe worldwide for taking the agenda home. We must undertake greenhouse gas emissions reduction in Scotland—that is where we must apply both our effort and our money. We will give further consideration to carbon credit limits at stage 2.

Des McNulty: Would it be possible for Scotland simply to say that we are not going to use international carbon credits as a lever and that we will achieve the targets that have been set wholly and exclusively through our domestic effort?

Stewart Stevenson: One must be aware that the net effect of that would be nil. Because of the way in which the European trading schemes will work, other people would use the credits instead of us.

Credits are not core to what we have to do; however, they are an important part of smoothing out some of the lumpiness in the graph to which I referred. That lumpiness will play both ways. When a coal-burning power station changes technology, that will be a lumpy benefit. However, a very cold winter will potentially have an adverse effect as people increase their energy consumption.

We cannot, as a matter of principle, discount the use of credits as part of the process of ensuring that we make our overall contribution. However, I say again—others, I am sure, will echo this—that we must make actual reductions in greenhouse gas emissions if we are to play our proper part in achieving the 2050 target for the containment of the increase in the world’s temperature.

David Stewart (Highlands and Islands) (Lab): I have a couple of questions about the roles of aviation and shipping. I know that you have a great interest in aviation, minister, so you will be well aware that the emissions from planes in flight have a much greater climate change effect than the same emissions at ground level, through complicated factors—nitrogen oxides and so on—which accelerate the climate change effect. You will be aware that the UK Government uses a
multiplier of 1.9 when it comes to calculating the effects of aviation emissions. However, I do not think that that is in your seven scenarios. If it is not, do you consider that the use of such a multiplier could be an important way of measuring the effects of aviation?

Perhaps you can answer my second question at the same time. In evidence, BAA said that the contribution of aviation emissions is covered in the EU emission trading scheme. What is your feeling about how we should measure emissions from international aviation?

Stewart Stevenson: I will answer your second question first and then come back to the other one. There is a footnote to the figures that are produced on emissions that already covers that, based on bunkering—that is, fuel uplift. Your first point being set aside for the moment, it is a pretty good surrogate for working out how much fuel is being used. For both shipping and aviation that is, in general, what is measured.

We need further work to inform us how emissions should be allocated to different jurisdictions. There are a range of opportunities for us not to count everything that should properly be attributed to us and for us to count things that should properly be attributed to others. Nevertheless, at the moment, the figures are at least being counted and are available. I will not sign up to the idea that we can simply trade away aviation emissions. Several initiatives have tried to address aviation emissions.

15:15

This committee has considered high-speed rail and I have said elsewhere that the mood on that is changing. Lord Adonis, who is the UK minister with responsibility for rail, is actively engaged in the subject. I think that he will meet the committee, because he will meet me. High-speed rail would affect much of the aviation from Scottish airports—such measures will make an important contribution. Operational and engineering measures can also be taken. A general question is whether we will in the future need to travel as much as we do today. Aviation will undoubtedly have to—and will—contribute not just to buying credits, but to reducing outputs.

David Stewart’s other point was about the altitude at which aviation emissions are made—the part of the atmosphere that is involved. I am not sure whether it is clear to me that the UK Government uses multipliers for radiative forcing. I would be interested to hear whether that is the case, because I am advised that the UK Government does not use such multipliers.

For short-haul flights, the use of turboprops, which fly lower than and in a different part of the atmosphere from jets, can contribute. It is interesting that the shortest sector travel time between Edinburgh and London happens to be in a turboprop and not a pure jet, for a variety of reasons that are not wholly replicable. We can expect more aircraft to fly lower, which might change their effect.

On the operation of aviation, we must work with the UK jurisdiction, which is responsible for aviation and its legislative framework. Our direct influence on that is limited to planning issues and our ownership of the lifeline airports for the Highlands and Islands, where a broader range of interventions are available to us.

David Stewart: If I understand you correctly, you do not believe that you can account for the effect just through the EU emission trading scheme; Scotland must have a system to account for the effect of aviation on climate change. That is not easy. I am trying to determine how you would measure the effect on climate change.

Stewart Stevenson: I will give you a little clarity. You said that we in Scotland need a system. We have made the commitment to include international aviation and maritime emissions. As I said—to make our intentions clear—we are considering amending section 14 at stage 2 by changing the word “may” to “must”—that has been raised with the committee—to reinforce what ministers have said we will do.

We should not and cannot act alone. We need an internationally accepted methodology. For example, in the future, the cost of fuel might be higher in Scotland than in Amsterdam—I choose that place arbitrarily for the sake of argument. If a Dutch plane that flew from Amsterdam to Edinburgh and then from Edinburgh to Amsterdam picked up no fuel in Edinburgh because fuel cost more here and it had bunkered some in Amsterdam, the current way of counting would mean that the climate change cost to Scotland was nil. However, we would probably all agree that the cost to Scotland should be reflected, because Scottish passengers would be travelling and so on. We have a method that gives us a relatively crude view of the effects. That is useful, but we need international agreement on how we will more properly attribute costs. Similarly, a transatlantic cargo flight might put down at Prestwick just to refuel without offloading or loading anything. We count that although, arguably, we should not.

I am not taking a view on any of that; I am only pointing out some of the debates that will take place. If aviation does not play its part, everyone else has to pick up the slack.

David Stewart: I will send your officials the reference for the multiplier that is used by the UK Government—it is 1.9.
My second question—there are probably similar arguments on this issue—is about shipping. You will know that, throughout the world, many operators now use quite heavy fuel because it is much cheaper. Of course, the downside is that it causes a great deal more problems in respect of climate change emissions. The Chamber of Shipping told us that “Measuring Scotland’s share of international maritime emissions is extremely difficult”.

How would you measure it?

Stewart Stevenson: It is currently being measured by crude bunkering. You are correct that there is a range of fuels. I have not been able to confirm it with my officials, but my recollection is that three fuels are generally used: M30, M40 and M120. They have different amounts of, for example, sulphur in them. That is not a climate change gas, but it is a serious problem, and it is very important for me as an asthmatic, because it turns into sulphur dioxide in the atmosphere and harms the lungs of people like me and others. You are correct that some developments that are taking place in shipping run counter to environmental concerns. Ships are being laid up all round the world as economic activity has diminished and there is pressure on costs.

How would we measure shipping emissions? I repeat that we need internationally to understand how we measure the emissions. We have numbers that help to inform us, but they are simply bunkering numbers. For exactly the reasons that I mentioned in relation to aviation, there are difficulties.

The European Union is pressing the International Maritime Organization to address emissions from shipping and to develop a mechanism by which we can get sensible estimates. Of all the transport areas, shipping is probably the one in which least progress has been made. In relation to matters such as sulphur, a range of issues beyond climate change gases must be tackled.

The Convener: I have to ask for briefer answers if we are to make the progress that we need. Before we move off this issue, Dave Stewart asserted that the UK Government uses a radiative forcing multiplier of 1.9. If the question is whether the Scottish Government currently has a figure that it accepts, is the answer no?

Stewart Stevenson: We are not using a figure at the moment. I ask you to recall that the figures that inform us are coming from the UK Committee on Climate Change and the inventory that has been produced at UK level. We are not producing our own.

Shirley-Anne Somerville: I will move on to delivery of targets. We have heard from a number of witnesses that the bill can set up a very useful framework, but it is obviously the delivery that matters. Scottish Environment Protection Agency and Scottish Natural Heritage said that significant work would have to be done from the outset to deliver on our climate change objectives. Can you talk us through what is being done to ensure that there is rapid delivery on the ground, so that we fulfil the climate change targets?

Stewart Stevenson: SEPA is interested, among other things, particularly in the adaptation network. In the middle of the year, we will introduce the strategic overview, which I think will start to deal with the issue that SEPA and others have raised. I come back to the point that there is another aspect to all this; it relates to adaptation, which is also being pursued.

Shirley-Anne Somerville: We will come on to adaptation later.

Stewart Stevenson: I am sure that you will.

Shirley-Anne Somerville: The Royal Society of Edinburgh’s written submission suggests that the framework will not be enough and that there may be a need for a strategy to allow future Governments to meet the targets. Is the Government developing a climate change strategy or an updated climate change programme? If so, is it considering putting it in the bill?

Stewart Stevenson: I do not want to trade semantics, but I am not entirely clear on the difference between a framework and a strategy, both of which are not about tactics—the things that one does—but about that which one is trying to achieve. Let me give an illustration: scaffolding enables a building to be built; it constrains the shape of the building, but it is not the building.

Shirley-Anne Somerville: Perhaps I can assist. Will you include in the bill anything that will oblige the Government to develop an action plan on delivery of your framework?

Stewart Stevenson: I return to what I said earlier: we are not waiting for the bill. We are already working on our strategic overview. The publication of our annual targets will be accompanied by a report in which we will detail our progress. Under the bill, we have to report on the policy measures that we are delivering, which—of course—we will have to describe. That is our view at the moment, although we will continue to work in the spirit of engaging with people.

On adaptation, our action plan will shortly be issued for consultation.

Shirley-Anne Somerville: The bill contains a requirement for an energy efficiency action plan to
be published. Has the Government held discussions on whether action plans for other sectors could be required under the bill, for example on heat, electricity or energy-demand reduction?

Stewart Stevenson: Again, we are considering a stage 2 amendment—we have seized on the subject—and we will, of course, introduce secondary legislation, including on energy efficiency. We are already taking action.

The action plan for renewable heat will include consumer information, awareness raising, skills—particularly in terms of insulation measures—building regulations and the encouragement of heat mapping at local authority level.

Jim Tolson: My question is on enforcement and sanctions. The bill contains a number of ambitious targets that many of us hope will be reached within the given timescales, but there are no clear provisions on enforcement and sanctions. Friends of the Earth Scotland has said that sanctions should be included in the bill. Also, I understand that the climate change business delivery group has asked why the bill contains no sanctions for targets not being achieved. Have you and your team considered sanctions? Are you planning to add sanctions to the bill?

Stewart Stevenson: If, by sanctions, you mean financial sanctions on the Government, our view is that including them in the bill would simply reduce the amount of money that could be made available to address climate change. We are minded not to do that.

Jim Tolson: So, you have not looked at sanctions in any other theatre.

Stewart Stevenson: Well—

Jim Tolson: On targets, for example?

Stewart Stevenson: I am sorry, but I missed that—

Jim Tolson: I think my mike is working.

Have you looked at making sanctions not on financial but on any other bases?

Stewart Stevenson: We do not know what that would mean.

Jim Tolson: That sounds like a no.

The Convener: The Friends of the Earth proposal is for financial sanctions that would result not in less money for climate change-related activities but more money for such activities through a dedicated fund. Does the Government have a clear view on the proposal?

Stewart Stevenson: The effect would be to remove money from people who are underperforming on climate change thereby reducing their ability to perform, which is not an immediately obvious solution.

The Convener: If I understand the proposal correctly, it is that the parts of Government that failed could access the money specifically to address their failures on climate change.

15:30

Stewart Stevenson: The effect would, therefore, be financially neutral. It is not clear to me that the proposal would deliver any benefit. The interaction between the responsible minister—and, for that matter, the Administration—and parliamentarians, whose job is to hold ministers and the Government to account, is the real issue. What is important is the information that comes from that and the scientific assessment of how ministers are doing. Although we may appear to be disagreeing about how to achieve the targets, everyone in the room is seeking to ensure that we achieve them.

The Convener: I am not telling you what I think about the proposal—I am asking you what you think about it.

Stewart Stevenson: Forgive me if I am making assumptions about your position. We simply do not see how it makes much sense to remove money from a public body that is not making the necessary progress and then invite it to ask for that money back, which is one of the options.

Section 31 requires that,

"As soon as reasonably practicable" after reporting that an annual target has not been met, ministers

"lay a report before the Scottish Parliament setting out proposals and policies to compensate in future years for the excess emissions."

Basically, the bill states that ministers will be dragged to Parliament to account for their failures. We see that as the appropriate and proper way of proceeding. No minister, whatever the complexion of the Administration, is ever terribly keen to be dragged to Parliament for that purpose. Annual reporting and the annual statement that must be made to Parliament are pretty robust ways of ensuring that Parliament and the wider public are on the case of failure in this area.

The Convener: Thank you. I just wanted you to comment on the proposal on the record.

Part 2 of the bill concerns advisory functions. I assume that your intention is still to use the UK Committee on Climate Change, at least in the short term, as the advisory body for the Scottish Government. We have received evidence on the resources that are available to the UK committee. It has been suggested that the committee has one
person working on Scottish issues and that it may need to allocate one or two more people to that task. Are you content that so far the committee has demonstrated that it has the Scotland-specific expertise and resources—both financially and in personnel—to enable it to exercise advisory functions for Scotland, which may require a perspective that is distinct from that which the committee takes in relation to the UK Government?

**Stewart Stevenson:** I met Lord Adair Turner soon after he was appointed. I was also consulted before his appointment, which was made before the committee really got going. Since it was established, the Committee on Climate Change has been on the case in respect of Scottish issues. It is worth making the general point that, were we from the outset to seek advice from a source other than the committee, it would take us a further 18 months or, more probably, two years to get advice. There should not be too much debate on the subject in the first instance.

The committee’s December report was a good start. We should bear in mind that the Climate Change Act 2008 places a duty on the committee to provide advice to the devolved Administrations, including the Scottish Government. We work regularly and effectively with the committee and with colleagues in the Westminster Administration. In fact, I think that it is correct to say that in recent times there has not been a single week when there has been no interaction. Meetings take place broadly every fortnight. We think that we will get what we require. I point out that there is also an adaptations sub-committee that provides advice, analysis and information to each of the national Administrations.

All of this is a serious indication of our ability to work with other Administrations; after all, this of all policy areas is one in which we cannot row our own canoe. We have to work with others and using the UK Committee on Climate Change is one of the key ways in which we can ensure that, at all levels, we get the level of team working across jurisdictions that will be required.

**The Convener:** At a previous evidence session, Scottish Government officials confirmed that, at that point, no specific advice had been formally sought from the UK Committee on Climate Change. Notwithstanding the less formal on-going dialogue that is taking place, has any formal advice been sought since then on, for example, the appropriate level for a 2020 interim target, which was mentioned earlier? If advice has not yet been formally sought from the UK committee on that issue, is such a move being considered?

**Stewart Stevenson:** Our immediate focus is to work with the UK Committee on Climate Change on developing its 2009-10 business plan and ensuring that the plan contains provision to support the work that we will require it to carry out. It is aware of the kind of questions that we want to ask. However, those questions have to be asked in the context of what the UK Government will do and we are awaiting further information in that respect.

The issue is more to do with the general environment. After all, we in Scotland do not have administrative or legislative responsibility for everything to do with climate change in Scotland. We are on target to have our questions answered on the timescale that meets our needs.

**The Convener:** Which is?

**Stewart Stevenson:** We will require our questions to be answered in time to lay secondary legislation, which will have to be done certainly by the middle of the year. We are, in fact, seeking to introduce that legislation a little bit earlier, and we will have the information that we require from the UK Committee for Climate Change—

**The Convener:** Forgive me, minister, but in our earlier discussion on the potential for amendments to introduce a 2020 interim target and whether that would have an impact on requirements for annual targets, you put great emphasis on reaching those decisions and making those amendments on the basis of evidence from the UK Committee on Climate Change. Have you not sought that advice?

**Stewart Stevenson:** I apologise—I missed your reference to the 2020 target. I was making a more general point about budgets going forward. We are working with the UK Committee on Climate Change with regard to its first report to ensure that we have the right figure for 2020 in early course.

**The Convener:** And will that advice also be made available to this committee in considering those amendments?

**Stewart Stevenson:** Advice to ministers is advice to ministers. If you are asking whether you can see the advice that I get through my officials, my answer is that, as I say, that is advice to ministers.

**The Convener:** I will let other members in in a moment, but I have to say that I find that response a little odd given that, earlier in the meeting, you told the committee that, although you would not reach a view on them yet, you would happily look at and be open to other amendments, as long as they were based on advice from the UK Committee on Climate Change. However, you are not going to publish that advice.

**Stewart Stevenson:** The UK Committee on Climate Change has published its inaugural report; it also publishes advice that it gives. However, I do not wish to make too much of what is a very
narrow point, which is that advice to ministers is of a different character. The committee's first report lays out Scottish abatement potential to help us to meet the 34 per cent target that is being discussed. We await further advice.

Des McNulty: I want to pursue the point that Patrick Harvie made, but in a slightly different way. The UK Committee on Climate Change can provide advice on a very wide range of matters from global trends in climate science right the way across to implementation in a narrow Scottish context. It might be equipped to offer that full range of advice right across the spectrum. On the other hand, although it might be well equipped to offer advice at one end of the spectrum—or on the greater part of the spectrum—a different kind of advice might be required on implementation and adaptation strategies.

What advice have you had from the UK Committee on Climate Change about its perception of the range of advice that it can give and whether that meets the full range of your needs? Have you taken independent advice, perhaps from the chief scientist, about where the best scientific advice available to the Scottish Government could come from, given the range of tasks associated with the bill? To return to the point that Patrick Harvie made, which bits of that advice will be made public and which bits might it be inappropriate to make public? I can see no reason why advice from the UK Committee on Climate Change on global trends in climate science should be secret or withheld in any way. However, some of the issues to do with immediate science should be secret or withheld in any way. Do we have the range of areas of advice that are required right? Have we identified what they are? Is the UK Committee on Climate Change the best body to give advice right across the spectrum? How much of the information from that body, or any other body, should be put in the public domain so that it can feed into the scrutiny process of climate change target setting and delivery which, in the spirit of transparency, I am sure we all want to see?

Stewart Stevenson: The only omission will be advice to ministers, which is a narrow piece of advice.

The UK Committee on Climate Change is a source of independent advice to the jurisdictions that have access to it. Those are primarily the UK Government, but also all the devolved Administrations. Our response to the first report by the UK Committee on Climate Change has to be informed to some extent by carbon emissions budgets that the UK Government has to set. Is the UK Committee on Climate Change currently equipped with the resource to do everything that is required? Probably not, but that is precisely why we and other Administrations are working with it to ensure that its business plan for the forthcoming year reflects those needs and that it has the necessary resources to allow it to undertake the work that the various Administrations require it to do.

To seek advice from elsewhere in parallel carries the risk that we might be drawing advice from a set of data that is time-lined differently, which will lead to different conclusions, not as a result of the science being different but, rather, as a result of the data being different.

Unless the UK Committee on Climate Change becomes unwilling or unable to respond to the needs of this devolved Administration—and of the Wales and Northern Ireland Executives—it will be the best available source of independent advice for the Government. Core advice to the Scottish Government will, of course, be seen by the people.

15:45

Charlie Gordon (Glasgow Cathcart) (Lab): How will the current advisory functions of SEPA and SNH link to the work of the UK Committee on Climate Change or of any new Scottish committee on climate change?

Stewart Stevenson: Clearly, our environmental agencies have to work with Government. They are, of course, part of Government, and are therefore in a position to influence the questions that we would wish to ask the UK Committee on Climate Change or any other source of advice.

SEPA is concerned with flooding issues and with the adaptation strategy. Together with the environmental bodies of other jurisdictions in the United Kingdom, SEPA will be a source of the data that will be considered by scientists on the UK Committee on Climate Change.

Charlie Gordon: Therefore, in some situations, you would go first to SEPA or SNH for advice, and then decide to get a second opinion from the UK Committee on Climate Change.

Stewart Stevenson: SEPA, as part of Government, has a set of statutory duties to discharge. On the issue of climate change, we expect SEPA to inform UK risk assessment. That information will then inform scientific assessment by the UK Committee on Climate Change.

I am keen to ensure that our approach is consistent, open and auditable. SNH also has environmental responsibilities, and SNH and SEPA are key to adaptation and to our response to climate change. Equally important, they will inform the UK Committee on Climate Change, so that it receives the best possible scientific view...
and is informed by the widest possible range of information.

**Charlie Gordon:** How might a judgment be made on whether a distinct Scottish climate change committee is needed?

**Stewart Stevenson:** The bill provides for that possibility: we envisage that it is possible. Thus far, the UK Committee on Climate Change has been responding.

Science is not geographically attached. Scientists around the world are used to working together on common causes, to shared standards. It is useful to have a single body that reflects the work of all the jurisdictions in the UK. On this agenda, as on others, it will be necessary to work with other jurisdictions.

The safety net exists, but it would take a substantial amount of time and money to set up a Scottish climate change committee. Committee members know my political persuasion, but I am here defending the UK’s approach. At this stage, we do not need to take a different approach. I do not yet see any warning signs that suggest that we need to go along that road.

**Charlie Gordon:** In describing the scenario of one day having a separate Scottish committee as a “safety net”, you are perhaps at variance with our understanding that there might be an organic development, as it were, of the range of advice available here in Scotland. It seems that you have in mind some criteria that would allow you, or one of your successors, to make a judgment on whether it is appropriate to have a separate Scottish committee. The fact that you describe it as a “safety net” perhaps indicates that, for the foreseeable future, you would prefer to stick with the relationship with the UK Committee on Climate Change.

**Stewart Stevenson:** That is the correct interpretation of the position that I am in at the moment. I used the term “safety net” simply in response to your positing future failure in the UK Committee on Climate Change and asking what the minister would do in that situation.

**Charlie Gordon:** With respect, I am not aware that I posited that. I simply wanted to get a feel for what criteria we might develop over time to allow us to make a judgment one day about whether we should have a Scottish committee.

**Stewart Stevenson:** It is early days on the subject. We have had one report from the UK Committee on Climate Change and will keep the situation under review. Statutory obligations on the UK committee to be responsive to our needs and to give us particular information are embedded in the UK Climate Change Act 2008. We have the option to ask for other advice outwith that, which we will seek to do from time to time. We will not be the only people who review how effectively the UK Committee on Climate Change is working. The NGO community, SEPA, SNH and all who are engaged in the agenda will keep a close eye on what is going on. That is intrinsically useful.

**The Convener:** Section 20 discusses the possibility of a Scottish committee on climate change. Does it keep open the option of a Scottish committee—if one were ever created—being appointed by and accountable to the Parliament rather than the Government in the manner of some of our commissions, instead of following the structure of the UK committee? Is that legislative door open and should it be?

**Stewart Stevenson:** The bodies that are accountable to the Scottish Parliament exist to represent and look after the public interest. They are independent of the Government and none of them provides advice to ministers.

**The Convener:** They are free to do so.

**Stewart Stevenson:** Yes, but they are not a source of advice for ministers. That is not their responsibility. In essence, they exist for scrutiny purposes. Therefore, what you suggest would be something of an entirely different character. If direct parliamentary supervision of the source of ministerial advice was the way in which the matter was approached, it would be a pretty radical departure that would need to be considered carefully—not that I am intrinsically opposed to radical departures, I hasten to add. If a Scottish committee were to be established, it would publish reports and respond to and report to ministers.

**The Convener:** I do not wish to explore your preference or mine among the options; I am asking a question of fact. Is it your understanding that section 20 leaves open the possibility of a Scottish committee being appointed by and accountable to the Parliament?

**Stewart Stevenson:** It leaves open the possibility of establishing a Scottish committee on climate change to advise ministers.

**Rob Gibson (Highlands and Islands) (SNP):** I will ask about annual reporting to the Parliament on progress towards emissions targets, which we have discussed before. What progress is being made on improving timescales for providing accurate emissions data?

**Stewart Stevenson:** There has not yet been any substantial progress in accelerating the timescale for annual reporting. Quite properly, the member used the word “accurate”. It would certainly be possible for us to get information earlier, but it is more likely that that information would be subject to revision. We have to make a
judgment about getting the balance right; it is not an absolute science.

We are considering how we can accelerate the process, which at the moment takes about 18 to 20 months. Disaggregation for Scotland of the data in the UK inventory results in an additional time lag. We are looking to make improvements, but there are areas in which we are still trying to understand how to do things. We have mentioned international shipping and international aviation, in relation to which the notes to the inventory include the bunkering figures that inform us to the degree that they can. It is clear that we will have to continue to work to improve that. We will do our best, but the progress that we are making at the moment is fairly modest.

Rob Gibson: In section 34, the bill proposes that the Scottish ministers will meet committee conveners after a report on targets has been laid before Parliament. Do you envisage the adoption of a more formal process, perhaps through a requirement to appear before relevant committees? Might that be a more effective means of encouraging accountability?

Stewart Stevenson: I do not think that the two proposals are alternatives. Requiring ministers to appear in front of the committee of committee conveners is probably quite an important provision because it emphasises the need to consider the issue in the round and across all policy areas. It will provide a good opportunity for committee conveners, who represent all the diverse interests of the various committees, to consider what is happening.

It will depend on the personalities involved and the convenership of the committees that will be responsible for overseeing climate change in the future, but I find it almost inconceivable that the relevant minister would not appear before the appropriate committee and other committees of the Parliament. I would be astonished if that did not happen.

The committee of conveners does not routinely sit in public, although I am not aware that standing orders would prevent it from doing so. It is not, of course, a statutory committee of the Parliament—I accept that. That is a matter on which Parliament could take action at its own behest. The provision whereby ministers will appear before the committee of conveners is an important addition to our appearance in front of those committees whose work is formally part of the parliamentary process. We will be guided by Parliament’s view on such matters.

Rob Gibson: So you would not object to the committee of conveners making it a more formal process.

Stewart Stevenson: Certainly not. If that were felt to be helpful, this minister would not feel uncomfortable with that, and I cannot imagine that any other minister would, either.

The Convener: I should clarify that we are discussing the Conveners Group, which is not a committee.

Stewart Stevenson: I stand corrected and abide by what you have just said.

The Convener: It is not just the case that the Conveners Group does not routinely meet in public; it never meets in public. It meets in private. It would be unfortunate to give a mistaken impression in that regard.

What engagement did the Government have with the Conveners Group or the chair of the Conveners Group before it decided to incorporate the duty in question in the bill? Did it discuss whether such a process would be appropriate?

Stewart Stevenson: We have had discussions at official level.

You are correct that the Conveners Group—on which I sat, from time to time, in a previous session of Parliament—meets in private. By the same token, as it is not a formal parliamentary committee, it could choose to do what it wanted. We are simply trying to make a genuine offer to reflect the cross-cutting—if I am allowed to use that word—nature of climate change in our engagement with Parliament. It is an offer that is genuinely made and which probably goes further than any that has been made in relation to any other legislation. If there is another way of achieving the same objective, we are entirely open to discussing it further.

16:00

The Convener: It would be helpful if you could provide in writing some detail of the discussion that you are saying took place before the proposal was incorporated in the bill. I am not sure that the Conveners Group was aware of that.

Stewart Stevenson: We can do that.

Des McNulty: My recollection is that, when it was started up, the Conveners Group was explicitly designed not to be a formal committee. I would have no objection to an informal briefing being given to committee conveners, but I am concerned about that group being given a formal status by being written into a particular piece of legislation. That is the problem that we have with the provision.

Stewart Stevenson: It has just been drawn to my attention that the exact words in the bill are:

"Scottish Ministers ... must ... meet with the persons who convene and chair such committees".
That means that the bill does not attach to any particular way of organising things.

I should make it clear that, although officials have clearly been involved in the process, the suggestion that we are making is, essentially, a political one. We are making an offer. If the Parliament or the committee thinks that the activity that is proposed in section 34(3) is not particularly useful, that is fair enough. If there is another way of achieving the same end, I am quite relaxed about responding to the committee’s views on the subject.

The Convener: Your state of relaxation is noted.

Rob Gibson: The bill provides for the Scottish ministers to produce a plan to compensate in future years if annual targets are not met. How is that substantially different from the approach that is provided for in the UK Climate Change Act 2008, which involves banking and borrowing from five-yearly budgets?

Stewart Stevenson: It is about the minister having to respond when people say, “You didn’t get it right last year. How are you going to fix that?” That is what it boils down to. That approach ensures that policies that address failures will be new and additional and will not simply continue in the direction that has been taken previously. That is the approach that we have come up with to deal with the matter; I am not going to make remarks about the approach of any other jurisdiction.

Rob Gibson: It seems to me a good deal more informal than the approach that involves banking and borrowing.

Stewart Stevenson: Banking and borrowing is simply about the budgets; it is not necessarily about the action that is required to address the problem. Ministers would have an overdraft, in carbon terms, and it is not terribly easy to deal with that when you are working on an annual reporting cycle. Our approach is intended to be quite a challenging one for ministers and their teams to deal with, as it forces an immediate response. It is like a letter from the bank manager that says, “You are overdrawn, and we require you to settle the account by the end of the month.” The timescale in the bill is slightly longer, but that is the flavour of the approach.

Rob Gibson: I would not want to compare Government ministers with bank managers at the moment.

It would be interesting if we could see some more specific details of how that reporting would take place.

Stewart Stevenson: There is provision for annual reporting in the bill. Perhaps you can draw me closer to what you think we might do beyond that.

Rob Gibson: I was trying to coax you into suggesting the sort of things that might be reported on.

Stewart Stevenson: Ah! We will describe the structure of the reports, if I recall correctly, in secondary legislation. In fact, section 28 states that we “must lay before the Scottish Parliament a report in respect of each year in the period 2010-2050 for which an annual target has been set”.

The report must state whether the annual target has been met and, if not, why not. It must contain the information that is set out in section 29, which has a fair list of different things in seven subsections. Section 29(5) states that the report “must be laid before the Parliament no later than 31 October in the second year after the target year.”

Section 29 describes what information must be in the report, but section 29(7) states:

“The report may contain such other information as the Scottish Ministers consider appropriate”.

In other words, the report is not limited to what is listed in section 29.

Section 31 states that, when annual targets are not met, we must report on “proposals and policies”. There will, of course, be further reports on the interim target for 2030. There is a long list in section 29 of what must be in the annual reports, but I am conscious of the need to make my answers more concise. However, I can read out the list in section 29, if you wish.

Rob Gibson: No—I was just testing.

Stewart Stevenson: It was quite proper to do so.

Jim Tolson: I believe that a sustainability duty should feature in the bill to encourage groups such as public bodies to act with future emissions in mind. More specifically, do you agree with SEPA that duties on public bodies are needed immediately because voluntary approaches will not deliver the required emissions cuts?

Stewart Stevenson: Public bodies include local authorities, and it is important that we sit down and discuss with them, as equals, what we want to do. I hope that the powers to mandate in the bill will have great power, even if they are never exercised. In other words, they provide a fall-back position.

I think I am correct in saying that all 32 councils signed up to the climate change declaration under the previous Administration. We therefore have consensus at that level. Having powers in reserve in the bill is the right thing to do. At this stage, it is
not terribly clear what we would force people to do, if we used powers to mandate. By having a
general power to fall back on, we are more likely
to get innovative and imaginative thinking in public
bodies. Of course, the opportunity for cross-
fertilisation among bodies provides for good
experiences to be learned and implemented.

Jim Tolson: From some of the evidence that
the committee has taken, it seems that public
bodies are not clear about what the duties might
look like. The Government has not fleshed out
what duties it wants to include in the bill and
secondary legislation. What work has been done
to develop ideas about duties and what discussion
has taken place with public bodies?

Stewart Stevenson: The bill is cast in such a
way that it does not specify duties at this stage.
Essentially, we have a framework bill that takes us
up to 2050. The way in which the bill is
constructed in that regard gives us sufficient scope
over a long period to respond to the circumstances
in which we find ourselves. Including a list of
activities in the bill would carry with it the real
danger that the responses of public bodies would
be restricted to what was on the list. It is much
more appropriate that we approach the issue in
the way that I have described.

The public bodies that we are talking about
include the Convention of Scottish Local
Authorities, Audit Scotland, Scottish Water, SEPA
and the Sustainable Development Commission.
There is a wide range of bodies with different
missions, which will therefore have to do different
things. A list can be an excuse for not doing
something—because it is not on the list—whereas
we would rather that those bodies were firmly
engaged in the agenda and came up with activities
that were appropriate for them. Our ability as an
Administration to take powers in that regard is a
fall-back position, which we hope will never be
used.

Jim Tolson: You mentioned SEPA. It is keen
that the duties should apply to regulators such as
the Water Industry Commission for Scotland.
Should that be the case, in your view?

Stewart Stevenson: The Water Industry
Commission is a regulator that represents the
public interest. Although I sometimes might wish to
do so, I cannot instruct the commission. The
legislative framework does not allow me to do that.
Part of our work with the water industry involves
annual discussions and agreement with the
commission about the sort of things that it will do.
That separation is quite important.

Jim Tolson: SNH has a target of reducing
emissions by 4 per cent, year on year. Should that
be the benchmark for all public bodies?

Stewart Stevenson: As I have said, each must
do what it is possible for them to do. I am
delighted that SNH shows that ambition and is
working up the processes by which it can deliver
on that target. However, it is for each body to look
at what it is responsible for and what activities it
undertakes, and to come up with appropriate ways
in which it can reduce the greenhouse gases that
it might have some influence on. Different bodies
will have different abilities to influence greenhouse
gas emissions. SNH, being an environmental
body, has particular opportunities that other bodies
will not have.

Des McNulty: We heard from Scottish Water
last week that its energy use is on an upward
curve, partly as an unintended consequence of
other policies, including European directives. A
good example might be Milngavie water treatment
works, which was previously gravity fed but which
now does a significant amount of pumping. How
will we take account of the unintended
consequences of directives and balance the
intentions that are set out in that legislation with
what we are trying to achieve with climate change
legislation?

Stewart Stevenson: The member is absolutely
right. Scottish Water's energy needs are rising,
and they are substantial. Much of the modern
water and sewerage infrastructure depends on
pumping material around. Scottish Water has
considerable real estate around Scotland and it is
considering installing renewable energy sources
directly on site, which it hopes will make a
significant contribution to its energy consumption.

The carbon reduction commitment is part of the
issue under consideration here, but we also need
to persuade the public generally of the importance
of making careful use of water supplies. One such
green action—which, although a simple little thing,
presses that particular button—is turning off the
tap when you are cleaning your teeth. That single
action will not save the world, but it is a way in
which people can be engaged on the issue. We
take water for granted but, in the future, we will
have to think about our water usage more
carefully.

We are beginning to have an influence over
European Community regulation in the context of
both its implications for energy use and the
European Union and the European Commission
understanding that their policies must be carbon-
proofed. Nevertheless, we aren't finished with some
of what the European Union is requiring us to do
that will increase Scottish Water’s energy
requirements.
Des McNulty: I am trying to remember the name of the minister who suggested in the midst of the water shortage crisis that people should share bath water. I do not think that he lasted very long.

The Convener: All in the name of good fun, surely.

Des McNulty: Absolutely.

Stewart Stevenson: It would depend on whether the water was shared serially or in parallel. People can do either.

The Convener: Each to their own.

David Stewart: Does the minister share my view that Scottish Water must set a good example? Until recently, it was losing half of all the water that it treated; now, it is losing a third of it. I give Scottish Water credit for moving in the right direction, but there are massive climate change implications to that.

Stewart Stevenson: David Stewart is absolutely correct. The target for water leakage was the one target that Scottish Water did not meet last year, although it missed it by a pretty narrow margin. It is an issue of considerable focus, and I look forward to Scottish Water not missing its targets. Because of its huge energy usage, Scottish Water is seeking to account more broadly for its carbon footprint and to use that information to test engineering and other initiatives that it proceeds with.

Des McNulty: Let us turn to the financial memorandum and the issues that were raised by the Finance Committee, which I think need to be addressed. When the Cabinet Secretary for Finance and Sustainable Growth and I were members of the Finance Committee, we were hard on financial memoranda that said that there would be relatively little cost involved in setting up a framework, although the bill in question put in place a mechanism that allowed the Government to produce secondary legislation that was uncosted in that bill but was a necessary consequence of delivering the bill.

Bearing in mind what the Finance Committee has said and the criticisms that it has made, do you consider it possible that you can deliver a significantly improved financial memorandum in time for stage 3, as has happened for a number of previous bills?

Stewart Stevenson: It is important and self-evident that the bill has always been, quite properly, about creating a framework to 2050. However, we do not know what our scientific understanding of the climate change agenda is likely to be in, for example, 2030 or 2040. The work of Sir Nicholas Stern has probably given us the most rigorous insight that is available at the highest level into not only the cost of dealing with climate change but, more fundamental, the cost of not dealing with climate change. However, even Sir Nicholas Stern, with the considerable expertise on which he could draw, had to come up with bands of outcomes and bands of costs that do not absolutely pin things down.

The cost of not dealing with climate change is clearly very high—it is 10 times or so the cost of dealing with climate change. I thought that Adair Turner put it well when he appeared in front of a Westminster committee—I think it was a House of Lords committee, but I am not certain. He said, with reference to the cost of 2 per cent of gross domestic product that Sir Nicholas Stern mentioned—I hasten to add that this was before the credit crunch came in—that the effect of climate change would be that, with a 3 per cent growth in the economy, the growth that we would expect to be delivered in January 2050 will instead be delivered in June 2050. I think that that is more or less what he said. That gives us a sense of the impact of dealing with climate change and illustrates that it is not quite what we might otherwise think.

Will we update the financial memorandum? As a matter of course, we certainly expect to update it to reflect any changes that we make at stage 2. However, it is inevitable in such a bill that we are dealing with estimates. The figures are not undebatable and they cannot be made so. They give the best ranges of figures that we can give. We will create the cost framework as we proceed to set budgets and annual targets, and we will have to bring forward a description of what the costs will be at that point. I do not think that there is any way in which we can import into the financial memorandum certainty about all the costs. I am afraid that I do not accept that that will be possible. We will have to introduce substantial secondary legislation during the period to 2050, and we will have to bring forward the financial costs of what is done at that stage.

I return to my point that Sir Nicholas Stern has given us a clear understanding—it is probably the best available understanding, and it is being relied on in other jurisdictions outside the UK—of what the costs are.

Des McNulty: Budgeted costs for the period between 2020 and 2050 could hardly be anything other than speculative. However, as I said at an earlier stage, I regard early action as the single most important thing in taking the agenda forward. Obviously, we are much closer to 2012, 2015 or even 2020 than we are to 2050. A substantial body of evidence is available to us—including in the reports that you have mentioned—that shows
that what is required is a spend-to-save exercise, whether that is in transport, energy efficiency or alternative means of energy generation.

In that context, it does not seem inconceivable that we could come up with a five-year budget for taking the climate change agenda forward or that we could make regulatory assessments that reflect what you expect to introduce within a foreseeable budgetary period. I am talking not about the period to 2050 but about a period of five to seven years. It seems to me that that is eminently reasonable, but you have not attempted to do that. In principle, Parliament should not make big commitments to things that will be very expensive to deliver without some systematic attempt to quantify the costs.

The Convener: Briefly, please, Des.

Des McNulty: I accept that the bill is a framework piece of legislation, but it contains some specific proposals that have direct cost implications. You propose a regulatory assessment regime, and the bill will have a significant impact on the budgetary decisions of the Government and other public bodies. Some public bodies are vague about that, as we heard from COSLA last week. Do you accept that it is imperative that we get a much stronger financial memorandum than we have at present?

Stewart Stevenson: The member used the phrase “much stronger”. What I am being asked for is something that gives us a better insight into the costs than what is on the table. It is clear that we will gain further information, and we will update information. We will update the financial memorandum in the light of changes to the bill at stage 2 and publish further financial information as part of our policy response in the middle of next year. Therefore, quite a lot will happen.

On the range of costs relating to non-domestic buildings, for example, it is clear that the consultation on the next generation of building regulations will change things. Indeed, things will change quite dramatically in all sorts of areas, and they will change the numbers. The UK Committee on Climate Change will give information on costs and cost effectiveness.

The member mentioned spending to save. Doing so is, of course, correct. He also returned to what he said earlier about the need for early action. We need to get the balance right. Counterintuitive things will undoubtedly emerge, and we must be confident that taking a particular action will not cost us money that could be better spent in other ways. There are issues around that. Activities relating to adaptations are also being undertaken in the UK risk assessment that is due for delivery in around two years’ time.

Costs will continue to evolve, develop and be reported on. We will change the financial memorandum as we proceed and seek to respond to the comments of the Finance Committee and to those of the Transport, Infrastructure and Climate Change Committee when it reports.

The Convener: Des McNulty should be very brief.

Des McNulty: If you will the end, you have to will the means. It is not impossible to quantify within a relatively short timeframe what the means might be to get to the first step. I am looking for a sense of the financial commitment that the Government is prepared to make to tackle climate change, because doing so is not free.

Stewart Stevenson: Of course, Sir Nicholas Stern would say that it is cheaper to tackle climate change than not to do so. I am not suggesting that doing so is free—neither option is free; both will cost money—but until we table annual targets, for example, we cannot start to home in on key numbers that relate to the targets. There will be one financial figure if target A is set and a different figure if target B is set—members should note that I am not using numbers so that I do not create an opportunity for misunderstanding.

We will consider matters, but a great deal of work will take place over the period to 2050 and ministers will constantly have to report on costs. Indeed, ministers will need to produce budget lines in their annual budgets that will support and sustain what needs to be done to tackle climate change.

Charlie Gordon: In recent oral evidence, the Scottish Trades Union Congress expressed disappointment that a bill of such a magnitude is not accompanied by a jobs impact evaluation. Will you consider trying to develop such an evaluation?

Stewart Stevenson: We have been clear that we see significant opportunities for new jobs in Scotland because of our unique advantages, particularly in energy. We do not want to raise false hopes, but it is clear that there will be substantial employment benefits if we exercise leadership here, get engaged with the new industries, particularly the tidal energy industry, and continue to develop our hydro power and wind power resources—we have increasing offshore wind power resources. We do not see the bill as being a negative for employment; indeed, we take quite the contrary view.

16:30

Charlie Gordon: You make a familiar point. A number of witnesses have pointed to the potential that you describe, but none has been able to quantify it. I share your hopes of additional employment opportunities in Scotland. The STUC expressed the view that, if the bill is enacted, it is
entirely possible that some jobs may be lost in enterprises with intensive energy use. I am interested in hearing about where the potential downside for jobs may lie. Can we try to get to grips with both the net and gross positions?

Stewart Stevenson: We are looking at a potential uplift of 16,000 jobs. The Government’s central purpose is sustainable economic growth.

Charlie Gordon: Is that a net figure?

Stewart Stevenson: The figure is for 16,000 new jobs—I do not claim that it is a net figure. However, in industries that will have to make changes in response to the climate change agenda, there will be considerable work in conversion and adaptation, as we add technologies. There will be the potential for employment opportunities even in the industries in which the greatest amount of change takes place.

I cannot give the member absolute certainty, but I can point to the UK Government’s low-carbon initiative, which suggests that there may be 400,000 jobs in the low-carbon economy. In the longer term, the 16,000 figure that we have identified probably represents the least of our ambition and the least of the outcomes that we can expect, as the Administration in Scotland probably has the greatest set of opportunities in the UK. There will clearly be changes to carbon-intensive industries such as coal-fired generation. However, we are likely to continue to be a net exporter of energy; the proportion of our energy that is exported should rise even in the coal-fired sector. Although the specific skills may change, there is every chance that employment will continue to grow.

Charlie Gordon: I am looking not for absolute certainty—that would be unreasonable—but for the avoidance of uncertainty in the minds of thousands of people, given that we are in a recession. I am not suggesting that we abandon the bill because we are entering a recession, but we must understand that the recession has created a great deal of uncertainty in the minds of the working population. I ask you and your officials to consider doing a bit more work to identify all the potential job impacts of the bill—the downside as well as the upside.

Stewart Stevenson: The recession creates a set of challenges—that is why this is precisely the right time for us to focus our efforts on the bill’s potential to create new jobs. In his report, Nicholas Stern focused on the opportunities that a low-carbon economy creates for any country that signs up to it.

Mr Gordon is correct to suggest that absolute certainty cannot reasonably be delivered. I am happy for us to do more work on the subject, but I do not want unduly to raise expectations about the outcome. I repeat that there are likely to be considerable opportunities even in industries that are carbon intensive—perhaps more than in less-affected industries.

Rob Gibson: Under the Climate Change Act 2008, the UK secretary of state is required to report to the UK Parliament with an assessment of the risks for the UK of climate change. The bill provides that when that happens, Scottish ministers must, “as soon as reasonably practicable”, lay before the Scottish Parliament a programme that addresses the risks for Scotland that are identified in the report.

I am aware of the analysis of responses to the consultation on the Government’s proposed climate change adaptation framework. People made the point that mitigation is a central issue and should not be regarded as simply complementary to adaptation. In theory, the Scottish Government might not need to produce a programme until at least 2012. Are you minded to publish detailed climate change adaptation documents before such documents are statutorily required to be laid before the Parliament?

Stewart Stevenson: You were referring to the first consultation on the adaptation framework, which was the first stage of our engagement with NGOs and wider Scotland. We propose to have annual progress reporting on the implementation of the action programme in the framework.

We seek to go somewhat further than does the UK Committee on Climate Change’s adaptation sub-committee, in which scrutiny is limited to monitoring and commenting on progress of implementation. That is a narrow remit for oversight and I suspect that the UK Government will reconsider it—of course, that is entirely a matter for the UK Government. Three Scottish regions are used in the UK climate change projections. Our studies will be ambitious and we will push the methodology for real-life understanding of what is going on.

In general, adaptation has been running second to other matters in priority. It is good that it is rising up the priority list in the UK and in Scotland.

Rob Gibson: You said that you will be more ambitious. People think that the development costs that are associated with implementing climate change adaptation must be quantified at an early stage. There will surely be an impact on jobs, which Charlie Gordon asked about. It would be well worth being much more specific, so that you can gain people’s confidence.

Stewart Stevenson: We will undertake a second consultation on adaptation, which will be based on what emerged from the first consultation
and will play an important role in developing a way forward. In the meantime, the Scottish Government is part of the UK adaptation sub-committee and is working co-operatively with a broader community of experts.

We will publish the adaptation framework later in the year. As part of the second consultation, there will be much direct engagement, for example through workshops with various bodies, to take matters forward and address the issues that you raise.

Rob Gibson: The committee heard evidence that there is a missed opportunity to increase resilience to the effects of climate change. What other options is the Government considering, which could be included in the bill?

Stewart Stevenson: It is not quite clear to me what those missed opportunities might constitute. Can you flesh out your question?

Rob Gibson: In the context of adaptation to increase resilience, we have been considering the work of the Scottish Environment Protection Agency and Scottish Water, for example. Government agencies and bodies might be able to take a lead. We have also heard about businesses that are gearing up more quickly than others for climate change. Spelling out the opportunities for increasing resilience could cover those matters and many others.

Stewart Stevenson: I made early reference to the May day network, which is involving businesses—the number that I mentioned was 140, which I think from memory is correct—in making commitments that are specific to their businesses. Sometimes, simple but important commitments are made. For example, a restaurant stopped using linen on its tables, because the linen had to be laundered. It went for a different arrangement to reduce its costs and adapt to the situation.

A key Government measure, with which members are familiar, is the Flood Risk Management (Scotland) Bill, which is making its way through Parliament. That deals with a huge mitigation issue that involves working with industry.

We have facilitated discussions with a range of public bodies. A lot of work is going on. We are supporting the May day network and working with the climate change business delivery group. We are seeing the progress that we need. Transport Scotland has just completed a study on landslides and we will work up an appropriate response to that. A range of activities is being undertaken throughout the Government to address the issue.

Rob Gibson: I attended the event on Thursday evening, which was inspirational. It showed that business leaders are taking an important stance that is in some ways far ahead of what we had thought possible.

A plea was made in evidence for the Water Environment and Water Services (Scotland) Act 2003 to be amended to include adaptation. Will the Scottish Government consider that?

Stewart Stevenson: I do not think that we have considered that suggestion, but I am happy to take it away and examine it.

Legislation is one way of doing things, but it is important to work with industry, agencies and NGOs to ensure that things happen. I have just been told—I did not know this before, that is for sure—that sustainable flood management is already part of something that is called the WELLS act—[ Interruption. ] I beg your pardon—it is the WELS act. Philip Wright’s writing is becoming a bit unclear.

Des McNulty: When we first debated the issue in the chamber, I said that the bill’s major deficiency was its lack of a public engagement strategy and targets. Have you had time to reflect on that? Do you intend to propose anything at stage 2 on public engagement? Are you willing to consider amendments on that?

Stewart Stevenson: Public engagement is not about primary legislation, if I may say so. It is a natural and normal part of the process. I make the general point that the consultation on the bill elicited 21,000 or so responses. Every one was considered individually, although a substantial number were part of an integrated campaign and were none the worse for that. Many responses were on pre-printed postcards that individuals who wanted to add information had annotated, so we engaged with that.

A substantial process of engagement has been undertaken. As I mentioned, we will run a series of workshops for the second consultation on adaptation. We will engage with a range of sectors, because different sectors have different needs—the business sector has a different set of needs from the voluntary sector. We will step up the game on engagement.

The Convener: Round 1 has lasted a little longer than we expected, but the subject is important and I am glad that everyone had a chance to explore the issues.

I suspend the meeting for five minutes, after which we will proceed with round 2, which is on the forestry and waste aspects of part 5.
On resuming—

The Convener: The second part of our evidence session will focus on forestry and waste issues. The minister wants to say a brief word before we get started.

Stewart Stevenson: I just want to clarify something that I said earlier. I was misled by reading someone else’s writing and, hence, I have potentially misled the committee. I clarify that there was not engagement at official level in relation to the Conveners Group. In other words, as I said later in my remarks, the offer that we made was essentially a political one. To avoid allowing that misstatement of facts by me to go any further, I correct it now for the record.

The Convener: Thank you. I appreciate that correction. You were under a bit of a blizzard of notes at the time, so the mistake is understandable.

To an extent, forestry and waste issues have been dealt with by secondary committees—the issues have been discussed here and in the other committees. Frustration has been expressed that the policy areas that are covered in the bill are still the subject of consultation processes. Does the Government consider it good practice to introduce legislation in policy areas for which the consultation process has not yet been completed and the results are not yet known by parliamentary committees, whose job it is to scrutinise that legislation?

Stewart Stevenson: We would certainly prefer to have completed the consultations, wherever we can, not simply to inform the deliberations of committees. Frustration has been expressed that the policy content is not added to the bill at stage 2, substantive changes to the legislation will put us in a similar position, in that we will not have the full range of responses from stakeholders or an analysis of their positions?

Stewart Stevenson: I absolutely accept that, although I could draw some parallels. I recall that, in opposition, I was intensively involved in the Land Reform (Scotland) Bill, which was the subject of more than 1,000 amendments—I cannot remember the exact number, but it was very substantial—by the end of stage 3. Substantial policy changes were made to that bill at stage 3 because the dynamics of the process of developing a bill can lead to that sort of position. However, I do not think that we are in that position with the Climate Change (Scotland) Bill.

The convener asked me at the outset whether I accepted that it would be better that consultations were not undertaken at this stage. I absolutely acknowledge that, in an ideal world, that would be the case. However, I think that we are doing as well as we can. We will work closely with the parliamentary committees.

The Convener: I have a final question on the matter, which I recognise is an issue of process. Does the Government accept that, if it proves necessary for committees—either this committee or other committees—to take further evidence at stage 2, the need for further evidence taking will

the range of stakeholders that might want to contribute to the consultation process.

Stewart Stevenson: We have sought to engage with committees by putting up the appropriate officials and ministers to ensure that we inform Parliament of the decision-making processes behind the inclusion—or, for that matter, omission—of different provisions in the bill. A wide range of issues can emerge, given that quite a lot of research is taking place. For example, the AEA Technology study “Mitigating Against Climate Change in Scotland: Identification and Initial Assessment of Policy Options” was only recently produced.

It might be helpful to confirm—I think that I said this before the suspension—that we do not intend to make any new policy additions to the bill at stage 2. That should give ministers some reassurance. It is also worth pointing out that the Rural Affairs and Environment Committee was given access to the preliminary analysis of the forestry consultation responses within two weeks of the close of the consultation period. However, I do not seek to dismiss the substantive point that the convener has made.

The Convener: Thank you. Can I take it that the Government also understands that, even if new policy content is not added to the bill at stage 2, substantive changes to the legislation will put us in a similar position, in that we will not have the full range of responses from stakeholders or an analysis of their positions?

Stewart Stevenson: We have had a range of consultations of one sort or another on the cases that we are talking about. Nonetheless, we are continuing to get new information on a range of subjects, which will continue to inform the way forward. I made the point before—I think that the convener acknowledged this before the suspension—that we are willing to engage in further evidence sessions at stage 2 if that is felt to be of assistance to the committee. That is part of how we would seek to ensure that the existence of consultations that are as yet incomplete does not materially inhibit Parliament’s ability properly to deal with the policy areas that have been referred to.

The Convener: I find it a little hard to see how committees can be expected to endorse the inclusion or implementation of measures in the bill when we are not yet aware of the full responses of
conflict to some extent with the Government's ambition for a speedy legislative process?

Stewart Stevenson: I want to have the speediest possible process—I suspect that that view is probably widely shared—but, given that we are putting in place legislation that will cover the period to 2050, I do not think that ministers should get unduly aerated about an additional week or two. It will be helpful to both parties if the committee and the Government can communicate in a way that gives each the earliest possible indication of any change that might be thought to be of such concern that people might wish to consult on it. If the committee can give Government an early indication of areas of concern arising from our stage 2 amendments—the committee will be in a position to take a view on that as we lodge those amendments at stage 2—I am sure that we can work together on that.

17:00

David Stewart: As you are well aware, there has been a lot of controversy about the forest leasing scheme that one of your fellow ministers proposed. Under the scheme, 25 per cent of the forest estate would be leased out over a 75-year period. You may also know that I lodged a series of parliamentary questions on the subject and that period. You may also know that I lodged a series of parliamentary questions on the subject and that I have raised the issue a number of times, including in the recent debate.

Time does not allow me to go into the proposal in detail, so I will keep my remarks brief. From the answers that I received, the bottom line is this: the idea came from City of London bankers Rothschild, which—as the minister knows—was Margaret Thatcher's favourite privatisation bank. The proposal has been widely condemned across the political fold and the vast majority of consultation responses were extremely critical.

As the Rural Affairs and Environment Committee report shows, all the evidence that it received on the issue was critical. That committee recommended to this committee that the Government should not progress the leasing proposal and that it should amend the enabling section of the bill to that end. As the minister knows, the unions and rural and urban communities, too, have widely condemned the proposal. My instinct on this, albeit that it could be wrong, is that the Government will pull the proposal; the question is simply when that will happen. I give the minister the opportunity today to withdraw the proposal, which is badly thought through. Leasing would be disastrous for rural communities, damaging for jobs and—frankly—would not do a lot for climate change.

Stewart Stevenson: It is important to consider what the Government is trying to achieve with Scottish forestry. We are trying to ensure that we up the ante on planting. Of course, we have a new Minister for Environment who has, under her portfolio, primary responsibility for this part of the bill. We received more than 500 responses to the consultation on the forestry proposals. Many parts of the proposals have been welcomed, particularly those on joint ventures.

The consultation closed on 27 January. The Minister for Environment has said, quite properly, that the proposal is a key area for her consideration. She is reviewing the consultation processes and discussing the issue with officials. I am sure that she will come to an appropriate decision. We have, quite properly, to allow the new minister time to consider the consultation responses and the objectives that the Government had in mind when it made the provision to which the member refers.

David Stewart: My next question is linked to the first one. The vast majority of people who took part in the consultation on the bill were highly critical of the leasing proposal. However, there is a bit more support for joint ventures. As the minister knows, that aspect was supported by the Labour-Liberal Democrat Administration. The minister and his fellow ministers have my support for the work that is being pursued on that front, particularly in renewables projects. Could you bring forward only that aspect of the proposal, perhaps by way of a stage 2 amendment?

Stewart Stevenson: Unless I have misunderstood the situation, the provision on joint ventures meets needs. Support for that provision is shared across the Parliament. Indeed, political representation can make a contribution in going forward on the issue. If members consider that it would be useful for amendments to be lodged, I would be interested in engaging with them on the subject. I broadly welcome the acknowledgement that the inclusion in the bill of the forestry provisions is a good thing, and something that will help the climate change agenda.

As I said, on this aspect, as on all of the provision, the Minister for Environment is looking at the issue. I welcome the member's broad acknowledgement that, on this aspect, the Government is aiming in the right direction, even if he remains substantially sceptical on one particular provision.

Rob Gibson: The minister mentioned the consultation responses. Did any of the people who opposed the leasing proposals, which have been controversial, make any other proposals that might help us to raise funds so that we can help to plant more forests at an early stage to mitigate climate change?
Stewart Stevenson: The comments in the consultation have focused largely on what should not be done. However, to bring a sense of balance, I should say that there has been substantial support for the proposals on joint ventures and substantial acknowledgement of the important role that forestry plays in Scotland’s climate change agenda. Our forests represent a huge way by which carbon is extracted from the atmosphere. We are planting something in the huge way by which carbon is extracted from the climate change agenda. Our forests represent an important role that fore...
that provision, and there are a number of strands to the criticism. One is the fact that a similar proposal was examined by the former Environment and Rural Development Committee and unanimously rejected.

Another argument is that, whatever case you make for taking such an approach to plastic bags, you cannot make a climate change case, because the substitution of paper bags or higher-density bags for single-use plastic bags generates higher emissions. Given that your arguments are so heavily based on evidence and are geared towards reducing emissions, will you reconsider whether the proposals in section 59 are appropriate in a bill on climate change?

Stewart Stevenson: I draw the member's attention to the fact that the provision is not about plastic bags but about carrier bags in general, whether they are paper, plastic, woven, hessian or whatever. It is about focusing on individual users of shops and supermarkets and getting them to reuse their bags.

It is interesting that the public and supermarkets have already responded to the issue. Action is being taken: there has been a 26 per cent reduction in the use of bags over the past couple of years—2006 to 2008—which has been very much driven by the large supermarkets. The provision in the bill is a backstop to ensure that progress continues to be made.

We must remember that the feed stock that is used to produce plastic bags is oil, which we will increasingly want to use for other purposes—not necessarily transport, but the chemicals industry generally. Although the provision is a backstop, it is an important part of the bill. In a sense, it pushes at an open door, but its inclusion ensures that the progress that is being made will continue.

17:15

Des McNulty: The Cabinet Secretary for Rural Affairs and the Environment stated that there are signs that, as you suggested, progress is being made through the voluntary agreement on reducing the number of carrier bags given out by 50 per cent by May 2009. If that target is achieved or looks like being achieved, will you reconsider the charging proposal?

Stewart Stevenson: The proposal would give ministers the power to make regulations, which would be subject to the usual parliamentary process. It is a good opportunity to pick up on an agenda that has widespread, if not unanimous, support. We are not minded at present to make any changes to section 59 as it is important for ministers to have the power to use in future. A 50 per cent reduction by later this year, which is possible, would be good progress, but it would not make the provision redundant because 50 per cent would remain to be dealt with. It is sensible to have such a provision, and surveys have shown that a substantial majority of the population is in favour of charging for carrier bags.

Des McNulty: The measure was the most criticised and negatively received in the consultation. You said that it is valuable as a backstop but have not made a substantive case for its inclusion in the bill. You said that you might wish to use it if other measures do not work, but you have not provided any justification for its effectiveness. You are proposing legislation that is fundamentally about climate change, but it is hard to tie the measure to positive climate change outcomes. Is its inclusion in the bill justified? If you want to introduce it, there is an argument for introducing separate legislation on it, but I am not sure that it is justifiable to include it in the bill.

Stewart Stevenson: I will make a number of responses to that. First, charges for carrier bags are part of the UK Climate Change Act 2008. In itself, that does not justify our introducing charges, but it gives me a little political cover with the member, if I may so put it. On a consensual occasion such as this, I will not push that point particularly hard.

The need for early action has come up on two or three occasions. The carrier bag issue is multifaceted: it certainly concerns the consumption of carrier bags but it is also of broader relevance to the consumer society. If, for whatever reason, people had less bag space to fill when they went to the supermarket, they might be more focused on whether they needed to make purchases. I do not know whether charging for carrier bags would have effects beyond the consumption of carrier bags and would mean that less waste food was purchased because there was less space but, over the long term, it could influence behaviours much more widely than simply encouraging people to stick a couple of old carrier bags in their pockets before they go down to Tesco.

The provision has the potential to influence behaviours in ways that undoubtedly support the climate change agenda by reducing the consumption of what are perhaps unnecessary quantities of goods. That feeds into the reduction of the manufacturing carbon cost of the associated items and the transport costs of goods going from wholesalers and distribution centres to supermarkets. Although the provision seems like a small part of the bill and not to have a large impact when we consider it in a narrow sense, it is in fact one of those interesting measures that opens the door to a wide range of second-level and third-level effects that might deliver quite a bit. I therefore have no great difficulty in justifying its inclusion in a bill about Scotland's climate.
Des McNulty: You would be on much firmer ground, quantifiably, if you banned packaging associated with pre-packed food or if you introduced measures in your role as planning minister to prevent supermarkets from having such large car parks. Either measure would deliver much better climate change outcomes.

I will move on to discuss commercial and industrial waste, which comes under sections 52 and 53. How will you balance the need to be sensitive to the requirements of business with the need to address climate change? More specifically, what is the Government’s latest thinking on waste for energy, which has a double benefit in this context?

Stewart Stevenson: I am delighted to have the implied support of the member for expanding the powers of the Scottish Government so that we could ban packaging, which we cannot do with our current powers.

The member talks about converting waste to energy. As it happens, yesterday I visited Artemis Energy near Motherwell, where I saw a wide range of materials—some of which I would not wish to discuss in public, because they’re no very nice things—that are converted into energy. We are very interested in further progress being made on that. The support for biofuels through the tax regime has changed a bit, but they can still make a useful contribution.

The issue of waste is important for business. The more waste any business produces, the more material it is paying for but not using, and the more material it is having to dispose of and pay someone to take away. Business in general is pretty much seized of the waste agenda. I visited the Tesco distribution centre in West Lothian a few months ago, and I saw that huge efforts are being made to get cardboard in from all the branches and to deal with waste issues. If the company had less cardboard, it would cost less to deal with it.

One of the Ayrshire councils has the highest rate of recycling at the moment, with a 25 per cent cap on the initial—[Interruption.] I beg your pardon: the cap of 25 per cent is for energy from municipal waste. The issue is about recycling and prevention rather than anything else and, as such, it is proper that we should deal with it in the bill.

The Convener: There are no further questions for the minister, in which case we have got through round 2 rather more quickly than we got through round 1. I thank the minister and both the groups of officials who joined him for their time and for answering our questions.

We have already agreed to take item 3 in private.
At the Transport, Infrastructure and Climate Change Committee meeting on 10 March I offered to write to you to provide more detailed information about Scotland’s potential emissions reduction trajectory. This technical information is contained in Annex A to this letter.

I also agreed to set out further detail on amendments to the Climate Change (Scotland) Bill which the Scottish Government is considering bringing forward at Stage 2. This information is contained in Annex B.

It is my intention that the Scottish Government will, as far as possible, seek to lodge its amendments in the Scottish Parliament at the start of the Stage 2 process to increase the time available for consideration. A factual briefing note will also be provided for Committee members ahead of the first Stage 2 session to clarify the purpose of the Scottish Government amendments.

In terms of expert advice requested by Scottish Ministers prior to bringing forward an order to establish annual targets, I can confirm that Scottish Ministers intend to seek advice for the first batch of annual targets from the UK Committee on Climate Change and that it is my intention that this advice be published.

It may be helpful if I clarify that it is my intention to formally request this advice when the Bill completes its Parliamentary passage. I feel it would be premature to seek that advice formally when the Parliament is still in the process of scrutinising the Bill and the final format of the Bill remains to be determined.

In the meantime the ongoing liaison at official level will continue to ensure the UK Committee on Climate Change is kept up to date with developments on the Bill.

I hope the Committee find this information useful.

STEWART STEVENSON MSP
MINISTER FOR TRANSPORT, INFRASTRUCTURE AND CLIMATE CHANGE
CLIMATE CHANGE (SCOTLAND) BILL

INTRODUCTION

1. Scottish Government officials have been undertaking analysis of the deliverability issues surrounding the proposal to introduce three percent, year on year, annual reductions to 2019, into the Climate Change (Scotland) Bill. Annual targets must be set which will ensure that we meet our interim and 2050 targets but these targets must be deliverable. Given the importance of this issue we see it as useful to provide the Committee with an insight into this analysis.

2. It is stressed that the figures set out in this paper are early estimates of potential savings and work is ongoing to produce more refined information.

3. A Strategic Overview project is underway which will deliver a high level discussion document for publication later in 2009. This will set out in broad terms the key sectors for abatement in the short, medium and long term and high level policy options around these, highlighting the key milestones in policy development and delivery and barriers to implementation. This work is a prerequisite for the more detailed statutory Report on Policies and Proposals (section 30), to be published in 2010, which will set out how Scottish Ministers will meet their annual targets over the period 2010 to 2022.

BACKGROUND

4. To achieve our 80% emissions reduction target will require an average annual reduction of more than 3% per year to 2050.

5. In 1990, Scotland emitted 70 Mt CO\textsubscript{2}e, including international aviation and shipping. Taking account of the EU ETS, this had fallen to 58 Mt by 2006, a reduction of 18% in 16 years.

6. Scotland’s emissions are split between the traded and the non-traded sector. The traded sector is a reference to that sector which is covered by the EU Emissions Trading Scheme (ETS), an EU-wide carbon trading scheme. Scotland’s power stations and other energy intensive industrial installations fall within the scope of the ETS. These installations currently account for just under half of Scotland’s emissions.

7. Carbon emissions reductions to be achieved through the ETS are now to be agreed at an EU level and the proposed reductions are consistent with delivering the UK Committee on Climate Change’s (CCC) proposed “Interim Target” of a 34% reduction in emissions in 2020 from 1990 levels.

8. In offering its advice in December 2008 on the UK’s carbon budgets, the Committee on Climate Change presents two scenarios for emission reductions to 2020:

   - **Interim Target - 34% emissions reduction - Extended Ambition (all synonymous)** – based on measures costing less than the forecast carbon price (£40/tCO\textsubscript{2}e in 2020) plus measures costing more than the forecast carbon price that are important stepping stones on the way to 2020. These are mostly policies to which the Government/EU has already committed in principle. The CCC has produced a **Scottish Abatement Potential** which broadly equates to an “Extended Ambition” for Scotland.

   The Extended Ambition is based on current international circumstances, under which the EU has a target to reduce emissions by 20% by 2020. The EU has committed to raising its target to 30% if a new international agreement is reached at Copenhagen. In this 30% world the CCC estimates that the UK should reduce emissions by 42% by 2020. Also in this 30% world, the traded sector would be expected to achieve much greater emissions reductions. The CCC’s second scenario is therefore:

   - **Intended Target - 42% emission reduction - Stretch Ambition (all synonymous)** – based on Extended Ambition plus further feasible abatement where there is no
current policy commitment. This includes more radical new technology deployment and more significant lifestyle adjustments. This target is proposed on the basis that there is a new international agreement. The CCC notes that, in the non-traded sector, the contribution to the 42% target can be either by increased domestic abatement or through the purchase of international credits.

**KEY POINTS**

9. A trajectory based on 3% annual reduction in Scotland’s emissions from 2010 equates, roughly, to a 43% reduction in 2020 against 1990 levels.

10. Given that emission reductions from the traded sector are, in effect, pre-defined at the level of the Interim Target (34%), for Scotland to achieve 3% annual reductions between 2010 and 2019 would require the bulk of the savings to come from the non-traded sector, by which we mean very significant carbon savings from energy use in heating buildings, from transport, waste, agriculture or forestry.

11. Emissions in the non-traded sector would need to be reduced by 4 - 5% each year, with emissions in 2020 needing to be around 12 MtCO\(_2\)e lower than in 2009. Based on current trends, emissions are projected to rise by 2 MtCO\(_2\)e by 2020. The total annual saving required in 2020 is therefore some 14 MtCO\(_2\)e.

12. The CCC estimates that the measures it recommends to meet its Interim Target, to reduce UK emissions by 34%, could deliver a saving in Scotland of around 5 MtCO\(_2\)e in 2020.

13. Savings obtained by Scotland adopting a pro rata share of the measures to meet the CCC’s more radical, Intended Target, to reduce UK emissions by 42%, would only add a further 1.4 MtCO\(_2\)e in 2020. Not all of these savings would be available because some of them relate to UK and EU measures which are not currently being implemented.

14. At best, this leaves a gap of over 7 MtCO\(_2\)e in 2020 which would need to be filled by much more radical measures in the non-traded sector.

15. Examples of the measures that could contribute to the delivery of the CCC’s Interim and Intended Targets are set out in Columns 1 and 2 of Table 1. These are the type of measures which would have to be taken even before attempting to fill the 7 MtCO\(_2\)e gap with more radical measures. Column 3 gives some examples of such radical measures.

16. To note that the savings identified are all additional savings. For example, the savings identified in Column 1 are additional to the savings that the CCC has identified as being delivered by current policies and incorporated into their baseline emission figures.

17. It is important to note the relatively small savings that these measures deliver in comparison to the 7 Mt shortfall.

18. These more radical measures are also likely to be significantly more costly that those included within the Extended (34%) or Stretch (42%) Ambitions. Whereas for the Extended Ambition, costs are largely at or below £40/tCO\(_2\)e, radical options for buildings, which would necessarily focus on renewable heat and microgeneration, could have costs up to and beyond £300/tCO\(_2\)e. Additional eco-driving measures are likely to have no or negative costs (i.e. save money) across society in the long-term. However, there may be up-front costs to government to stimulate the initial adoption of eco-driving practices and the additional savings are relatively small.

19. It is also worth noting that although there may be a net cost saving over the lifetime of measures, there may well be considerable up-front costs in delivering cost effective measures.

20. A further point is in respect of the supply side. In most, if not all, carbon savings measures, there is the need to increase the capacity of the supply chain to deliver. This cannot happen overnight and it would be unreasonable to expect it to. There is little point in having targets that we fail in year one. An acceleration of effort is required but we need time to ramp up our efforts.
CONCLUSION

21. Policy levers and agreements at the UK, EU and international level are crucial in assisting Scotland to meet its ambitious climate change targets.

22. The CCC recommended that, if there is an international agreement at Copenhagen later this year, then the UK should move to the Intended Target of 42%. The Scottish Government will review its position in light of any new international circumstances and advice that it receives.

23. Scotland’s annual emissions reduction targets must be stretching and ultimately, deliver 80% reductions by 2050. However, they must also be achievable in order to retain credibility. The Bill requires that we set our annual targets following receipt of advice from the “relevant body” which in the first instance is to be the Committee on Climate Change. This advice will be in the context of the 2020 interim target to be inserted into the Bill. The CCC has already shown that it will not shirk from recommending demanding targets. Crucially, though, their advice will be based on expert and independent analysis of real emissions abatement potential, and that seems the sensible way to go forward.

TABLE 1 - EXAMPLES OF SAVINGS REQUIRED IN KEY AREAS

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scottish Abatement Potential (MtCO₂e)</td>
<td>Stretch Ambition (MtCO₂e)</td>
<td>Intended Target</td>
<td>Radical measures (MtCO₂e)</td>
</tr>
<tr>
<td>Interim Target</td>
<td>Additional savings beyond baseline measures</td>
<td>Additional savings beyond Scottish Abatement Potential</td>
<td>Additional savings beyond Stretch Ambition</td>
</tr>
<tr>
<td>Existing housing</td>
<td>Almost 100% loft and cavity wall insulation</td>
<td>Additional savings for further solid wall insulation – a further 120,000 homes</td>
<td>80% take-up of solid wall insulation - a further 150,000 homes</td>
</tr>
<tr>
<td></td>
<td>10% of technical potential for solid wall insulation (around 40,000 homes)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.4-0.5 MtCO₂e</td>
<td>0.3-0.4 MtCO₂e</td>
<td>0.3-0.4 MtCO₂e</td>
</tr>
<tr>
<td>Renewable heat</td>
<td>Sourcing 11% heat demand from renewable heat by 2020</td>
<td>No additional measures proposed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.6-0.7 MtCO₂e</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport</td>
<td>Average new car efficiency 95 gCO₂/km in 2020 through engine and other efficiencies</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 MtCO₂e</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport</td>
<td>1% car and van drivers take up eco-driving behaviours per year. All HGV drivers take up eco-driving</td>
<td>40% of car and van drivers adopt eco-driving behaviour by 2020 and achieve 3% fuel efficiency increases</td>
<td>All car and van drivers take up eco-driving</td>
</tr>
<tr>
<td></td>
<td>0.1 MtCO₂e</td>
<td>0.1 MtCO₂e</td>
<td>0.1 MtCO₂e</td>
</tr>
<tr>
<td>Category</td>
<td>Description</td>
<td>Emissions (MtCO₂e)</td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>Transport</td>
<td>Speed limit reduction to 60mph with effective enforcement</td>
<td>0.4 MtCO₂e</td>
<td></td>
</tr>
<tr>
<td>Central case DfT estimate of uptake of Smarter Choices.</td>
<td>No additional measures proposed</td>
<td>0.2 MtCO₂e</td>
<td></td>
</tr>
<tr>
<td>10% road transport biofuels by volume</td>
<td>No additional measures proposed</td>
<td>0.4 MtCO₂e</td>
<td></td>
</tr>
<tr>
<td>Forestry (afforestation)</td>
<td>2008-2014 12kha/yr 2015-2020 15kha/yr If continued, aims to achieve 25% forest cover around 2055</td>
<td>0.4 MtCO₂e</td>
<td></td>
</tr>
</tbody>
</table>
Proposed Stage 2 Amendments

2030 interim target

In recognition of the growing support for the inclusion of a 2020 interim target in the Bill and the ambition expressed in the first UK Committee on Climate Change (CCC) report for the first set of UK carbon budgets (published on 1 December 2008), Scottish Ministers intend to bring forward amendments to section 2 at Stage 2 to replace the 2030 target with a 2020 target. This has two benefits:

First, an ambitious 2020 target will help incentivise early abatement action because it sets a key target that the annual targets must deliver.

Second, it aligns Scotland with our partners in the UK Climate Change Act and with the timelines for key EU targets on climate change, renewable energy and energy efficiency. Significantly, policy levers are held at an UK and EU level and Scotland will not be able to deliver its ambitious targets on its own.

Scottish Ministers are currently considering the level at which the 2020 target should be set. In deciding upon the level of the target, Scottish Ministers will have regard to:

- Advice on targets and on emissions abatement potential set out in the CCC’s December 2008 report which identifies savings at a UK and Scotland level;
- Analysis of the Scottish emissions abatement potential identified in the CCC report and ongoing analysis within the Scottish Government of the key areas;
- Other publicly available advice, including the AEA report Mitigating Against Climate Change in Scotland;
- Carbon budgets and the 2020 target adopted by the UK Government - important because of the emissions reduction policy levers held at the UK level and the very close economic, infrastructure and geographical ties Scotland has with other parts of the UK; and
- Current and future international agreements on emissions reductions and the prospect of the EU adopting a 30% emissions reduction target for 2020 in the event of an international agreement being reached at Copenhagen.

International aviation and international shipping emissions

Scottish Ministers are aware that concerns have been expressed that section 14(1) of the Bill does not commit Scottish Ministers to include greenhouse gas emissions from international aviation and international shipping. Scottish Ministers will therefore seek to amend the Bill at Stage 2 to:

- remove any ambiguity that an order will be brought forward in this regard; and
- introduce a deadline by which the Scottish Ministers must lay the first order under section 14(1).

Scottish Ministers will require the power to make subsequent orders under section 14 (1) to allow the methodology for Scotland to be changed in line with any future international agreements on the apportionment of emissions from international aviation and international shipping.

Duty of public bodies to take action on climate change

Section 36 of the Bill contains powers which enable the Scottish Ministers to make provisions by order imposing on public bodies duties relating to climate change. You will be aware that there has been considerable discussion with Committee witnesses on whether the Bill should contain an explicit duty on public bodies rather than enabling powers. Scottish Ministers are considering options in this regard including linking a potential duty with sustainable development. This will be discussed further with COSLA whose support will be required.
Limit on the use of carbon units

As it has always been Scottish Ministers’ intention to prioritise domestic emissions reductions, options are being considered for limiting the amount of carbon units which may be used to credit the net Scottish emissions account for any given period including when such limits may be introduced. This would restrict the amount of emissions which Scottish Ministers may offset, thereby placing greater emphasis in achieving emissions reductions within Scotland.

Scottish Ministers are aware that this is a complex area, and that any limit on carbon unit use must be drafted in such a way that it does not interfere with the operation of trading schemes such as the EU Emissions Trading Scheme.

Muirburn

It is Scottish Ministers intention to bring forward an amendment to section 46 of the Bill (which contains a new section 23A of the Hill Farming Act 1946), so the order making power is subject to affirmative parliamentary procedure, and so that the power cannot be exercised so as to reduce the current number of days comprising the permitted muirburn season.

Forestry

As you will be aware, following the announcement made on 13 March by the Minister for Environment, the Scottish Government has decided not to take forward the provision in the Bill which would enable parts of Scotland's national forest estate to be leased. An amendment will therefore be made seeking the removal of section 47(4).

Energy Efficiency

Scottish Ministers will seek to amend section 48(2) to replace the word “promote” with the word ‘improve’ to change this provision to “improve” the energy efficiency of living accommodation. The action plan prepared under section 48(1) will therefore aim to promote energy efficiency, having particular regard to improving the energy efficiency of housing.

Energy Efficiency of Non-Domestic Buildings

Following the conclusion and analysis of the consultation on the proposals for improving the energy performance of non-domestic buildings, Stage 2 amendments will be brought forward to amend section 50 to enable, through secondary legislation, mandatory implementation of cost-effective improvements to existing non-domestic buildings. Any SSI made under this provision would be subject to affirmative resolution.

It is not intended that this provision would be utilised immediately and as announced in the response to the consultation, a voluntary approach will be adopted initially to the implementation of cost-effective improvements to existing non-domestic buildings. This regulation making power is intended for future use if a voluntary approach is considered inadequate for delivering emission savings.

Draft ‘mock’ regulations for this will be provided for the Transport, Infrastructure and Climate Change Committee to consider before Stage 2 of the Bill process begins. These draft regulations will also be shared with the Economy, Energy and Tourism Committee.

Renewable Heat

Scottish Ministers will seek to amend section 51 to introduce a commitment to produce a renewable heat action plan and to update it regularly.

Waste Reduction and Recycling

Amendments to section 58 will be sought at Stage 2 to refine the deposit and return provisions in the Bill to do the following:

- ensure that any deposit and return scheme can be operated under a clearing-house system;
- extend deposit and return schemes to items other than packaging; and
- address splitting the deposit, or making charges, to ensure that the costs of running a scheme can be covered.

**General technical amendments**

In addition to the amendments in key areas which are detailed above, Scottish Ministers intend to introduce a small number of technical amendments to existing Bill provisions.
ANNEXE D

List of other written submissions in response to the call for views from the Transport, Infrastructure and Climate Change Committee and the Rural Affairs and Environment Committee.

Transport, Infrastructure and Climate Change Committee responses which focussed primarily on the main provisions of the Bill as set out in parts 1-4:

Organisations
Aberdeen City Council
Aberdeenshire Council
Association of British Insurers
Association for the Conservation of Energy
Baggit Limited
Chamber of Shipping
Changeworks
Children's Climate Change Project
Christian Aid
Church of Scotland
City of Edinburgh Council
Climate Change Business Delivery Group
Confederation of Passenger Transport UK
Consumer Focus Scotland
COSLA
Crown Estate
Diageo
East Ayrshire Council Department of Neighbourhood Services
East Lothian Council
Eco Renovation Network
Energy Saving Trust
Falkirk Council
Fife Council
First Group
Friends of the Earth Scotland
Glasgow City Council
Green Group City of Edinburgh Council
Highland Council
Historic Houses Association for Scotland
Holyrood 350
Living Streets Scotland
Microgeneration and Energy Efficiency Bill Steering Committee
National Library for Scotland
NHS Dumfries and Galloway
NHS Greater Glasgow and Clyde
NHS National Services Scotland
NHS Tayside Estates Department
North Lanarkshire Council
Oxfam Scotland
Renfrewshire Council
Royal Society of Chemistry
Royal Society of Edinburgh
Royal Society for the Protection of Birds
Salvation Army
Scotch Whisky Association
Scottish Association for Public Transport
Scottish Building Federation
Scottish Catholic International Aid Fund
Scottish Environment Link
Scottish Environment Protection Agency
Scottish Food and Drink Federation
Scottish Natural Heritage
Scottish Qualifications Authority
Scottish Renewables
Scottish Rural Property and Business Association
Scottish and Southern Energy
Scottish Water
SIMPAC Ltd
Spokes
Stop Climate Chaos Scotland
Strathclyde Partnership for Transport
Tayside Foundation for the Conservation of Resources Ltd
Tearfund
Transform Scotland
Unison Scotland
Unite the Union Scotland
Waterwatch Scotland
World Development Movement
WWF Scotland
Individuals
Patricia Abel
Dr Thorsten Ackermann
Amanda Addison
Regina Alcock
Jim Affleck
Graeme Allan
Alexa Allen
Dr Lesley Alton
Kirstie Anderson
Clare Andrews
Eric Annandale
Linda Ashera
Ruth Atkinson
Dr Elizabeth Auty
Nigel Bagshaw
Katie Nicoll Baines
Anne Bankier
Lang Banks
Rodrigo Barnes
Sara Barry
Reade Beaudoin
Julian Begg
Cameron Bell
Kenneth Bell
Paula Bell
Nadia Bessos
Alexandra Birch
Tim Birley
Victoria Bowdidge
Michael Black
Callum Blackburn
James Blake
Antje Blischke
Robert Boath
Susan Bonar
Dr Susan Bowie
Lindsay Bratton
Anthony Brightman
Jennifer Broadhurst
Annabel Bromley
Dr Irene Fortune
Mary Fraser
Jamie Fry
Stephanie Gardiner
Jonathan Geary
Cara Geddes
John Gordon
Anna Goss
Harry Goudie
Stephanie Graf
Ross Graham
Amy Gray
Claire Green
Hugh Green
Oriole Hall
Colin Hamilton
Antosa Hamilton-Isherwood
Iain Hannah
Carol Harley
Adam Harrison
Sally Harrower
Dr Piers Hart
Stuart Hay
Nick Haycock
Michael Hellicar
Rosalind Henderson
Judy Hills
Kenny Hogg
Christina Hollinshead
Erica Hollis
Laura Hopkins
Tim Hughes
Michael Hui
Roger Humphry
Sandra Hutton
Tim Jacobs
Mark James
Gayle Jamieson
Bryan Jeanes
Pauline Jewett
Dr Guy Johnson
Alan Jones
Dr Gus Jones
Tessa Jones
Robert Kay
Fiona Kelly
Laura Kelly
Laura Kemp
Daniel Kirby
Clare Kirtley
Claire Laing
Dianne Laing
Tamara Lang
Paul Latham
Lukas Lehmann
Elizabeth Leighton
Emma Levy
David Liddell
Dr George Lindsay
Katy Littler
Justin Littlewood
Charlotte Longmuir
Adean Lutton
Rebecca Lyon
Louise McCafferty
Graeme McDermott
Claire MacDonald
Fiona Macdonald
James MacGillivray
Dr Donald Macintyre
Jilly McKay
Gillian Mackie
John McKinlay
Cameron McLatchie
Gillian McLean
Linda Macniven
Charles Macpherson
Marilyn Ann Mcpherson
Betsy MacQueen
Nkiruka Maduekwe
Paul and Ana-Maria Maguire
Sandy Main
Transport, Infrastructure and Climate Change Committee, 2nd Report, 2009
(Session 3) – ANNEXE D

David Mansfield
Aidan Marshall
Kirsteen Marshall
Susan Martin
Eileen Mauchline
Ross Meikle
Colleen Middleton
Alison Mitchell
Clark Mitchell
Vivienne Moir
Miguel Molina
Dr Paul Graham Morris
Alexa Morrison
Jonathan Morton
Shona Munro
Ben Murray
Alison Neil
Iona Nelson
Paul Nicholson
Eric Nisbet
Elsa Nutt
Margaret Nutter
William O'Hare
Filipa Oliveira
Donald Orr
Lissa Orr
Rebecca Osborn
Jonathan Pacitti
Elsa Pancirolli
Richard Pascal
Jan Paterson
George and Heather Paul
Margaret Peacock
Aimee Penman
Ute Penny
Catherine Peters
Allan Price
Bob Pringle
Sarah Pritchard
Gideon Rathinaraj
David Rennie
Catherine Stevens
Barbra Stewart
Dani Stewart
Julie Stoneman
Francis Stuart
Ninian Stuart
Cosmo Sutherland
Stuart Tait
James Taylor
Margaret Taylor
Yvonne Taylor-Robertson
Yann Tessier
Paul Tetlaw
Anne-Marie Tierney
Dr Barbara Tinto
Fiona Tinto
T Tung
Margo Van Greta
Sue Walker
Alice Walsh
Morag Watson
Susan Watt
Barbara Weir
Eric White
Gillian White
Adam Whyte
Tharindu Wijetunga
Gregg Wilkie
Jaimi Williamson
Sarah Williamson
Gordon Wilson
Janet Wilson
Laura Wilson
Marion Wilson
Scott Wilson
Sheila Wiseman
Monica Wojcieszek
Stephanie Wolfe-Murray
Fiona Wolfenden
Katy Wright
Angus Yarwood
Rural Affairs and Environment Committee responses which focussed primarily on three areas of the Bill – the role of the Forestry Commission (section 47), Waste Reduction and recycling (sections 52 to 61) and Muirburn (section 46):

**Waste Reduction and Recycling**
Ahmed, Ali Raza
Ahmed, Munir
Association of Charity Shops
Baggit Ltd
Barnes, Graham
Barnes, Linda
Barnett, Mark
Becker, B
Bell, Willie
Berrie, S
Beverage Can Makers Europe
Boyle, Paul
British Polythene Industries PLC
British Soft Drinks Association
Carrier Bag Consortium
Calder, Lauren
Calder, Marion
Calder, Tracey
Carrs, Fred J
Clarkson, Hugh
Collins, Stewart
Cunningham, John
Community Recycling Network Scotland
Deeks, Marlene
Dick, William
Douglas, Archie
Douglas, Yvonne
Dowds, Louise
Doyle, J
Dunbar, Susan
Dunslay, Yvonne
Edwards, Anne
Elliott, Hazel
Federation of Small Businesses Scotland
Fleming, Kerry
Galisden, Amanda
Giddy, Sandra
Hendry, Grant James
Hamilton, William
Houston, David
Jervis, B
John Lewis Partnership
Lammie, L
Lammie, Lynda
Lamont, Claire
Lee, Donna
MacDonald, J
MacDonald, V
Martin, Derek
McCann, Craig
Millar, D
Miller, Roseanne
Monteith, Alastair
Murdoch Brothers Butchers
Murdoch, J
Murdoch, Sandi
Nicolson, Jim
Robson, Lynne
Saunders, Colin
Saunders, David
Scott, Douglas
Scott, L
Scott, Mary
Scottish Alcoholic Drinks Producers
Scottish Environment Services Association
Scottish Food and Drink Federation
Scottish Grocers' Federation
SEPA
SIMPAC
SIMPAC Appendix A
SIMPAC Appendix B
SIMPAC Appendix C
Shaws Fine Meats
Smeaton, Margaret
Sutcliff D, McArthur K, Smith S
Tierney, A
Timmins, P
Tough, Alastair
Walker, Carri-Anne
Walker, Dr Robert B
Walker, P
Wallace, Christine
WRAP Scotland
Young, Ailsa
Young, Nairn James

Forestry
Aberdeenshire Council
Archaeology Scotland
Balfour, Dr Jean
Blow, Stephen
Confederation of Forest Industries
Fairweather, Peter M
Forestry Commission Trade Unions
Highland Council
Institute of Chartered Foresters
Ireland, Duncan
James Jones and Sons Ltd
Kennedy, Gordon
Mulgrew, John
Loch Lomond and The Trossachs National Park Authority
Mackie, Stewart
Munro Sawmills Ltd
National Farmers’ Union Scotland
National Trust for Scotland
Ross, Chris
Royal Society for the Protection of Birds
Saunders, Colin
Scottish Environment LINK
Scottish Natural Heritage
Scottish Renewables
Scottish Rural Property and Business Association
Scottish Tourism Forum
Stewart, Emma
Taylor, John
Thomas, Ian
Thorfinn, Simon
Tweed Valley Tourist Consortium
UK Forest Products Association
Woodland Trust Scotland
Wood Panel Industries Federation

Muirburn
BASC Scotland, GWCT Scotland and RSPB Scotland
Game & Wildlife Conservation Trust
Royal Society for the Protection of Birds
Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

Aberdeen City Council is fully supportive of the ambitious proposals for an 80% reduction target for 2050 and the inclusion of aviation and shipping emissions.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

The Council supports the achievable interim targets set out from 2010 to 2022. These are essential to promote early and continued action however it must be stipulated that for a Local Authority budget reporting periods should be in multiples of four to reflect the political cycle.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

The Council accepts that the definition of Scottish emissions is to be based on source emissions due to the complexity of other emission accounting proposals. The Council is also supportive of the inclusion of international aviation and shipping emissions.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

The Council agrees with the Scottish Government gaining expert advice from the UK Committee on Climate Change in the short term. However, it may be required to clarify when the Scottish Ministers intend to review the effectiveness of the advice from this Committee.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?
Aberdeen City Council would like to emphasise that the reporting mechanism regarding electricity generation should exclude any electricity generated from renewable sources for example Photo Voltaic or biomass CHP as this displaces electricity drawn from the grid or any electricity that feeds carbon neutral electricity into the grid. After all the aim is to report on electricity that adds to carbon emissions.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

Aberdeen City Council welcomes the proposed action plan but would like to see a commitment that Scottish Local Authorities will be given the lead responsibility for achieving carbon emission reduction in the domestic sector. This legislation will form the basis for the next stage in the Home Energy Conservation Act. The Council is aware that responsibility for this may fall to a non profit organisation such as the Energy Saving Trust, and are concerned that they may not be able to deliver.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

The Council agrees with the proposal for renewable sources of heat however believe that the provision should be extended to incentivise the utilisation of waste heat even when it comes from non-renewable sources for example to heat buildings or greenhouses in market gardens. If this were included, waste heat from centralised electricity generation or from a range of industrial processes could be captured and used in district heating schemes in the short-term to displace other forms of space and water heating. That displacement would reduce carbon emissions and should therefore be included in the provision.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

- Waste prevention and management plans;
- Waste data;
- Deposit of recyclable waste;
- Procurement of recyclate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

What are your views on these proposals?

Aberdeen City Council is fully supportive of measures to reduce waste and increase recycling as part of an integrated strategy to divert waste from landfill. Currently the Council is developing a Citywide Waste Strategy to deliver this.

Reduction of packaging
The Council agrees with the Policy Memorandum to reduce packaging, however feels that the duty should not primarily fall to retailers. Sufficient duties must also be put on producers to eliminate waste before it is produced in accordance with the Waste Hierarchy. Producers should be required to modify products to encourage refills, recycling and bulk buying.

Deposit and return schemes
Aberdeen City Council supports the provision to set up a statutory deposit and return scheme and has in the past written to the Cabinet Secretary to ask for appropriate legislation to be included in the Climate Change Bill. The Council believes deposit return schemes address many sustainability and waste management policy themes and reinforces the polluter pays principle.

From a Council perspective return and deposit schemes are encouraged as they not only reduce litter but they may also reduce the volume of waste that local authorities are required to handle, thus reducing costs. If such schemes are introduced to the Bill, the Council would lobby for any unclaimed deposit funding to be distributed proportionally to Local Authorities to be used for waste and climate change actions, as seen in similar schemes in California, USA.

**Charges for carrier bags**
Aberdeen City Council fully supports the introduction of charges for single use carrier bags and has in the past fully endorsed the introduction of a tax on single use plastic bags. The Council has been campaigning to reduce the environmental damage caused by plastic bags since 2003.

As a Council we offer re-useable jute bags for a small charge. Dog fouling collection bags are biodegradable and offered for sale. Similarly the bags intended for food waste collection are also biodegradable and made from cornstarch. Aberdeen EcoCity offers cloth bags as a giveaway to encourage reuse and sustainable shopping.

Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

The Council are happy with the consultation process.
Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

These targets are in line with those in the Council’s previous consultation response.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

In its previous response the Council submitted that targets should be reviewed every 3 years to ensure they remained realistic. Reasonable advance notice provides an appropriate basis for decision-making.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

Any revision of targets should be based on scientific advice. Delivering these targets will depend on the technological and economic feasibilities, as well as efficiency gains and behavioural change. Building towards the 3% annual reduction prior to then is a realistic goal and would enable business to adapt.

Q.4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

The vast majority of the reduction in emissions at least should take place within Scotland, with offset used as a last resort. Setting a limit on units which can be purchased would ensure the appropriate balance in reduction measures is maintained.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?
The Council acknowledges the practical aspects of using this definition but notes that it has limitations. It ignores the emissions associated with imported goods by being based on production rather than consumption measures. No account is taken of the import/export balance of trade. The Council endorses the inclusion of aviation and shipping, as recommended in its previous response.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government's approach to obtaining independent, expert advice on climate change?

The Council endorses this approach on obtaining independent, expert advice.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland's emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

Regular reporting is an appropriate method of monitoring progress and enabling any changes in measures to be made.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

The proposals are broadly in line with the comments provided previously. However, there remains no duty on the Scottish Government to fund any additional duties imposed on public bodies, including local authorities. The Council considers that there should be a duty on the Scottish Government to provide additional funding. In addition, it would be preferable if there was a duty to consult on the reporting mechanism as well as the duties. This could be through CoSLA.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

The Council previously recommended that adaptation was one specific topic where guidance should be provided. This proposal will set a framework for this.
Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

The Council would be supportive of this, subject to decisions being based on scientific advice.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

The Council has submitted a separate response to the Forestry Commission Scotland (FCS) on its consultation on the potential legislative changes contained in the Climate Change (Scotland) Bill. The Council agreed that FCS could enter into joint ventures in renewable energy projects on the national forest estate. The Council raised a number of points, including: leased land should be retained for forestry; ring fencing funds for woodland creation; maintaining biodiversity and access standards, community relationships and partnership working; and support for the existing forest sector.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

The early production of an action plan would be welcomed. The action plan should provide clear, realistic guidance and supporting mechanisms, including on the ‘hard to treat’ existing buildings.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?

It is appropriate that Scottish Ministers are able to make regulations on energy performance of, and emissions from non-domestic buildings. These regulations should ensure that specified requirements not only cover disclosure of data but lead to improved performance. The adoption of the methodology used in England and Wales, by incorporating Display Energy Certificates (DEC’s) alongside Energy Performance Certificates (EPC), will add further credibility to this legislation, enabling actual energy usage to be monitored, reported and ultimately reduced.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?
Given the high proportion of energy required for heating in Scotland (around 45%), the Council welcomes the duty on the Scottish Government to promote heat from renewable sources. The incentives will need to be appropriate, in funding and timescale, to give sufficient support to installations in this sector.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas: Waste prevention and management plans;

Waste data;
Deposit of recyclable waste;
Procurement of recyclate;
Reduction of packaging;
Deposit and return schemes;
Charges for carrier bags.

What are your views on these proposals?

Section 52. Waste Prevention and Management Plans.
A waste prevention plan should be a plan which implements a strategy to reduce the amount of waste produced. To be effective the wording of section one needs to be adjusted to “to prepare a plan for the prevention of waste produced by or otherwise associated with their activities”

It is clear who would be covered by the term ‘persons of a specified kind’.

To be effective these regulations would have to include or be primarily aimed at manufacturers. This has been done in the past by extending producer responsibility, so the producer is responsible for the whole life cycle of their goods (Waste Electrical and Electronic Equipment Regulations are a prime example). This would follow the ‘polluter pays principle’. Again there is no indication as to responsibility for meeting the costs of such a plan.

The requirement to produce a Waste Management Plan should be part of a reduction plan, not a separate entity. A waste prevention plan is a waste management plan.

The guidance notes do nothing to encourage lateral thinking in terms of waste production. For example, “On a different scale, they might require an office to prepare a plan showing how it will minimise waste – for example by adopting double-sided printing. A person might be required by virtue of subsection (2)(a) to prepare more than one plan, for instance to deal with different types of waste.”

The term “showing how they will minimise waste” is not consistent with section 52 on waste prevention. Printing on both sides of a piece of paper indicates that waste is still acceptable. Replacing the need to use the printed form in the first place is waste prevention. Although the Council has an extensive computer network it still relies on paper forms and publishes committee papers. The latter, for example, could be replaced by electronic reports to be read on ebook type device or laptops in committee.

Section 53. Information on waste.
This information should be readily available as all movements of waste by law must be recorded and all waste facilities have to submit data to SEPA on a quarterly basis.
Section 54. Recyclable Waste Facilities.
This would be difficult to enforce. The waste prevention plan would cover the instances given in the guidance notes such as offices having paper collections. The original discussion on this included requiring shopping complexes and public buildings to provide separate containers for the collection of recyclables. This may conflict with anti-terror initiatives which have seen the removal of litter bins in some public places. A Waste Collection authority already has a duty to arrange the collection of business waste if requested to do so. Again this could be covered in the waste prevention plan without the need for additional regulation.

Section 56. Procurement of recyclate.
There is some concern with the term ‘recyclate’. Often production companies will include some of the processing waste back into the manufacturing process and class that as recycled material. The term ‘post consumer recyclate’ should be considered. In some cases there is also a down side to the inclusion of recyclate in the form of a loss of, or a reduction in warranty. Consideration will have to be given to allow those covered by this to make a life cycle judgement on the benefits of inclusion of recyclate.

Section 57. Targets for the reduction in packaging.
The EU presently leads on packaging waste targets through the Packaging Waste Directive. Consideration would have to be given on the possible negative impacts on manufacturing in Scotland should companies face greater cost in compliance compared with any other EU country.

Section 58. Deposit Schemes.
A regulation requiring a deposit and return scheme should only be considered after a full life cycle analysis has been carried out on the options available. Returnable bottles are normally quoted as a prime candidate for such schemes, but the environmental impact of the storage, collection and transportation, as well as the environmental impact of the processing of such products needs to be considered. In the past chemicals were used to wash out bottles for reuse, which in turn produces an effluent. There is also the potential to move some goods from packaging which could not be recycled into packaging which can, thereby side stepping the associated costs involved in deposit schemes. ‘Tetra Paks’ have a better carbon footprint and fare better in a life cycle analysis than glass bottles.

A second consideration should be contributions from the deposit scheme being used to subsidise local authority waste management. Not all returnable goods will be returned; therefore unclaimed deposits should be available.

Section 59. Charges for carrier bags.
The assumption is that customers are not charged for carrier bags by supermarkets. The costs for the provision of carrier bags are already passed back to the customer in an indirect form. Plastic supermarket carrier bags are probably the most widely reused item in any domestic property. In many cases they are made from recycled material. Where they have been restricted the overall use of plastic bags may not have dropped at all. Customers merely buy other plastic bags for the secondary use that a carrier bag would have been put to. There is no indication as to what would be considered or who would benefit from the charges. The only beneficiary may be the regulator of such a scheme.

Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?
The consultation was adequate.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?
No comment.
Q18 Does the Bill raise any equalities issues you would wish to highlight?

No.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

The Bill should assist Scotland in working towards sustainable development by reducing the use of finite resources.

Q20 Do you have any other comments on the Bill?

It is clear that the Bill will result in additional duties for local authorities. However, although the Financial Memorandum takes steps to costing the impact of some aspects, it is not clear what additional costs will be imposed on the local authorities and how these will be funded. Consultation/dialogue between the Scottish Government, CoSLA and the local authorities should take place on the resource aspects.

The issue of funding is equally applicable to businesses and residents as they seek to reduce emissions and costs. This should be recognised and addressed.

The Council welcomes the aim of the Bill and acknowledges the commitment necessary on all sides to the successful implementation.
WRITTEN SUBMISSION FROM THE ASSOCIATION OF BRITISH INSURERS

The Association of British Insurers (ABI) is the voice of the insurance and investment industry. Its members constitute over 90 per cent of the insurance market in the UK and 20 per cent across the EU. They control assets equivalent to a quarter of the UK’s capital. They are the risk managers of the UK’s economy and society. Through the ABI their voice is heard in government and in public debate on insurance, savings, and investment matters.

Summary

- The ABI supports the Scottish Parliament’s efforts to develop comprehensive climate change legislation for Scotland.
- We broadly agree with the proposals for climate change mitigation and we encourage the Scottish Parliament to pursue this approach in times of economic challenges and budgetary constraints.
- Preparing Scotland for our changing climate (‘adaptation measures’) needs to happen now. This should be achieved through integration into existing policy areas. We would welcome more focus on the need to set clear adaptation targets and a regular adaptation reporting requirement.

Introduction

1. It is essential that through these tough economic times climate change remains at the top of the Scottish Parliament’s agenda. Climate change is a reality, it is happening now and the impacts are being felt across the world – now is the time to adapt to, as well as mitigate the causes of climate change.

2. The ABI supports the Scottish Parliament’s efforts to develop comprehensive climate change legislation for Scotland, but more needs to be done to integrate adaptation and mitigation. An integrated climate change strategy needs to be implemented coherently across national, devolved, regional and local boundaries and it needs to maximise the synergies between emissions reduction (dealing with the causes of climate change) and climate risk management measures (tackling the consequences of climate change).

3. Achieving sustainable development is dependent on adequate protection of the environment, jobs and services as well as people and property. Most policies do not recognize these linkages and only focus on one aspect.

4. Climate risk, in particular the frequency and severity of extreme weather events, will continue to increase over the next 30-40 years, irrespective of action to reduce emissions. This inevitable climate change results from historic emissions and could only be reversed by taking carbon back out of the atmosphere and oceans. However, the current generation has justifiable expectations that the effects they are already experiencing and will increasingly experience from inevitable climate change should be reduced even while they are bearing the costs of avoiding further climate change that will affect future generations.

5. The ABI is working very closely with the authorities in Scotland in certain areas of climate risk management, such as flood risk management and we are encouraged by the commitment to develop effective long-term flood risk management strategies for all sources of flooding in Scotland.
Response to consultation questions

6. The ABI broadly agrees with the proposals for climate change mitigation in the policy statement and we encourage the Scottish Parliament to pursue this approach in times of economic challenges and budgetary constraints. Both mitigation and adaptation should not be perceived as a cost, but as an investment that will reduce the future losses caused by climate change. Below are our detailed responses to those consultation questions that are most relevant to us:

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

7. The ABI welcomes the targets set out in the Scottish Climate Change Bill. It is important to make early progress towards realistic but ambitious targets for emissions reductions. We are pleased to note that all greenhouse gases are considered, not just Carbon Dioxide.

8. Long-term targets are particularly valuable in offering certainty to investors and encouraging technological innovation. The opportunities to revise targets should, therefore, be limited, available only in clearly defined circumstances. We recognise that some flexibility is essential, but the proposed approach re-introduces too many uncertainties. No change in the target except through primary legislation should be allowed.

9. The Scottish Climate Change Bill should include targets not just for mitigating our impact on the climate, but also for adapting to the changing climate: it should set a series of targets to reduce flood risk across Scotland, for example by setting a maximum number of households and businesses at high risk of flooding from all sources, and the Scottish Government should be required to report on progress in achieving this target annually. Adaptation policy needs to be guided by clear objective - and target-setting. Adaptation objectives and targets need to focus on building adaptation capacity at local, regional and national level. It is very important to continue developing adaptation metrics to allow the monitoring of adaptation measures and to assess if action is achieving intended objectives.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government's approach to obtaining independent, expert advice on climate change?

10. We support the establishment of an independent, credible, expert body to assess the level of future targets and progress on their delivery, but this should not lead to more ineffective bureaucracy.
11. The remit of this new Scottish Committee should be extended to cover adaptation issues and its composition should reflect this. Its status should be similar to certain expert committees advising Government on health issues, commissioning research as needed to support its analytical work, publishing reports independent of ministers and adopting a transparent approach in its deliberations. The Committee should hold regular discussions with the UK Committee to ensure that resources are used efficiently and that there is the maximum amount of knowledge exchanged on these issues.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

12. The ABI welcomes the annual reporting arrangements proposed in the Bill. However, as well as a check on emissions, in each annual report there needs to be a re-appraisal of adaptation progress to inform each spending review. The report should consider external shocks and issue warnings if there appears to be insufficient banking or very heavy borrowing.

13. The Scottish Government should publish on an annual basis detailed interim plans and report on progress along the 25-year strategic plan (proposed under question 1), outlining the planned investment in flood defences and drainage systems over the following three-year period and the analysis underpinning these investment and prioritisation decisions, as well as initiatives taken in response to other climate risks, such as storm and heatwaves.

14. Periodic reviews of impacts and adaptation should occur on a cycle compatible with the Government’s spending reviews, providing an evidence base for decisions on departmental programmes and spending needs, rather than a fixed five-year cycle.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

15. We welcome the enabling powers to introduce a duty on certain parts of the public sector (i.e. local authorities and large public bodies) to take specified actions on climate change. We propose that the statutory duty placed on local authorities to reduce flood risk is extended to also include a wider duty to adapt. SEPA should be made the competent authority with responsibility for ensuring that flood risk from all sources is assessed and mapped, that plans are prepared to achieve agreed targets and that delivery to plan by all relevant bodies is monitored and reported. In particular, it is important that this national body works with all other stakeholders, especially at the local level to ensure that the Scottish framework reflects local needs and can be delivered locally, right through to involving the public and resident associations in being the front-line in the fight against flooding.

16. We welcome the provision in the Bill for local authorities and large public bodies to be required to report to the Scottish Government, however, these should be regular reports on their adaptation as well as mitigation measures.

17. These reports should be published annually, setting out progress towards the long-term targets and achievements of the milestones.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?
18. The predicted changes in the climate pose a threat to our current way of life as well as the resilience of the economy. It is therefore encouraging to see that the Scottish Government has begun to recognize the significance of adaptation. The ABI welcomes the decision to prepare a Climate Change Adaptation Framework for Scotland as an important step in dealing with climate change.

19. We support the approach to ‘mainstreaming adaptation’, something the ABI has been calling for years. Due to the holistic nature of the challenge, climate adaptation should be achieved through integration into existing policy areas. This ‘mainstreaming’ is the best strategy to ensure that climate risks are taken into account in all relevant decision-making processes.

20. The Bill should also have specific adaptation reporting requirements, along side the reporting on emission reductions. This would create the necessary accountability for adaptation.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

21. We welcome the requirement to produce an action plan for energy efficiency of buildings. It is very important to capture synergies and to avoid policy conflicts.

22. Understanding climate risks and the consequent investment in adaptation should not be a separate activity but should be integral to the consideration and delivery of emissions reductions. The cost of impacts and adaptation measures will soar in the second half of the century if inadequate action is taken to reduce emissions now. The two strands are complementary and additive - only rarely substitutable. At the same time, some measures to reduce emissions could actually increase the effect of climate impacts in the immediate future and reduce the scope for adaptation. For example, the more compact towns and high density developments needed to reduce transport and housing emissions lead to higher risk of flash flooding and heat island effects. This raises the importance of building in resilience to flooding as part of mitigation actions. Cavity wall insulation to improve energy efficiency results in much more costly and lengthy flood repairs. Therefore it is important to use different insulation products to achieve the necessary climate mitigation in flood risk areas. Solutions, which will often entail the same policy and regulatory instruments, need to find synergies between mitigation and adaptation measures, avoiding conflicts.
23. The action plan would need to focus on new buildings as well as retrofitting existing buildings - both with a view to enhance energy performance, but also resilience to climate risks. The public sector through its purchasing power should take a leadership role in this area. In this context we suggest a reference to the development of incentives to drive behaviour change and the need to minimising perverse incentives, both within a public and private sector context. The missing integration between mitigation and adaptation is also creating problems with regards to incentivising behaviour change. Some of the levers adopted to encourage energy efficiency could similarly be used to encourage climate resilience.
WRITTEN SUBMISSION FROM ASSOCIATION FOR THE CONSERVATION OF ENERGY

Introduction

The Association for the Conservation of Energy (ACE) is a lobbying, campaigning and policy research organisation, and has worked in the field of energy efficiency since 1981. Our lobbying and campaigning work represents the interests of our membership: major manufacturers and distributors of energy saving equipment in the United Kingdom. Our policy research is funded independently, and is focused on four key themes: policies and programmes to encourage increased energy efficiency; the environmental benefits of increased energy efficiency; the social impacts of energy use and of investment in energy efficiency measures; and organisational roles in the process of implementing energy efficiency policy. We welcome this opportunity to offer our views on the Climate Change (Scotland) Bill as introduced. ACE is a member of both Stop Climate Chaos Scotland and the Scottish Fuel Poverty Forum.

Stop Climate Chaos Scotland

Stop Climate Chaos Scotland is a coalition of more than 30 organisations campaigning together to tackle climate change. The coalition members include environment and development NGOs, faith groups, trade unions, community councils, student societies, women’s organisations, a mental health charity, and many others. In Scotland, the members have a combined supporter base of over 1.5 million people.

The Stop Climate Chaos Coalition Scotland priorities for the Climate Change (Scotland) Bill are that it must:

1. Set out a framework that will achieve at least an 80% reduction in greenhouse gas emissions by 2050.
2. Establish in statute annual emission reductions of at least 3% year-on-year from the start, not just from 2020, compatible with a fair and safe cumulative budget identified by the advisory body (see 4).
3. Include emissions from all sectors in the framework and targets set out in the Bill, including those from international aviation and shipping, from the very start.
4. Establish a Scottish advisory body, a Scottish Climate Change Commission, in the primary legislation to support delivery of the Bill when it is enacted.
5. Ensure that at least 80% of the effort to cut emissions takes place in Scotland.
6. Establish duties on all public bodies to reduce greenhouse gas emissions in line with the national target.
7. Set in place robust, transparent reporting measures so the Scottish Parliament is well informed on progress in meeting targets and Government is held to account on mitigation and adaptation.
8. Ensure that strong enforcement measures are set in place in statute.
9. Ensure Scotland counts all its emissions and reports on those produced by products and services we consume as well as emissions produced domestically.
10. Be explicit that sustainable development is core to the purpose and delivery of the statute in relation to mitigation and adaptation.

Summary

ACE welcomes the Scottish Government’s ambition in introducing a Climate Change Bill which sets statutory targets for reductions in greenhouse gas emissions and which supports the delivery of those targets. We also welcome the overall target of an 80% reduction in emissions by 2050 on 1990 levels, which is broadly in line with the current scientific consensus, and we welcome the fact that the Bill will cover all six Kyoto gases. However, we believe some crucial details about how these emissions cuts will be achieved are missing – in particular the lack of sectoral targets on the face of the Bill is a major failing. In addition, the section of the Bill focussed on energy efficiency (Part 5, Chapter 3) falls far short of what is needed to achieve the emissions reductions envisioned in earlier sections of the Bill. The Bill must be strengthened if it is to deliver a fair and equitable reduction in Scotland’s emissions and give business and industry the certainty we need to invest for emissions cuts.
There are, in our view, a number of conspicuous shortcomings in the proposals that will hamper the Bill’s effectiveness. Principle among these is the lack of any limit on the number of carbon credits that can be purchased from abroad. The Scottish Government should be aiming for 100 percent internal provision to achieve the Scottish target. This would allow the Scottish economy to benefit from early action to reduce emissions, and, if investment is suitably targeted, would also help to achieve existing Scottish Government targets on fuel poverty.

ACE believes strongly in the effectiveness of statutory targets, with a variety of incentives and sanctions including the option of affordable legal challenge. Statutory targets will not only give direction to Government, but are vital to give business the certainty it needs to make the appropriate investment decisions. For building materials (including energy efficiency materials), the investment required to increase production is immense, and local workforces must be trained up and retained. This is not a business where imports can be relied upon to make good a shortfall in domestic production – imports are more expensive because of the bulky nature of the materials. For this reason and several others, ACE supports sectoral targets, as set out below.

While the proposal for annual emissions reduction targets is welcome, it is disappointing that these annual targets are not set in statute from the start. A cycle of annual reports to Parliament on progress towards meeting the annual targets, ideally given by the First Minister, would help to deliver the required level of accountability.

Finally, it is essential that all greenhouse gas emissions, including those from aviation and shipping, are included in the Bill.

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050. What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

ACE welcomes the 2050 target, which we believe to be broadly in line with current scientific consensus. We also welcome the inclusion of all six Kyoto gases in this target. However, it is important that this target is kept under review by an independent Scottish Climate Change Commission, and if necessary, strengthened.

We do not believe that the interim target is sufficiently ambitious. If we are to tackle our contribution to climate change, it is crucial that we make early and deep cuts in our emissions. We would therefore prefer an interim target of a 50% cut by 2020. Choosing 2020 as the date for the interim target would bring Scotland into line with other UK, European and international targets.

It is also essential that the Bill include a cumulative emissions target as well as an end-point target. Indeed, without an overall cumulative budget the Bill will not guarantee keeping within a fair contribution to a two degrees Celsius target. A cumulative target would show global leadership.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive. What are your views on the setting of targets in batches from 2010 to 2022?

(see answer to question 3 below)

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year. What are your views on this approach or any possible alternative approaches?
It is disappointing that the SNP Government have not delivered on their 2007 manifesto commitment for annual statutory targets of at least 3% emission cuts from the start. Delaying implementation of the statutory annual targets will fail to deliver the political accountability that is required, and allow politicians to blame preceding governments for missed targets. Ministers cannot be allowed to avoid taking tough decisions on large new emissions sources, or on measures which are seen as politically unpopular. Shorter periods, and targets set in statute, make impacts of poor decisions obvious sooner, and provide a clear link between the Minister or administration that makes any poor decision and the emissions implications of that decision. Allowing a longer budget period would let Ministers ‘off the hook’ for the emissions implications of their decisions, and would therefore create an incentive for Ministers to make bad decisions. Increasing accountability would also increase the public confidence in Ministerial decisions and increase the credibility of Government action.

The annual targets would fit within longer budget periods. These longer-term budgets, along with a 2050 target and an interim 2020 target, would help deliver the certainty that business needs in order to plan ahead and ensure the required investment.

For all the reasons above, we believe it is essential that the Bill include statutory emissions reduction targets of at least 3 percent per year from the very start. The current wording is inadequate and will lead to a delay before the deep emissions cuts are delivered. Such a delay, in the face of what is a global emergency, is entirely unacceptable.

**Sectoral targets**

In addition to statutory annual targets from the start, it is essential for the Bill to require Government to consider emissions at the sectoral level. If each sector is not given specific targets upon which they must report, individual companies and businesses will present excuses as to why they should not have to reduce their emissions, and will try to ‘pass the buck’ to other sectors. Indeed, there is evidence that this is already happening within the Scottish Government: transport in particular appears unwilling to accept its responsibility in this regard. Each sector is trying to pass the responsibility for reducing emissions on to other sectors: the problem of ‘free riders’ is already developing.

This is particularly important in the case of the commercial and public services sector. This sector emits around 15 million tonnes of carbon per year UK-wide, with 13 percent of total UK carbon emissions arising from energy use in buildings in the service sector. Electricity consumption in this sector is especially high, due to excessive lighting, air conditioning and ventilation systems. Commercial sector energy use is growing fast and is projected to grow faster than any other sector under business as usual, apart from transport. According to the Carbon Trust, Scottish business wastes £100 million per year in lost energy.

For the above reasons, ACE supports the inclusion of sectoral targets on the face of the Bill. Specifically, we would advocate the following targets:

- By 2020 the general level of energy efficiency of residential accommodation has been increased by at least 20 percent compared with the general level of such energy efficiency in 2010.
- By the end of 2010 the general level of energy usage in the commercial and public services sector has reduced by at least 10 percent compared with the general level of such energy usage in 2005 and by the end of 2020 by at least 10 percent compared with the general level of such energy usage in 2010.
- 1 gigawatt of combined heat and power shall be installed in Scotland by 2010.
- By the end of 2016 so far as practicable all existing homes shall be low carbon.

The above are all targets or Scottish equivalents of UK targets to which the UK Government has committed itself but which are currently non-binding. By including them in the Scottish Bill, the Scottish Government would demonstrate clear leadership over the UK Government on this important issue. By failing to include them, the Scottish Government would in our view be effectively ceding leadership on this issue to Westminster and demonstrating a lack of ambition for Scotland.
In addition to the above, we would advocate the following targets, which would also demonstrate clear leadership from the Scottish Government:

- Emissions reductions from the public sector as a whole, and in particular from the Government’s own estate, of at least 5 percent per annum.
- Carbon emissions from the built environment in Scotland should be reduced by a minimum of 3 percent per annum.

Q.4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

In our view the Government should aim to deliver the Scottish target solely through domestic emissions reductions, thus maximising the benefit to Scottish business of preparing for the opportunities of a low-carbon economy. Such an approach would also reflect the moral position noted in the consultation paper last year: namely that cumulative per capita emissions since 1751 are higher in the UK (and, we presume, in Scotland) than anywhere else in the world, including the US and China, due to the fact that we industrialised before the rest of the worldiv.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

It is essential that the Scottish share of emissions from international aviation and shipping are included in the definition of ‘Scottish emissions’, and are covered by the Bill from the very start. To give this sector a free ride would be completely unacceptable and grossly unfair on other sectors of the economy which, rightly, are required to deliver their fair share of emissions reductions.

While we acknowledge that the current ‘bunker fuels’ method of calculating emissions from these sources is not perfect, it is better to have an imperfect method to calculate these emissions than no method at all. If and when there is international agreement on how these emissions should be calculated, the Bill (or associated secondary legislation) can be amended accordingly. Until such an agreement is in place, this sector should not be excluded from the Bill.

It is also important that the Bill requires Ministers to report annually on consumption-based emissions figures, to ensure that Scotland is not simply exporting its greenhouse gas emissions. The annual report to parliament should also include an indication of emission by sector, to ensure that all sectors are playing their part in achieving emissions cuts.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?
We would prefer the Scottish Government to establish its own Scottish advisory body which would ensure that advice and scrutiny of progress was sufficiently focussed on Scotland. Since the Scottish context is markedly different to elsewhere in the UK, we are unconvinced that the UK committee on climate change is sufficiently well resourced or has sufficient expertise to fulfil this role. Needless to say any Scottish body would need to work closely with the UK committee.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

Parliamentary scrutiny is certainly essential and reports on progress should be on an annual basis to Parliament, ideally in the form of an oral statement by the First Minister.

Speaking to a meeting of the Scottish National Party conference in October 2007, John Swinney MSP, Cabinet Secretary for Finance and Sustainable Growth, described his aspiration that the process of parliamentary scrutiny set out in the Climate Change Bill should be as terrifying for Ministers as “going to the dentist to have all your teeth pulled out, without anaesthetic”. His vision will only become reality if an effective system of annual reporting to Parliament against annual targets is set out. The reporting duties in the Bill do not yet meet the so-called ‘dentist standard’.

Reporting duties should be strengthened in order to meet this now famous ‘dentist standard’ so that they specify reports from the First Minister to Parliament not only on the annual emissions reduction, but also against an annual report from the independent advisory body on how well the Government should have done against its targets in the same period. This report should also specify the emissions cuts that have been achieved by each sector over the preceding 12 months. At the same time the First Minister must also set out any policy changes that will be made in the forthcoming year in order than emissions reductions are brought back on track. Only if all three of these conditions are met would the so-called ‘dentist standard’ be met.

We also agree with Stop Climate Chaos Scotland (SCCS) that the most appropriate forum within the parliament for scrutiny of any statement is not the convenor’s group, since this group does not meet in public.

However, while parliamentary scrutiny should be the primary means of holding the government to account, it should not be the only means.

The UK Government’s Climate Change Act provides for sanctions for failing to meet targets through judicial review. In addition, in the event of failure to meet targets, Ministers will be required to bring forward new policies to Parliament.

ACE believes that alongside tough parliamentary scrutiny, there must be strong incentives and effective sanctions. In addition we believe that a regime of financial incentives and penalties for government departments and other public bodies would prove an efficient way to promote compliance.

We propose that as in Westminster, in the event of a failure to meet a target or budget the responsible minister must come forward with new policies designed to compensate for any shortfall, regardless of its cause.

We also propose that by amendment of Strategic Environmental Assessment rules Parliament establishes a “call in” mechanism for new plans, programmes or strategies that would increase greenhouse gas emissions, so that both the Minister responsible for the plan, programme or strategy and the Climate Change Minister would have to justify approval of such a plan programme or strategy to parliament in advance of giving approval.
In addition to the measures set out above, we suggest a rolling ‘Climate Fund’ mechanism. The fund would be used to pay for mitigation and adaptation in Scotland and overseas, and would be open to be bid into by all Government Departments and public bodies (amongst others). It would be replenished through direct Government funding, and through fines levied against Government Departments and public bodies for failure to meet relevant climate emissions targets. This fund should be additional to, and not a replacement of, existing funds to promote energy efficiency and tackle fuel poverty.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

In the 2007 SNP manifesto, a clear commitment was given to ensure that the public sector sets an example on environmental matters. In the section headed ‘A Greener Scotland’, the manifesto states:

“Government, its agencies and other public bodies including the NHS and Local Authorities have a responsibility to take a lead.”

The Government can deliver on this pledge by ensuring that public bodies procure only buildings in the top quartile of energy performance, and that the public sector as a whole, and the Government estate in particular, delivers emissions reductions of at least 5 percent per annum and reports annually to Parliament on progress towards making those reductions.

In our view the Scottish Government must introduce duties on public bodies. Those duties should include a duty for public bodies to procure only buildings in the top quartile of energy performance, and to ensure that all existing buildings reach an energy performance certificate banding of ‘B’ by 2016 at the latest. This will ensure consistency between public sector rhetoric and public sector action. As Futerra Communications have found, the credibility of communications from the public sector on climate change and sustainability is undermined unless the public sees consistency between words and deeds. Setting a requirement that all public sector buildings are in the top quartile of energy performance would help to show that consistency.

We agree with SCCS that engagement with other public bodies by the Scottish Government is crucial. We also agree with SCCS that the way statute is currently drafted on this issue is unhelpful.

Finally, public bodies should be subject to a financial regime of incentives and sanctions as mentioned previously.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

Since this is not our area of expertise, we refer the committee to the SCCS submission in response to this question.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?
Q11  The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

Since this is not our area of expertise, we refer the committee to the SCCS submission in response to this question.

Q12  The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

The energy efficiency section of the Bill as it stands at present is woefully inadequate. If the measures contained within this section of the Bill are intended to deliver the emissions cuts envisioned earlier in the Bill, then the Bill is doomed to failure from the start. This section must be strengthened. Specifically, a number of studies have shown that voluntary measures to improve the energy efficiency of our building stock will not deliver the required emissions cuts vii: Ministers must take powers to require mandatory improvements in the energy efficiency of buildings, either at point of sale / rental or as part of a mandatory energy performance certificate, or ideally both of these. More detail on this is included at question 13 below.

While we welcome the fact that the energy efficiency action plan will now be set in statute, it is frankly embarrassing that we have been waiting for action on this from the Scottish Government (then the Scottish Executive) since 7 December 2004, and that it still has not been published except as a consultation. It is essential that an energy efficiency action plan is brought forward at an early date – we would recommend that the 12-month timetable in the Bill for initial publication of the plan is considerably shortened: 3 months would in our view be more than adequate. We do welcome the annual report to parliament on progress and the three-yearly review of this document, however.

We are also very concerned that the current drafting of this section would actually lead to a weakening of the duty on Scottish Ministers so far as energy efficiency is concerned. In section 179 of the Housing (Scotland) Act 2006, Ministers have a duty to improve energy efficiency in domestic housing. In contrast the drafting of this section of the Bill merely gives Ministers a duty to promote energy efficiency, while section 179 of the Housing (Scotland) Act would be repealed by the passage of this Bill. Such a weakening of the duties on Scottish Ministers is unacceptable. We would prefer that the duty on Ministers was to improve energy efficiency throughout its work – not merely in domestic housing.

Q13  The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?
We welcome the proposals in the Bill, which confer on Ministers the power to make regulations providing for the assessment of the energy performance of non-domestic buildings and emissions associated with such buildings. These changes are in line with the current recasting of the EU Energy Performance of Buildings Directive (EPBD), so will probably need to be implemented in Scotland sooner or later anyway. It is prudent of the Scottish Government to bring these measures in before they are required to do so, especially given the difficulties and delays encountered in implementation of the EPBD first time around.

However, we believe the extended powers do not go far enough since they still rely on a voluntary approach to energy efficiency which will not deliver the required reduction in emissions. While obtaining an energy performance certificate will be required for a wider range of public buildings than at present, there is nothing to require the building owner to actually carry out any energy efficiency improvements, and presently few incentives for them to do so. The measures set out in the Bill appear to be approximately the same as those set out as ‘option 2’ in the Scottish Government’s consultation on emissions from existing non-domestic buildings published last year. According to the partial regulatory impact assessment issued as part of that consultation, option 2 is estimated to deliver a cut of 2.12 MtCO2e by 2020. This appears to us to be a very ambitious figure given the measures proposed, but it nonetheless falls far short of the 3% per annum reduction required.

For comparison, research conducted by AEA technology suggests that the measures in the EPBD will deliver emissions savings of around 0.2 MtCO2e by 2020 in the domestic sector. No comparable figures exist for non-domestic but we can see no reason why non-domestic savings would be any higher. More recent research from Denmark, which has had an energy performance certificate (EPC) system in place since 1996, has found that the carbon emissions reductions from EPCs on their own (i.e. without any parallel fiscal or regulatory incentives) have been negligible. While we believe EPCs based on an operational rating to be a very useful tool in empowering tenants and building buyers, and that in combination with other incentives can certainly be useful in tackling emissions, we would advise against the Scottish Government relying upon EPCs in isolation to deliver the required emissions cuts from non-domestic buildings.

In order to deliver the level of emissions cuts set out in the earlier section of the Bill from the non-domestic sector Ministers must take powers to require building owners to improve the energy efficiency of their buildings. We believe the most prudent way to do this would be as set out in the Scottish Government’s consultation on this subject in late 2008: to make the ‘recommended improvements’ section of each energy performance certificate mandatory. We were very disappointed not to see these measures included in the Bill, since they appear to us eminently sensible and will help to deliver the level of carbon cut that the Bill envisages.

We were very surprised to hear officials from the Scottish Government, in giving evidence to the Economy, Energy and Tourism Committee on 4 February 2009, say that the proposals in their consultation document for a mandatory element to energy performance certificates were controversial. That is not our experience. We ran a consultation event on 22 September 2008 along with the Built Environment Forum Scotland and Thirdwave Consultancy Ltd, with some input from the Scottish Government. The event looked at the measures contained in the Scottish Government’s non-domestic consultation, and more than 50 people attended from public, private and voluntary sectors. The overwhelming majority of those building owners attending agreed that without the mandatory element, the sector could not achieve the envisaged cut in emissions. So long as finance in the form of grants and/or soft loans were available to building owners, those attending the workshop were supportive of the mandatory element. Both public-sector (Central Energy Efficiency Fund) and SME-sector (Energy Saving Scotland Small Business Loans Scheme) energy efficiency finance schemes already exist, though in our view these should be expanded and made much more widely available. We therefore fail to see any genuine reason not to implement the compulsory element to EPCs.

Since many non-domestic buildings are in the public sector, it would seem prudent to include further provisions in the Bill about the energy efficiency of public sector buildings. The Westminster Government has committed to only procure buildings in the top quartile of energy performance, and it would be disappointing if Scotland fell behind Westminster in this regard.
Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

As mentioned above, we do not believe that ‘promoting’ renewable heat is sufficient. We believe a duty must be placed on Scottish Ministers to deliver a renewable heat strategy and action plan, which should include specific targets for renewable heat. Given the background of an EU target that 20% of the EU’s energy (not merely electricity) be met from renewable sources by 2020, it is imperative that the Scottish Government prioritise action in this area.

In addition, we refer committee members to the submissions of SCCS and the Scottish Renewables Forum in answer to this question.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

Waste prevention and management plans;
Waste data;
Deposit of recyclable waste;
Procurement of recyclate;
Reduction of packaging;
Deposit and return schemes;
Charges for carrier bags.

What are your views on these proposals?

Since this is not our area of expertise, we refer the committee to the SCCS submission in response to this question.

Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

The consultation on the Bill itself was passable, though it is somewhat puzzling that the so-called ‘campaign responses’ were treated in a separate category to other responses. We should have expected all responses to be treated equally in a truly democratic system.

However, the major inadequacy in terms of consultation has been the lack of consultation on measures to reduce emissions from existing buildings, which were first promised back in February 2008. While the Scottish Government did consult in late 2008 on emissions from existing non-domestic buildings, this consultation did not involve any stakeholder events. Indeed, ACE along with the Build Environment Forum Scotland and Third Wave Consultancy Ltd organised our own consultation event around these proposals, since it became apparent that the Scottish Government were neither willing nor able to do so. Since domestic buildings account for approximately one third of our greenhouse gas emissions, it is deeply worrying that we are still waiting for a consultation on emissions from existing domestic buildings.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

No view.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

Yes, it raises issues of international equality: we therefore refer the committee to the SCCS response to this question.
Q19 Do you have any comments on the impact of the Bill on sustainable development?

We refer the committee to the SCCS response.

Q20 Do you have any other comments on the Bill?

Yes, we do.

The Bill as it is currently drafted sets out a useful framework for emissions cuts. The framework is far from perfect, as set out above, but it is a useful start.

However, the Scottish Government is in danger of willing the ends without delivering the means to those ends. This Bill appears to be setting in statute where Scotland should be, without identifying how we should get there. The reality is that getting there will require some difficult political decisions, even in the area of energy efficiency in buildings. It remains to be seen whether the Scottish Government is willing to make those difficult decisions. We sincerely hope that it is.

Conclusion

In our view the credibility and effectiveness of the Bill is paramount, and depend on three key issues:

- Setting the right targets in statute (80 percent reduction by 2050, with a cumulative target based on global equity; 50 percent by 2020; and at least 3 percent in any given year).
- Taking a comprehensive and inclusive approach – including emissions from all sources and all sectors including international aviation and shipping; and aiming to achieve 100% of the cuts domestically.
- Ensuring strong incentives and sanctions to deliver accountability and compliance.

Despite many welcome elements, the Bill falls short of a fully credible and effective package under all these headings, and we urge the committee to rectify these shortcomings at stage two. We trust you are able to take these views into account.

1 Defra (2006) Consultation on measures to reduce carbon emissions in the large non-energy intensive business and public sectors
2 Scottish equivalent of a UK figure. See Carbon Trust press release, 28 October 2004, Growing businesses throwing away £1 billion in wasted energy Available online: http://www.carbontrust.co.uk/NR/rdonlyres/EE9BAE6D-B613-4BF5-9875-F969268CAE23/0/20041028_Clocks_release_FINAL.pdf
3 The Sullivan report recommends that the next change in Scottish building regulations, in 2010, delivers low-carbon new homes. We suggest that, so far as practicable, this level of energy performance is required from all existing homes by the end of 2016. Gordon Brown made this pledge in a speech to the Green Alliance on 12 March 2007: “Over the next decade my aim is that every home for which it is practically possible will become low carbon.” See Scottish Building Standards Agency (2007) A Low Carbon Building Standards Strategy For Scotland also http://www.green-alliance.org.uk/grea1.aspx?id=1514
6 United Nations Environment Programme and Futerra Communications (2005) ibid
7 See for example Scottish Government (2008) AEA report on Mitigating Against Climate Change in Scotland: Identification and Initial Assessment of Policy Options
9 Workshop report available here: http://www.befs.org.uk/issues.htm [Link no longer operates]
Submission to the Transport, Infrastructure and Climate Change Committee

CLIMATE CHANGE (SCOTLAND) BILL

In response to the calls for evidence on Questions 1 - 20 I submit the following for consideration.

OVERALL TARGETS

Question 1

The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

It is nigh impossible to achieve such unrealistic targets such as 50% and 80%. In order to get anywhere near those targets all air freight and air travel would need to come to a complete standstill thereby depleting our country of inward investment and as a consequence uncompetitive in world markets.

Question 2

The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

No government should set those unrealistic targets without the full and equal support of other countries.

Question 3

The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

It has been scientifically suggested that greenhouse gas emission will decline by a few percent but start to rise in 2010 so yet again this is an unrealistic target to set.

NET SCOTTISH EMISSIONS ACCOUNT

Question 4

The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

No country should be allowed to buy and sell carbon units as this diminishes the whole point of the exercise.

Question 5

The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

Exactly the point I make in answer to Question 4.
The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

Why are we extending Edinburgh Airport in order that it can take more aircraft?

The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

In order that figures are not in anyway massaged, reporting frequency should be set in stone.

The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

No more quangos, we taxpayers already pay through the nose for what we have at the moment.

The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

As in answer to Question 8, far to many reports are delayed in order that figures can be massaged.

Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

We already have in place, why do we need more powers to vary the times when Muirburn takes place, surely this can be done through common sense dialogue.

The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The
The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

In other words, grow more trees. Do we really need more powers to do this.

ENERGY EFFICIENCY
Question 12

The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

Not before time, let's make a start with the Scottish Parliament Building which seems to think that energy grows on trees.

Question 13

The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

Will this mean an end to (a) the floodlighting of Edinburgh Castle and (b) an end to the fireworks display at Festival time. Just what we need to encourage tourism.

Question 14

The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

No more windfarms, which are not only costly and poor value for money, they are a blight on our countryside. We need to invest in wave power using the currents available in the Firth of Forth for example and to a certain extent we need to seriously ignore all the "green" factions and consider converting waste to energy.

WASTE REDUCTION AND RECYCLING
Question 15

The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

* Waste prevention and management plans;
* Waste data;
* Deposit of recyclable waste;
* Procurement of recyclate;
* Reduction of packaging;
* Deposit and return schemes;
* Charges for carrier bags.

I have forwarded a full and concise submission on this question which can be found on the RAE Committee calls for evidence page.
GENERAL ISSUES
Question 16

What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

Utterly disgraceful, given that the only specified consumer product within the Bill is carrier bags (it has yet to be defined what is meant by a carrier bag) not one single invitation has been sent out to anyone within this sector of the industry which is singled out for legislative powers.

Question 17

Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government on the consultation proposals?

No.

Question 18

Does the Bill raise any equalities issues you would wish to highlight?

The fact that no other bags other than carrier bags are included within the Bill is discriminatory under EU Legislation. Furthermore, any national agreement by retailers to charge a minimum price – even one requested by the Government itself – is likely in principle to be anti-competitive and would need to demonstrate it's exemption from the Competition Act to avoid the risk of a successful legal challenge.

Question 19

Do you have any comments on the impact of the Bill on sustainable development?

I refer to the answer at Question 14.

Question 20

Do you have any other comments on the Bill?

Scotland's Environmental and Rural Development Committee rejected proposals to introduce a charge for plastic carrier bags, Scotland's Rural Affairs and Environment Committee rejected proposals to introduce a charge for plastic carrier bags in 2008, both committees understood that to introduce a charge would increase not only waste in Scotland but increased emissions in Scotland. Section 59 contained within the Climate Change (Scotland) Bill should be removed.

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CLIMATE CHANGE (SCOTLAND) BILL

MEMO TO THE TRANSPORT, INFRASTRUCTURE AND CLIMATE CHANGE COMMITTEE

The Chamber of Shipping is the trade association for the UK shipping industry (including deep-sea bulk, short-sea bulk, containers, ferry, cruise, offshore support and specialised operators), working to promote and protect the interests of its members both nationally and internationally. With 144 members and associate members, the Chamber represents over 860 ships of about 23 million gross tonnes and is recognised as the voice of the UK shipping industry.

Question 5

The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

Question 20

Do you have any other comments on the Bill?

Summary

1. In the climate change debate shipping should be regarded as the best available solution to the global need for transportation. Shipping is the most energy-efficient mode of transport and the backbone of global trade – carrying 80% of all world trade and 92% of the UK’s goods. Furthermore, the carbon cost of carrying a tonne of freight by ship is 10 times less than by road and 100 times less than by air. Seen in light of the enormous volume of goods carried by ships, the CO₂ emissions from shipping is small. The reason for this is that shipping for many decades – even without regulation – has had a strong market-driven incentive to focus on reduction of fuel consumption. However the Chamber of Shipping fully acknowledges the need for further reduction of air emissions from shipping and believes that the way to achieve environmental protection must be found in a holistic manner. To be successful, such an approach should take into consideration the availability of technology to reduce emissions, the need to encourage innovation and the economics of world trade.

International shipping’s contribution to global carbon emissions

2. Precise figures concerning the contribution of international shipping to global carbon emissions are hard to come by. A variety of studies put the figure at anywhere between 1.5 and 5%. The International Maritime Organization (IMO) – the UN regulatory body for shipping – and most scientific commentators agree that a figure in the range 2 - 4% is realistic with an authoritative IMO study published in October 2008 putting the figure at 2.7%. While a precise figure would be helpful for measurement purposes, it is not necessary to wait for this before taking policy decisions. This is for two reasons; firstly, even at the higher end of the estimates of shipping’s contribution to carbon emissions, when seen in the context of the enormous amount of work performed, shipping remains by far the most efficient way to move bulk cargoes of goods and this position is unlikely to be usurped in the medium term. Secondly, despite its excellent carbon performance, the shipping industry is absolutely committed to reducing its carbon footprint in line with society’s expectations.
3. Looking at future trends (and regardless of the current economic conditions), it is likely that – in absolute terms – emissions from shipping will grow steadily for the foreseeable future despite efforts to improve the carbon performance of individual ships. This is because shipping is a service industry which responds directly to growth in world trade (without which expansion in the world economy could not occur) and that growth is likely to be greater than the achievable carbon reductions. It is worthy of note that no serious politician or government body has ever called for shipping’s carbon emissions to be reduced at the expense of slowing down the world economy. Any reductions in ships’ carbon emissions must therefore be achieved in a way that permits growth in the volume of goods shipped by sea.

Measuring Scotland’s share of international maritime emissions

4. Measuring Scotland’s share of international maritime emissions is extremely difficult, with almost all of the options failing to provide an accurate representation. Do we, for instance, wish to measure the relative contribution of the Scottish shipping industry (however defined) to that of the global shipping industry? Or do we wish to measure the amount of carbon generated by shipping in order to provide Scotland with the goods and services required? Or should Scotland accept responsibility for all carbon emitted by ships within its territorial waters? When considering the most appropriate methodology for allocating the share of global shipping emissions to Scotland’s Carbon Budgets, it should be remembered that shipping is the only truly international industry. Not only will ships make multiple calls in any one voyage, but they will often carry cargo destined for onward transport to a number of other countries. This makes allocating emissions extremely difficult and carries with it the distinct possibility of introducing error into the Scotland’s overall Carbon Budgets.

5. Measuring Scotland’s share of international carbon emissions will also be made more problematical for it is only the UK, as a nation state, which has a duty to report bunker fuels sales (even if only as a ‘memo item’) under the Kyoto agreement. Similarly, bunkers that are recorded by the UK as being used for domestic voyages would include fuel used on voyages between the constituent parts of the UK. There would therefore be a significant risk of double counting if both the UK Climate Change Act and any similar legislation in Scotland were to seek to account for the same emissions. It is not clear how this issue could be easily overcome except by utilising some broad measure of disaggregation.

6. When considering questions of measurement, the other side of the coin – enforcement – must also be borne in mind. The UK Climate Change Act, the Kyoto agreement and the EU Emissions Trading Scheme have all excluded mandatory carbon reductions from shipping for the same reason – it is virtually impossible to legislate for such a mobile and international industry except at the global level. For any country to impose unilateral legislation on a global marketplace is to deliberately impose additional costs on its own stakeholders which will not be shared by their competitors.

Measurement only or mandatory reductions also?

7. It is unclear to the Chamber what mechanisms for the enforcement of any national measures will not be capable of being easily and legitimately avoided by operators. This means that the total emissions reductions will, in practice, be less and may paradoxically be even higher if legitimate avoidance measures result in longer voyages. For instance, if Scotland were to impose a carbon charge on a ship’s final voyage into Scotland, a ship coming from China may decide to make an otherwise unnecessary call in France or Ireland in order to minimise the technical ‘final voyage’ into Scotland or, more likely, would call at an English port and move the goods across the border by another less carbon efficient transport mode such as road or rail.
8. If the Climate Change (Scotland) Bill was clear that it only wished to measure Scotland’s contribution – a position that the Chamber of Shipping could support – to international shipping emissions this could be done as soon as an agreed methodology was decided upon. A ‘bottom-up’ approach (i.e. obtaining data from individual ships) would yield more accurate data than a ‘top-down’ (e.g. averages of bunker fuel sales etc) approach, but it should be recognised that this would place a considerable burden on both ship-owners and administrations alike.

9. The Committee will doubtless be aware that the UK Climate Change Act has mandated that the government in Westminster must take account of emissions from international shipping when considering its carbon budgets. In order to assist this process the Chamber of Shipping has teamed up with WWF-UK (formerly the World Wildlife Fund) to assist the UK government in quickly developing a methodology for measuring carbon emissions from ships that is truly reflective of those emissions that can appropriately fall within the UK’s responsibility. Should the Climate Change (Scotland) Bill end up recommending a similar approach it may wish to consider whether our joint proposal to the Office of Climate Change might assist the body responsible for delivery north of the border. A copy of our joint proposal has been appended to this submission for ease of reference (see Annex 1 below).

A word on international agreements to control and reduce carbon emissions from global shipping

10. Measurement and control mechanisms for carbon are being actively discussed within the IMO and its Secretary General has announced his wish for that body to have agreed upon a concrete package of proposals in readiness for the UNFCCC Conference of the Parties (COP15) meeting in Copenhagen in December 2009. Meanwhile the EU have indicated that, should IMO not deliver a satisfactory package of measures by 2011, then they will look to include international shipping within the EU ETS by 2013. It is therefore clear that shipping will be included within some form of international / regional regime within a very few years.

11. The UK Government has played an active and constructive role in the negotiations at IMO and its policy position reflects well the realities of dealing with this particular sector. The Chamber of Shipping is keen that the UK Government should remain committed to an international solution delivered through the IMO. While we accept that measures delivered either unilaterally or through devolved administrations will always be an option open to governments, we would stress that these should be seen as options of last resort both in terms of effectiveness and ease of administering. To that end we would consider the inclusion of international shipping in the Climate Change (Scotland) Bill (while negotiations are building to a climax in the international arena) to be a retrograde step and one likely to hinder rather than help the broader discussions and efforts to reduce carbon emissions.

12. Carbon emissions trading and market-based instruments (MBIs) e.g. a fuel levy are politically very sensitive topics within the IMO. A significant number of developing, non-annex 1 countries (i.e. China, India, South Africa, Brazil etc) are of the opinion that they are not duty bound to seek carbon emission reduction measures through either the IMO or UNFCCC. Furthermore, they are also less willing to discuss measures to improve operational and technical efficiency and are extremely unwilling to contemplate the introduction of MBIs. The Chamber of Shipping, however, is firmly of the opinion that MBIs must play a part in efforts to reduce the sector’s carbon footprint and has openly called for international shipping to be subject to a global, open emissions trading scheme in December 2008.
13. The Chamber is also actively working with its international parent body – the International Chamber of Shipping (ICS) – and sister associations throughout the world to develop consensus for this approach on the understanding that it delivers the necessary environmental outcome while maintaining the necessary level playing field and ensuring that any solution does not discriminate between national shipping registers.

Prospects for developing new engine technologies and fuels, as well as more fuel-efficient operations

14. Shipping is a mature technology and the scope for improvement by full application of existing technologies is limited. Ships engines have improved steadily since their inception while hull and propeller designs are almost fully optimised. For instance, new hull coatings may provide some enhanced fuel efficiencies (and hence carbon reduction) in the order of 5% - 10%. While there is always room for improvement (and much is dependent on what constitutes an ‘existing’ ship), it is thought that a modern, well-maintained vessel may be able to improve its performance by about 5% if cost/benefit is considered immaterial. Given that fuels costs account for 30-50% of total voyage costs it should be recognised that shipowners have long had every possible commercial incentive to optimise fuel efficiency.

15. New technologies will certainly come on stream in time. But they are not available now and, no matter how many prototypes or concepts are developed, shipowners cannot be expected to invest in anything other than robust, proven technologies that are commercially available. However, shipowners are keen to see new technologies emerge and are willing to offer ships to assist in trials and development processes. Again it should be stressed that, given the direct link between fuel efficiency and carbon emissions, shipowners also have a direct commercial interest in the development of fuel saving technologies.

16. Alternative fuel sources may also have a role to play and bio-fuels can be used in ships engines. However, given the volume of fuel used by the c50000 merchant ships trading internationally (transporting every kind of cargo) and the current uncertainty surrounding the net benefit of bio-fuels, the industry would consider it prudent for legislators to better assess the impact of a substantial take-up of bio-fuels by such a large consumer as international shipping before reaching any decisions.

17. Fuel cells, solar-power, wind kites etc are all theoretically possible alternative technologies but they are best viewed as supplementary power sources rather than alternatives to the main propulsion systems on board. Nuclear power is technically feasible for ships and there are examples of nuclear-powered merchant as well as military ships. Issues of security and acceptability are, of course, dominant in that particular debate.
18. Reducing the speeds at which ships travel is often seen as a ‘quick win’ in terms of reducing carbon emissions from ships. While it is true that reducing ships’ speed has a dramatic effect on fuel consumption, the full range of underlying factors which have hitherto determined the speed at which ships generally travel remain relevant. It should be noted that shipowners / operators have relatively little say over the speed of their vessels as this is invariably determined by the charterer. Any reduction in ships’ speed would therefore require the consent of customers as they would in general have to wait longer to receive their goods. Shippers seek to maintain supply continuity and time of delivery is an essential competitive parameter. To maintain an acceptable service at slower speeds would mean an increase in the number of ships required negating much of the fuel savings otherwise expected. Furthermore, very little can be achieved on traditional slow-steaming bulk carriers as these already steam at little more than thirteen or fourteen knots. For ferries, travelling time for the passenger is a key issue in the extensive competition with other (less carbon efficient) transport modes; many Scottish ports are tide-bound which further reduces the flexibility of port arrival / departure times and; they should also be considered, especially in Scotland, as a bridge between outlying areas forming essential and reliable infrastructure. Any policy decision requiring vessels to slow down would need to be underpinned by a robust and detailed analysis of all the implications of such a measure.

Additional Industry Comments

19. The shipping industry has been working through the IMO, EU and national governments on how best to reduce carbon emissions for some time. As a result, it may be helpful for the Committee to note the broad principles which we feel will deliver a mechanism that delivers its environmental objectives while maintaining the competitiveness of the industry.

20. Firstly, and perhaps obviously, industry is only interested in delivering a solution that is effective in contributing to the reduction of total global greenhouse gas emissions.

21. In order to achieve this and avoid evasion, such a system must be binding and equally applicable to all Flag States.

22. Across all maritime legislation, the shipping industry consistently argues for a goal-based (as opposed to a prescriptive) approach, as being better suited to such a diverse industry and also allowing shipowners the flexibility to meet their environmental responsibilities in the most cost-effective manner.

23. Linked to cost-effectiveness are considerations that seek to limit or at least minimise competitive distortion and that, within the parameters of sustainable development, do not penalise trade and growth nationally or globally.

24. It has been suggested that shipping suffers from the lack of a Formula 1 to lead and drive technological improvements. Whereas the aviation industry has benefited from the civilian application of military technologies and also from the space-race, shipping has had no such high-end sector motivated by a completely independent set of cost considerations. We would therefore suggest that any control measures for shipping should actively support and encourage the promotion and facilitation of technical innovation and R&D in the entire shipping sector.

25. In addition, it is clear that any regulatory mechanisms adopted must be flexible in order to accommodate likely future technologies in the field of energy efficiency.

26. Finally in our checklist, the industry would look to ensure that the ‘back-office’ side of any regulation is given due thought. For any system to be workable, and for true environmental benefit to be gained, it is clear that the approach must be practical, transparent, fraud-free and easy to administer.
Domestic Shipping

27. We note that the subject of this inquiry is the possible inclusion of international shipping emissions within Scottish Carbon Budgets. However, the Chamber has concerns that emissions from domestic shipping (which can take place as part of an international voyage) should be properly attributed. We are unclear how this will be done. For example, it is not clear how foreign-owned competitors, which have had the opportunity to refuel abroad before making Scottish domestic voyages, will be treated? We would ask the Committee to satisfy itself that the methodologies for including domestic shipping (and its definition) within the Climate Change (Scotland) Bill are likely to achieve the stated objectives.

January 29, 2009

Robert Ashdown
Head of Technical Division
Chamber of Shipping
29 January 2009
BY EMAIL

TO: COMMITTEE ON CLIMATE CHANGE
CC: DfT, DEFRA, DECC

Dear Ben,

Shipping and the Climate Change Act

Following the decision of the UK Government to include carbon emissions from international shipping within the Climate Change Act for measurement purposes - a position which both WWF and the Chamber of Shipping endorse – the two organisations, the leading stakeholders in this field, have committed to working together in its implementation. Our common objective is to assist the UK government to quickly develop a methodology for measuring the carbon emissions from ships that is truly reflective of those emissions that can appropriately fall within the UK’s responsibility.

During our initial discussions we have reached some broad conclusions which we hope you will find useful in developing your own thinking. These are very much our preliminary thoughts and we remain eager to participate in the development of the methodology for measuring this most complicated of sectors.

Overall Coverage

‘International shipping’ is imprecise in meaning and its coverage will need to be defined. In general terms it would be taken to mean commercial shipping engaged in international voyages (ie not ‘domestic shipping’). We assume that it is not intended to encompass leisure yachts, military or other Government vessels or installations at sea that are not otherwise regarded as ships such as fixed installations used for the production and pumping of oil. It should be noted that existing IMO legislation contains definitions of many relevant terms (‘ship’, international voyage’ etc) and it would be sensible to use these wherever possible. It is not clear whether fishing vessels should be included, perhaps depending on whether their activities are encompassed elsewhere within the fishing industry itself.
Data on virtually all seagoing internationally-trading merchant ships of over 100 gross tons, including fishing vessels, is held within the Lloyds Register-Fairplay database and are allocated internationally-recognised unique numbers (IMO numbers). This would facilitate the inclusion of fishing vessels but we are not in a position to comment on whether similar methods of reporting and verification would be appropriate. Nonetheless, a clear definition of which vessels/installations are included will be necessary.

Consideration will also need to be given to an appropriate cut-off point for vessel size. Existing international maritime regulations, primarily from the IMO, apply only above certain levels of gross tonnage, though the levels vary for different purposes. For example, MARPOL, which deals with marine pollution, only applies to ships of more than 400gt; SOLAS, dealing with marine safety, applies to vessels of 500gt and over, while other conventions and agreements apply to vessels down to 100gt. Gross tonnage is considered the simplest and most appropriate measure for applying de minimise provisions.

In practice no commercial vessel below 100gt would be engaged in international trade, and very few in the next bands up. (As before, different considerations may well apply to fishing vessels.) The UK government will need to take a view on the most appropriate lower limit recognising the limits of the various data sets, the cost/benefit of measuring very small vessels and any effect the limit chosen may have on subsequent negotiations at EU or IMO level.

Possible Measurement Methodologies

Given that the Climate Change Act will, initially, only measure, rather than restrict, carbon emissions from international shipping, greater flexibility can be applied as to the methodology as there is a much reduced risk (so long as any associated administrative burden is low) that ships will choose to reflag as a result of any measurement requirements. Indeed, given that we would expect the methodology chosen to be flag-blind and non-discriminatory, reflagging for this reason alone would be pointless. However, it should be noted that methodologies which will work for measurement purposes will not necessarily work if mandatory reductions are later required. It will also be important that any methodology takes into account the risk of ‘double counting’ where other countries follow the UK’s lead and seek to take responsibility for their share of emissions from international shipping.

There are numerous ways in which carbon emissions from international shipping could be measured. For example, by ship, by location, by voyage, by fuel sales, by number of port calls. However, the more accurate methods of measurement are considered to fall into two broad approaches, one based on physical activity and the other based on economic activity.

Physical Activity would be essentially a voyage calculation, relying on data such as point of origin, ship type, fuel type and distance sailed. There are two particularly difficult aspects to take into account:

- if outward voyages are to be included there is a clear difficulty in determining what the next voyage is to be; the UK has a much lower level of export cargos than imports, and consequently many ship leave the UK empty to seek their next employment – a bulk carrier in ballast may go to Rotterdam to load scrap metal or to Argentina to load grain, depending on market opportunities at the time, and often when on the high seas. If this general approach is chosen, it would be simpler to take account of inward voyages only (of course, where a ship arriving in ballast for an export cargo has come from is equally arbitrary, it is at least known);
an appropriate methodology would need to be developed to fairly deal with vessels that have multiple loading and/or discharge ports. This is particularly relevant to the container trades, though applies also to other unit loads (such as new motor vehicles or refrigerated cargos) and some bulk trades in both petroleum/chemicals and dry commodities. For example, a containership on Far East service may have its first European port of call in the UK, with short voyages to Continental discharge ports or vice-versa; in addition there may be mid-voyage calls at container hubs in the Mediterranean. As well as the difficulty of determining an appropriate length of voyage, the split of cargo between that for the UK and that for elsewhere would be problematic (and touches on the need to avoid potential double-counting referred to above).

Measuring the Economic Activity could either be based on imports/exports or a percentage of GDP; or on shipping company economic activity. A significant advantage of the former approach is that it is better suited to providing the statistical base at the level needed to inform political policy-making whether in the UK, the IMO or elsewhere. In particular, it does not prejudge the approaches that might be adopted should specific instruments need to be developed later. Last, and by no means least, is the avoidance of a significant burden on business, much of which is not located in the UK and much of which is run by SMEs, as the Government already collects very extensive data on the UK’s sea-borne trade.

If the location of the shipping company’s activities were to be considered when assessing ‘economic activity’, the acknowledged difficulties of allocating that activity to the UK or elsewhere needs to be addressed. In that connection, we would draw your attention to work that is currently being undertaken by the Office for National Statistics (ONS) and the Department for Transport together with Lloyds Register-Fairplay to allocate ships within the world fleet according to “country of economic benefit” (COEB). It seems to us that, should the government wish to pursue a methodology based on economic activity, this work could be directly applicable and add to the range of different policy needs to which it might be usefully applied.

It is clear that both of these broad approaches (economic & physical activity) will give rise to a number of questions and queries and that these will need to be considered fully if the finally-adopted methodology is to have credibility as an appropriate measure of international shipping emissions. We conclude, however, from our initial examination that measurement by economic activity is likely to provide the Government with the data it requires to meet its responsibilities under the Climate Change Act with the lowest administrative burden on business.

Specific Considerations Related To Sections of the Shipping Industry

In addition to the application of different methodologies to conventional cargo-carrying merchant ships considered above, it is likely that there will be some sectors that are more problematic than others, depending on the broad approach chosen. For instance, measurements based on imports and/or exports would exclude most ships engaged in carrying passengers (whether cruise ships or ferries) or in the service sectors (offshore support vessels, dredgers etc). It would be possible to develop a statistical approach for some of those activities, for example relating passengers to the voyage concerned or to the numbers embarking/disembarking; though there would be difficulties to be addressed in relation to ferries where most are multi-purpose, carrying both freight and passengers in markedly different proportions according to time of day or seasonal demand.

For specialist service vessels it is recognised that a different method of assessment may be required, compared with those carrying passengers or freight. While any methodology decided upon will need to meet the circumstances of the majority of internationally trading ships, there are some significant sectors where credible measurement is important; for example, in the cruise sector, where passengers may base their purchasing decisions on the environmental performance of the vessels in question.
Definition of Domestic Shipping and Emissions Measurement

At present the UK measures the carbon emissions of domestic shipping based on bunker fuel sales as determined by the IPCC under the Kyoto framework. It is widely recognised that this measure under-records emissions. Given that many domestic voyages will be part of a sequence involving international legs (and such ships will purchase their bunkers wherever most economic), and that there are no significant differences between domestic or international ships except for their voyage patterns, it may be more appropriate for all shipping to be treated as ‘international shipping’, with the proportion of domestic shipping being separately assessed. Again, this would be less burdensome, fairer (as it would include internationally trading vessels performing a domestic leg) and be more accurate than the current arrangements.

Next Steps

The WWF and CoS hope that, by taking our thinking forward jointly on these important issues, we can assist you better as you move your own thinking forward. We would like to emphasis once again our willingness to be engaged in the detailed work going forward so that the most suitable methodology can be devised and applied as soon as practicable.

Yours sincerely

Robert Ashdown
Head of Technical
Chamber of Shipping

Peter Lockley
Head of Transport Policy
WWF-UK
1. Introduction

This response represents the view of Changeworks, an environmental charity that exists to improve quality of life and to protect the environment. We work with passion, integrity and in collaboration to develop and deliver innovative projects and businesses in energy, waste prevention and transport that inspire and empower people and communities to make a difference.

2. Reason for comment

Scotland’s housing stock remains largely energy inefficient despite existing programmes that are attempting to tackle this issue. The residential sector is Scotland’s biggest contributor to greenhouse gas emissions, accounting for around a third of all emissions. In addition to contributing to climate change, this inefficiency condemns large swathes of society to fuel poverty. Therefore raising the level of energy efficiency in the home is absolutely critical if Scotland is to meet the greenhouse gas reductions proposed in the Climate Change Bill, and to tackle its statutory commitment to eradicate fuel poverty by 2016. A radical overhaul of existing energy efficiency legislation is needed to achieve this, as the policy emphasis till date has been on low and zero carbon housing for new homes and largely fails to tackle the current housing stock, 85% of which will still be used in 2050.

Changeworks has for many years promoted innovative waste prevention projects aimed at both the public and small businesses. We understand the critical role of efficient resource use in delivering carbon savings. We are therefore keen to see a framework, which rolls out best practice and promotes the zero waste approach. We have chosen not to respond specifically on this and instead would like to lend our support to the response submitted by CRNS (Community Recycling Network Scotland – click link); this captures the experiences of organizations in the sector.

3.0 Specific comments

3.1 Setting the right context (Questions 1-5)

To be effective the Bill must establish an appropriate framework based on clear targets for reducing carbon emissions. In this respect Changeworks accepts the arguments presented by a wide range of organisations that as a minimum the Bill should:

A) Require a reduction of greenhouse gas emissions of at least 80% by 2050, reflecting the latest scientific evidence. However, the government should consider a cumulative emissions target as opposed to a point target as the basis for carbon budgeting.

B) Include annual statutory annual targets of at least 3% year on year reductions. At the moment, the draft Bill proposes delaying annual targets of at least 3% until 2020. There is an urgent need to reduce emissions now, so the Bill must require at least a 3% reduction in emissions per year starting immediately. Delaying this requirement until 2020 will stymie initial progress and require more drastic action in future years. Additionally if the cumulative approach to carbon budgets is adopted then the total emissions ceiling is likely to be breached.

C) Include emissions from international and domestic aviation and shipping. The Bill currently states emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should be absolutely clear that all emissions must be included at the outset. Failure to do this will require either punitive or less cost effective reductions in emissions in other areas, such as domestic housing.
3.2 Duties on public bodies (question 8)

Changeworks works closely with local authorities to develop projects that help to tackle fuel poverty and climate change. Although we believe the authorities we work with are also highly committed to tackling these issues, we are aware they face a number of challenges in managing competing priorities and allocating resources for climate-related projects. Clearly statutory functions are given priority in the overarching strategies of local authorities and this is reflected in current single outcome agreements. Unless local authorities have a statutory remit in relation to reducing climate change emissions, then there will be no greater action than at present. Such a duty would build on current voluntary action but highlight the need for greater urgency. The same case can be made for many other public bodies, especially those delivering services to the public or promoting economic development.

The Bill should therefore contain an immediate overarching duty on public bodies in relation to climate change. Any duty should be positive in nature. It should also be broad and empower local authorities to take action across their entire geographic area not just within their own services and properties. For instance local authorities should promote measures that influence the behavior of the public by rewarding actions that reduce carbon. Delivery of the duty would be taken forward through mechanisms such as community partnerships. The detailed implication requirements relating to the duty should be set out in guidance and regulations established through the Bill.

Currently councils are designated as Energy Conservation Authorities through the Home Energy Conservation Act 1995. This act must not be repealed unless a broader and stronger duty in relation to climate change and fuel poverty is put in its place first.

3.3 Tackling emissions from domestic housing (question 12)

We welcome the provisions requiring the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change. We believe the Scottish Government should provide much greater detail on specific action, in some cases this will require legislative changes that should be considered by the committee.

Changeworks has many years’ expertise working on household emissions. It is clear there are considerable opportunities for improving the energy efficiency of the housing stock to secure substantial carbon savings. However the current institutional framework does not lend itself to achieving this goal, and requires revision to improve the existing rate of progress in the housing stock. The problem is less a technical issue and more of a socio-economic one. The following issues must be addressed as a priority in any action plan that results from part 5 chapter 3 of the Bill. For the topics that require legislative changes by the Scottish Parliament it would seem prudent to do this during the passage of the Bill to create the necessary impetus for action. The issues that must be considered in the context of the Bill, are ensuring:

A) Scottish Government sets a clear framework of progressive targets to improve the energy performance of existing housing, reducing emissions by 35% by 2020 and 80% by 2050.

B) The Scottish House Quality Standard (SHQS) currently sets a minimum NHER of 5 for efficient central heating and insulation. This target needs to be more exacting to improve energy efficiency and cut emissions in the current housing stock. Furthermore the target should be increased to require a minimum NHER of 8 (or equivalent on the EPC scale) by 2016. This would be aligned with statutory fuel poverty targets. Ministers should be pressed to make this commitment during the passage of the Bill.
C) Any policy package is delivered in a way that is equitable and progressive, so that those at risk of fuel poverty do not bear further costs. A review of the current UK energy efficiency policies (EU ETS, Renewables Obligation and CERT) is essential as the costs are borne by all gas and electricity consumers through billing. Although the existing schemes are designed to improve energy efficiency and reduce fuel poverty they also have the capacity to increase fuel poverty by reducing the disposable income in low-income households through higher fuel bills. Furthermore, those on low incomes are far more likely to have a prepayment meter and consequently pay far higher prices for their energy. At current prices, prepayment meter customers pay £127 a year to £340 a year extra (depending on fuel supplier) compared to those who pay for example by direct debit. In essence the poorest members of society are subsidising the environmental costs of direct debit consumers. This practice needs to cease immediately and it is only fair that low income and vulnerable households benefit from climate change policy rather than being penalised by it. This argument is further supported by strong evidence that suggests that low-income households have a smaller carbon footprint than average. To ensure the appropriate balance is achieved specific clauses relating to fuel poverty should be considered, possibly updating the provisions in the Housing (Scotland) Act 2001.

D) Over time the roll-out of Energy Performance Certificates (EPC) to all households, not just those that have been subject to a recent rental or sale. This will promote the implementation of energy efficiency measures across all the housing stock. Greater adoption of measures would also be likely if council tax reductions were granted for energy efficient properties as established through an EPC rating. Another opportunity to roll out EPCs exists when a property owner is seeking a building warrant for improvements or extensions to the property. Landlords should be required to produce a valid EPC when they register with local authorities. The period of an EPC should be reduced from ten to five years, given the pace that standards in energy efficiency will change at, in coming years. The Bill should ensure that Ministers have the powers to do this after consulting stakeholders.

E) A requirement that properties being sold, rented, upgraded or extended meet an accepted energy efficiency standard (for example an E-rating on the EPC scale) before the property can be transferred. Rental income for energy inefficient properties should be capped given the high levels of fuel poverty associated with this sector and the ongoing failure of landlords to invest in their properties. Stricter energy standards should be required for accredited landlords.

F) Update the Home Energy Conservation Act (HECA). Firstly, integrate reporting and monitoring requirements on energy efficiency in housing with other duties in relation to carbon reduction and fuel poverty. Secondly, retain and reinforce local authorities’ responsibilities as energy conservation authorities, empowering them to co-ordinate the improvement of the housing stock across all tenures including the setting of targets.

G) Extend local authority powers in relation to Housing Act 2006 to include a range of basic energy efficiency measures (e.g. loft top ups and cavity fill) when enforcing household repairs. Meeting energy efficiency standards should be viewed as an essential repair not an improvement.

H) Revising communal repair clauses in the Tenements (Scotland) Act 2004 to include energy efficiency improvements. The barrier to improving flats must be addressed or these buildings will never be upgraded. Presently it is impossible in the majority of cases to secure the agreement of all the tenants to allow such works to proceed. Without this

1 http://www.energyhelpline.com - February 2009
amendment the majority of properties in Scotland’s cities will remain untreated, and upgrades will continue to be blocked by a minority of tenants.

I) Provisions to allow either the Scottish Government to arrange for very low interest loans to households for the purpose of energy efficiency improvements. Costs should be spread over a 10 – 20 year period, or repaid when the property is sold. This should be in addition to concerted promotion of Loan Action Scotland throughout the private rented sector and residents associations. Other schemes such as the Landlords Energy Saving Allowance should also be promoted, given the dire energy efficiency standards across this sector.

3.4 Promoting micro-generation

Changeworks sees merits in the further measures to promote micro-generation. Whilst there has been significant progress in recent years, particularly the SCHRI grants scheme, much more needs to be done to secure the roll out of these technologies. Early adoption of these legislative measures would clearly provide the necessary tools for delivering the targets in the Bill. These include:

A) Providing incentives, such as reduced business rates or reductions on Council tax, for business premises and domestic households who install new energy efficiency improvements and microgeneration measures.

B) Require Scottish Government to set targets for energy efficiency and micro-generation and local authorities to consider such technology by setting targets and strategies to take this forward.

C) Require all new building developments to ensure energy efficiency measures are installed as standard and include capacity for microgeneration (to initially deliver at least 15% reduction in projected emissions building regulations, rising to 100% by 2016).

D) Require annual reporting to Parliament on progress and implementation of these measures, including progress at a local authority level.

E) Empower councils or energy advice centres to bulk buy micro-renewables, which drives down costs, and offer extended low interest loans to households that offset the payback periods.

3.4 Zero Waste (question 15)

We are part of the CRNS network and endorse the views already submitted to the committee.

4.0 Conclusion

To be effective the Climate Change Bills must first set a clear and unambiguous framework, which works towards achieving the 2050 goals. To allow these targets to be met a retrofit strategy, including new legislative measures which remove current barriers to action, that addresses the energy efficiency standards of all existing properties, including hard-to-treat properties will be needed. Failure to take bold action will ensure that targets are missed and future generations will continue to suffer fuel poverty and health inequalities. Furthermore, tackling the energy efficiency standards of the current housing stock will create jobs, which is an added bonus in the current economic downturn. Similar benefits will be achieved in relation to concerted action to deliver a zero waste Scotland.
Robust legislation, strong leadership, and a complete package of measures that includes delivery, increased funding and capacity are all needed to ensure that emissions targets are met. Financial support will need to double from current levels to around £500-600 million per year. However this investment is minimal compared to the long-term cost of inertia. Similar costing and increased action to promote zero waste will also be needed if Scotland is to move beyond the status quo.

The Stern Review was explicit in recommending action now, rather than trying to mitigate the consequences of climate change. Failure to take adequate steps at this stage will have far greater costs for the economy and the planet in the future. Such a programme would also deliver social and economic benefits by ensuring that the legacy of substandard housing, and inefficient and wasteful use of resources is tackled. In this respect the Climate Bill points Scotland to the right way forward, but what is also needed are rapid steps along the path to lower emissions.
Children’s Climate Change Project 2008

"Which world would we want? One all burned up or one all lovely and equal? It’s your choice".
(MCP)

The Project: In spring 2008, 20 Members of the Children’s Parliament in Scotland were invited to take part in the Children’s Climate Change Project. This innovative project was brought together by WWF Scotland, the Children’s Parliament and Children in Scotland, to engage young people in the global debate on climate change and particularly the national debate on the Scottish Climate Change Bill which was being developed by Scottish Government.

Young people were not directly targeted in the formal consultations around the Bill. The organisations that developed the project felt that children should be engaged in this debate, not only as citizens in their own right, but also because they have arguably the biggest stake in the decisions made about what we do to tackle climate change. The project was kindly supported by Scottish Government and the Scottish Commissioner for Children and Young People.

In advance of a Climate Change Project Camp, all the children received packs of information and some tasks related to the project were undertaken at home. Over the weekend camp in Kinghorn, Fife in June 2008, the children learned about climate change, how Parliament works and the Climate Change Bill. They stayed in yurts, role played as scientists, historians, politicians and activists and discussed their aspirations for Scotland’s Climate Change Bill. The children’s views were captured in a mural which showed their own journey over the project and the journey of the Bill to being strong and delivering a green, happy ‘eco world’ or too weak (or thrown out) and resulting in a ‘burned up’ world. On return to their communities across Scotland, they talked with more children and adults, reaching around 200 children in the whole exercise of the project. The children exhibited the mural and presented their findings to the Scottish Climate Change Minister, MSPs and the Children’s Commissioner in the Festival of Politics in Edinburgh in August 2008.

The children have been supported to submit this short report of their conclusions as written evidence to the Transport, Infrastructure and Climate Change Committee of the Scottish Parliament and hope to continue to contribute to the debate on the Climate Change (Scotland) Bill on its journey through Parliament.

About the children: Twenty children from diverse social backgrounds and from across Scotland signed up for the Children’s Climate Change Project. They were aged between 9-14 years old and are Members of the Children’s Parliament (MCPs) in the Western Isles, Fife, North Edinburgh and South Ayrshire.

Key messages

The strongest message from the project is one of individual and shared responsibility:

Now is the time to make a difference and help stop climate change and Scotland should lead with a strong climate change bill.

Taking responsibility; taking action.

1. Children are worried about the future if we do nothing about climate change.
2. Children are concerned about how climate change affects people in Scotland, their health and wellbeing, as well as people in other countries.
3. Children are concerned how climate change affects other living creatures, particularly endangered species.
The children learned some important things:

4. The children became more familiar with the language and terms used when adults are talking about climate change. They also learned about the language of Parliament: a Bill, the role of a committee, MSPs and citizens.

5. They have learned about the nature of our atmosphere, about the causes and effects of greenhouse gases. They have explored energy production, transportation, and how our consumer choices affect climate change.

6. The children learned about how our lives have changed from hunter-gatherers to traditional and now modern farming, to use of machinery, to international travel and demands for food and other products from all over the world.

7. The children have learned about a growing world population, and how our history and industrial development here in Scotland has played its part in today's climate change.

8. The children learned about the damage that is done by plastics, packaging and oil based pesticides.

9. We use a lot of landfill. Children learned that anything that is biodegradable can break down, and that composts release less methane than landfill rubbish.

10. The children discussed how active citizens have been successful in changing things for the better throughout history.

Children want their voices heard. They want to be active citizens and have their say about climate change

11. The children would like to influence what politicians and Government decides about climate change.

12. The children had lots of discussion about different ways to do it.

Children have identified some important debates and dilemmas

13. The children said there should be more education and debate to inform children and adults about climate change.

14. The children explored and debated the pros and cons of various technologies in helping to reduce CO2 emissions.

15. The children felt that sometimes technology is too expensive.

16. There were concerns about environmental impact.

17. The groups were divided about nuclear power. Some children agreed that nuclear power is OK if “the waste could be dealt with safely” but others were strongly opposed to it.

18. The children debated whether laws or punishing people if they do not follow rules about things like composting or saving water is necessary.

19. The children considered how to get people off aeroplanes and on to other transport.

The children identified things we need to do about climate change:

20. The children identified things that individuals can do to reduce energy use and their impact on the environment. Individually, and in their family life, people can cut down on their personal energy use if they:

   a. walk and cycle more
   b. use their cars less or share your car
   c. use less household energy
   d. compost and recycle
   e. buy locally produced food or grow your own
   f. buy locally made products
   g. use public transport more
   h. fly less
The children concluded that:

21. We should use technology to help reduce the damage we do.
22. There should be more use of sustainable energy technologies like wave, hydro, tide, solar and wind power.
23. These should be affordable. They should be developed in a way that is sensitive to local people’s opinion and the environment.
24. We must protect forests.
25. The Government should help people use less energy by improving public transport
26. The Government should make laws that affect what people can do, if what they do is damaging the planet.
27. The Government could:
   a. ration petrol
   b. encourage people not to fly
   c. ban products that are bad for the environment
   d. make sure new buildings meet energy efficiency standards
   e. help people understand their own personal energy use and any damage they might be doing.

What should be in the Scottish Climate Change Bill?

The children came up with and discussed the following ideas for the Climate Change (Scotland) Bill. During role play as Members of the Scottish Parliament considering the Scottish Climate Change legislation they debated many of these ideas. The two marked ** were selected in particular, discussed and approved by the children’s own version of the Transport, Infrastructure and Climate Change Committee.

**Transport:**
- Each bus should have more than 20 people
- Scotland should spend more money on public transport
- The number of people in a car should be 3-4 people
- Make petrol that does not pollute the earth
- If they don’t have 3-5 people [in a car] they would get a fine of £100
- You should be paid to cycle (over 2/3 hours)
- Prices of short distance planes should go up to discourage people from going from Edinburgh to London by plane **
- Scotland should spend money making our public transport better
- They should lower the price of eco-friendly cars: electricity, hydrogen, etc.
- Make electric-normal hybrid buses
- Increase car tax/prices and reduce price of eco-friendly rural public transport
- The government should look into new, alternative fuel sources i.e wave, hydro-electric. Also, invest in hydrogen fuel cell cars. They are the way forward! **
- Cars have to be very fuel efficient by law
- In the suburbs, promote lanes for bicycles. This is safer.
- Car companies should be paid grants to invent cars that run on water or hydrogen
- Planes should fill up the whole plane with people before leaving the airport and if not all seats, most of them.

**On waste:**
- Recycle all plastic, cans, glass etc.
- Everyone should have an organic bin scheme like in the Western Isles
On energy:
- Turn off all electrical appliances when not using
- Scotland should encourage people to buy solar panels and wind turbines by making them cheaper.
- There should be a fine for people who waste energy
- An eventual ban on normal light bulbs to allow for energy-saving ones

General:
- Local food should be served in school dinners, hospitals and prisons
- Get a filtration system to save on water (recycle)
- Plant better trees in inner cities
- Cut the Scottish carbon dioxide emissions by 80%
- Earthship schools

Steering Group and Funders
This learning and consultation project was designed, facilitated and supported by a number of organisations. The Steering Group members are WWF Scotland, Children’s Parliament, Children in Scotland and Scottish Commissioner for Children and Young People. The Steering Group are most grateful to Scottish Government and Children’s Commissioner for the financial support to the project.

Thank you to all the children and adults who participated in and made this project possible.
WRITTEN SUBMISSION FROM CHRISTIAN AID

Introduction

Christian Aid believes climate change is a social justice issue. Poor countries have done the least to contribute to climate change yet are suffering its effects, first and most severely. Moreover, climate change is threatening to undermine development gains and make poverty permanent.

We therefore welcome the introduction of the Climate Change (Scotland) Bill as an acknowledgement that developed countries need to lead the way in drastically reducing their carbon emissions if we are to secure an equitable global deal to avoid dangerous climate change.

Christian Aid believes the Scottish climate change bill has the potential to be the most ambitious climate legislation in the world and could pave the way for Scotland to demonstrate international leadership ahead of the UNFCCC talks in Copenhagen in December 2009. However, the bill needs to be strengthened in a number of areas which we have outlined in our response below.

Christian Aid is a member of Stop Climate Chaos Scotland. Stop Climate Chaos Scotland is a coalition of more than 30 organisations campaigning together to tackle climate change. The coalition members include environment and development NGOs, faith groups, trade unions, community councils, student societies, women’s organisations, a mental health charity, and many others. In Scotland, the members have a combined supporter base of over 1.5 million people.

The Stop Climate Chaos Coalition Scotland priorities for the Climate Change (Scotland) Bill are that it must:

1. Set out a framework that will achieve at least an 80% reduction in greenhouse gas emissions by 2050.
2. Establish in statute annual emission reductions of at least 3% year-on-year from the start, not just from 2020, compatible with a fair and safe cumulative budget identified by the advisory body (see 4).
3. Include emissions from all sectors in the framework and targets set out in the Bill, including those from international aviation and shipping, from the very start.
4. Establish a Scottish advisory body, a Scottish Climate Change Commission, in the primary legislation to support delivery of the Bill when it is enacted.
5. Ensure that at least 80% of the effort to cut emissions takes place in Scotland.
6. Establish duties on all public bodies to reduce greenhouse gas emissions in line with the national target.
7. Set in place robust, transparent reporting measures so the Scottish Parliament is well informed on progress in meeting targets and Government is held to account on mitigation and adaptation.
8. Ensure that strong enforcement measures are set in place in statute.
9. Ensure Scotland counts all its emissions and reports on those produced by products and services we consume as well as emissions produced domestically.
10. Be explicit that sustainable development is core to the purpose and delivery of the statute in relation to mitigation and adaptation.

While Christian Aid supports the Stop Climate Coalition Scotland position in relation to annual reduction of at least 3%, we believe more ambitious annual reductions of at least 4% are needed to increase our chances of avoiding dangerous climate change. See response to questions 1 and 2 for further details.
Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

Christian Aid welcomes the target in the bill to reduce emissions from all greenhouse gases by 80% by 2050. It is widely agreed that to keep below a 2°C rise and avoid dangerous climate change, global emissions reductions of at least 80% by 2020 are essential.

However, the emission reductions pathway to reach 2050 target, and thus the cumulative emissions between now and 2050, are as important as the target itself. According to IPPR¹, global emissions need to peak between 2010 and 2013, and then decline at an annual rate of at least 4% by 2015-2020², if we are to have a ‘very low to low risk’ of exceeding the 2°C threshold. The current bill requirement that, between 2010 and 2019, Scotland’s emissions must be less than the previous year is therefore inadequate. If Scotland is to contribute its fair share of the global effort required to keep below the 2°C, the bill should set annual targets to cut emission reductions by at least 4% from the outset.

Christian Aid believes it would make more sense for the bill’s interim target to be set at 2020, in line with the interim targets of the UK and the European Union, rather than at 2030. In addition, to meet the need for early and deep cuts as outlined above, Christian Aid believes the interim target should be to cut emissions by 50% by 2020.

Once the temperature increases above 2°C, scientists say the risk of exceeding ‘tipping points’ where global warming will become catastrophic and irrevocable will dramatically increase. This would mean up to 1-3 billion people will face water shortages, millions will go hungry, and tens of millions could be at risk as diseases such as malaria spread. If the aim of the bill is for Scotland to contribute its fair share towards avoiding dangerous climate change this aim should be made explicit in the long title of the bill.

Q.4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

Christian Aid believes it is disingenuous to refer to a Scottish net emissions account unless a figure is put on how much of the bill’s reduction target is met through domestic effort i.e. emission reductions that are made in Scotland.

As it stands, the bill allows for an unlimited level of carbon credits to be purchased to meet the emission reduction targets. For reasons of global equity and international leadership, Christian Aid believes the at least 80% of the effort to meet the bill’s targets should take place in Scotland and not be ‘bought in’ from other countries.

Global equity
To avoid dangerous climate change, not only do all countries need to reduce their emissions by 80% by 2050 but industrialised countries need to lead the way in making deep, rapid cuts. A transition to low-carbon development in developing countries (through mitigations funds of the UNFCCC), needs to happen in addition to and not instead of, emission reductions in wealthy nations such as the UK.
Developing countries have contributed the least to climate change, are disproportionately suffering its effects and are the least able to finance mitigation and adaptation. In contrast, industrialised nations like Scotland, which bear the historical responsibility for climate change, have the greatest capacity to reduce their emissions to deliver an equitable global solution to the problem. The overall objective of the Bill must therefore be to guide Scotland to a low carbon economy and not to simply set targets which can be met by paying others to cut their emissions.

Quality of credits
In addition, Christian Aid has serious concerns about the quality of carbon credits generated outside the EU. It is questionable whether some of the projects from which carbon credits are generated are truly ‘additional’ (i.e., delivering emission reductions which would not otherwise have occurred) or contribute to sustainable development in the host country. Moreover, there is evidence to suggest that some “offsetting” projects have produced substantial social and environmental harm.

Therefore, if the bill allows for the purchase of carbon credits, it should specify the criteria that will be applied to ensure they are truly additional, purchased from projects, which have been certified as making a measurable, reportable and verifiable contribution to sustainable development, and benefiting the local community.

International leadership
Placing a requirement in the Bill, that limits the proportion of emission reductions bought in from elsewhere, would make Scotland the first industrialised nation to demonstrate its willingness to make deep cuts at home. This would place Scotland at the forefront of generating greater trust and confidence, particularly amongst developing countries, which is desperately needed in advance of the international talks in Copenhagen in December 2009.

Incentivising the traded sector
Stating in the bill that at least 80% of the emission cuts is met through domestic effort is entirely compatible with the operation of the European Union’s Emissions Trading Scheme (ETS). The ETS is a potentially valuable mechanism but both Stern and Turner have acknowledged it will not in itself deliver the required cuts in the timescale required, nor drive investment in a renewable power sector. The traded sector in Scotland accounts for approximately 50% of Scotland’s emissions and includes the power sector which is critical to the delivery of a low-carbon economy. The traded sector can therefore make a significant contribution to meeting the bill’s targets.

It has been suggested that because emissions from the traded sector are fixed by the number of allowances allocated through the ETS scheme, there is no reason to focus on these sectors. Followed through to its logical conclusion that would mean there would be no point in using available policy levers to reduce emissions from the electricity sector, such as energy efficiency measures or support for renewables.

It has also been argued that if the ETS sectors in Scotland reduced their emissions below the scheme’s cap that would only shift the emissions elsewhere in Europe through the sale of credits. Christian Aid acknowledges this argument but believes it is preferable that the ETS sector in Scotland is incentivised to show leadership by demonstrating how early deep reductions can be made at home and thus, the capacity for the ETS cap to be tightened.

Q 5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?
Christian Aid supports the inclusion of Scotland’s share of emissions from international aviation and shipping in the definition of Scottish emissions. We would like to see these emissions included in the primary legislation but allow for the methodology used to calculate these emissions to be revised in the future (through secondary legislation) in line with international reporting methods.

Christian Aid would also like to see a commitment in the bill to regular reporting on the emissions produced elsewhere that result from consumption in Scotland. By reporting on consumption, the Scottish Government would be able to identify appropriate levers to address all emissions arising from the behaviour of individuals in Scotland. Such reporting would also encourage individuals to address their behaviour and consumption to make a contribution towards reducing global emissions.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

Christian Aid would want to ensure that the body advising on the bill’s targets has sufficient expertise to understand the impact of climate change on vulnerable communities around the world and a comprehensive understanding of the policy levers available in Scotland to bring about early deep cuts in emissions.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

Christian Aid believes that in order that the targets set out in the bill are met and that Scotland makes its fair contribution towards avoiding dangerous climate change, there must be robust reporting arrangements that are transparent and accountable.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

The bill sets out a framework to reduce greenhouse gases. However, it is important that the reductions in greenhouse gases are not achieved by undermining the long-term sustainability of vulnerable communities. For example, one of the solutions that has been sought to cut emissions in rich countries is substituting biofuels for oil. This “solution” will need vast tracts of land for plantations, leading to biodiversity loss, food insecurity, conflict, and the forced ejection of millions of rural and peasant farmers from their lands.

As Christian Aid does not wish to see the targets in the bill met at the expense of vulnerable communities, it strongly supports a general duty on sustainable development in the bill.
Q20 Do you have any other comments on the Bill?

It has been suggested that there is a contradiction in the positions advocated by international development agencies in pushing for deep cuts in emissions and promoting fair trade from developing countries. However, this suggestion is a red herring as it is rich countries that dominate international trade and between which the majority of goods are exchanged. For example, the International Institute for Environment and Development has stated that the total emissions associated with the export of fruit and vegetables from Africa is the equivalent of 0.1% of the UK’s total emissions. Moreover, local or regional trade does not necessarily incur more emissions than international trade. Growing flowers in Kenya and flying them to the UK can be less than a fifth of those grown in heated and lighted greenhouses in Holland.

\[1\] High Stakes: Designing emissions pathways to reduce the risk of dangerous climate change IPPR 2006
Introduction

1. The Church of Scotland welcomes the Climate Change (Scotland) Bill and endorses the proposal to cut emissions of greenhouse gases by 80% by 2050.

2. For the Church of Scotland climate change is primarily an ethical issue and our interest in the bill is in its overall impact and its implementation rather than in the technical detail. However the Church of Scotland is a member of the Stop Climate Chaos coalition and supports the submission made by the coalition covering technical aspects of the bill (see appendix below). This submission is therefore confined to those questions that deal with broader issues. These are primarily questions 1-3, 7-9, 12, 13, and 20.

The Ethical Imperative

3. The church’s position is summarised by the following statement.

   The Church of Scotland is concerned that climate change poses a serious and immediate threat to people everywhere, particularly to the poor of the earth; and that climate change represents a failure in our stewardship of God’s creation. We accept the need to reduce the emissions of greenhouse gases urgently to avoid dangerous and irreversible climate change; and to promote a more equitable and sustainable use of energy.

4. For these reasons we strongly support the Bill and the contribution it can make to reducing greenhouse gas emissions. Although Scotland is responsible for a small share of global greenhouse gas emissions the example it sets through this legislation is admirable and the Scottish Parliament and Government are to be commended in jointly bringing forward this Bill.

Public Involvement, Engagement and Commitment

5. Our main concern is whether people in Scotland feel involved, engaged and committed to the legislation. The evidence from meetings with eco-congregations around Scotland is that many people are concerned about climate change and its impact but few people are aware of the Bill or how it might affect them. In the face of other more immediate and pressing demands in their lives most people tend to forget about climate change. Climate change is of general concern to many people but when major proposals arise such as the development of a new luxury golf course or a new bridge over the Forth the lure of new development is usually more powerful than concerns about climate change.

6. The importance of public engagement and support was highlighted in the debate on the Eco-Congregation Scotland programme held in the Scottish Parliament on 19 December 2008. Members contributing to the debate identified the importance of community involvement and how congregations can lead community responses to climate change. The Minister for the Environment, Michael Russell, identified that communication, along with mitigation and adaptation is one of the three aims of the Government’s climate change programme. We therefore believe that if it is to be effective the Bill should include provisions to require the Scottish Government to promote public awareness about the legislation and its targets; and to promote public involvement and engagement in meeting those targets.

Overall targets (Questions 1-3)

7. The Church of Scotland strongly supports the target of an 80% reduction in greenhouse gases by 2050. However the evidence from meetings with eco-congregations, presbyteries and other groups, is that this target is too large and too remote for most people to understand. Faced with such a distant and such a huge target people tend to recoil from the challenge. To aid understanding and engagement short term targets are essential. In meetings with eco-congregations we have identified that an annual target of 5% a year is helpful and generally welcomed by congregations as being challenging but realistic.
8. This approach was agreed unanimously by the General Assembly 2008 in response to a deliverance proposed by the Iona Community in 2008 and is now being used by Eco-Congregation Scotland as a target for eco-congregations across Scotland. This experience is relevant to the Bill. A target reduction of 5% each year is consistent with the 80% target by 2050 and would help deliver on this. As a tool of public engagement and involvement short term targets will be useful, if not essential, to help the Government move forward.

**Reporting duties (Question 7)**

9. The clauses on reporting duties need to be stronger to require the Scottish Government to set out how it has provided advice and information to the public, how effective that advice and information has been; and how it has promoted engagement and involvement in the delivery of targets. If the Government is not effective in this regard the Bill is likely to fail in its purpose. By way of example consider the impact of legislation that has been successful: the Smoking, Health and Social Care (Scotland) Act 2005. This legislation introduced the smoking ban that led to immediate and significant behaviour change in Scotland, change that has had a huge and positive health impact. The context of the Act was different and the requirement it made of people was very specific, but it would not have been successful without a government led campaign of advice and involvement, including a nationwide consultation exercise.

10. On the other hand there are other examples of legislation that warn what might happen if the Bill fails to achieve public support. The UK Equal Pay Act of 1970 sought to secure equal pay for men and women, yet nearly 40 years after its enactment there is still public debate and legal action surrounding its implementation. In both the public sector and in business equal pay has not been clearly and unequivocally achieved. We cannot afford to be in this position in 40 years time with climate change. The uptake and effective implementation of the legislation must be immediate if it is to be effective. And for this to happen one of the preconditions is widespread public acceptance and involvement. The Bill needs to embody this requirement and it may be that this section is an appropriate place to do this.

**Duties of public bodies relating to climate change (Question 8)**

11. Duties on public involvement and engagement could usefully be extended to all relevant public bodies. Local authorities and community planning partnerships in particular have a duty under best value to promote public engagement in their policy planning process and have now developed substantial experience and expertise in implementing this duty. They could take on public engagement on climate change issues relatively easily and play a major role in helping the government implement its proposals. Churches, congregations and other voluntary organisations could also play an important role and it would be helpful for the legislation to embody a requirement for public bodies to engage with voluntary organisations in the delivery of this duty.

**Adaptation (Question 9)**

12. As with mitigation, communities will have to be at the centre of strategies to promote adaptation. In its response to the Scottish Government consultation document on adaptation the Church of Scotland identified the importance of the Scottish government supporting communities across Scotland to help them formulate their own response to climate change. This would lead to consideration of the role of education; community learning and development; and of community and voluntary organisations. In this context the Climate Challenge Fund is an example of how the Government can reach out to voluntary organisations and help them engage in the action to respond to climate change. The Bill could include more specific reference to the need to engage with communities in developing programmes for adaptation; along the same lines as those suggested for mitigation above.
Energy efficiency (Questions 12-13)

13. The promotion of energy efficiency is a crucial response to climate change and the clauses are welcomed. However it may be appropriate to relate these duties to the need to tackle fuel poverty as the two issues are closely related. It might be appropriate for the bill to require the Government to take on a more specific duty to promote energy efficiency and tackle fuel poverty by including targets that will lead to a systematic improvement of the housing stock and to reduce the proportion of the population living in fuel poverty. Such targets would be challenging and would need to be supported by a substantial budget to be effective, but would lead to a measurable reduction in carbon emissions and of fuel poverty.

General issues (Question 20)

14. In conclusion, the Church reasserts both the importance of the legislation and its impact on people across Scotland. In the coming century climate change will change lives and while technical measures contained in the Bill are important, first and foremost, people across Scotland need to be engaged and committed to the challenge of responding to climate change. The Bill must therefore seek to involve and engage people and communities and set out clearly how the Government will be expected to do this.
Appendix

Stop Climate Chaos

Stop Climate Chaos Scotland is a coalition of more than 30 organisations campaigning together to tackle climate change. The coalition members include environment and development NGOs, faith groups, trade unions, community councils, student societies, women’s organisations, a mental health charity, and many others. In Scotland, the members have a combined supporter base of over 1.5 million people.

The Stop Climate Chaos Coalition Scotland priorities for the Climate Change (Scotland) Bill are that it must:

1. Set out a framework that will achieve at least an 80% reduction in greenhouse gas emissions by 2050.
2. Establish in statute annual emission reductions of at least 3% year-on-year from the start, not just from 2020, compatible with a fair and safe cumulative budget identified by the advisory body (see 4).
3. Include emissions from all sectors in the framework and targets set out in the Bill, including those from international aviation and shipping, from the very start.
4. Establish a Scottish advisory body, a Scottish Climate Change Commission, in the primary legislation to support delivery of the Bill when it is enacted.
5. Ensure that at least 80% of the effort to cut emissions takes place in Scotland.
6. Establish duties on all public bodies to reduce greenhouse gas emissions in line with the national target.
7. Set in place robust, transparent reporting measures so the Scottish Parliament is well informed on progress in meeting targets and Government is held to account on mitigation and adaptation.
8. Ensure that strong enforcement measures are set in place in statute.
9. Ensure Scotland counts all its emissions and reports on those produced by products and services we consume as well as emissions produced domestically.
10. Be explicit that sustainable development is core to the purpose and delivery of the statute in relation to mitigation and adaptation.
Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

The Council acknowledges that the proposed reduction targets are ambitious by international standards. Nevertheless, they are achievable with a robust supporting package provided by Scottish Government.

The Council believes that an emission reduction by 90% from 1990 levels will be needed to avoid runaway climate change if the growing international consensus on this issue is correct.

The Council believes that an interim target set at 2020 rather than 2030 would be better as this would tie in with dates set in other international agreements and the UK Climate Change Act and the recommendations of the UK Climate Change Committee.

The Council has set its own targets of 20% carbon reduction by 2015, 30% by 2025 and a target of a zero carbon economy by 2050. This commitment is backed by a detailed Carbon Management Plan and perhaps something similar should be considered in a Scotland wide context.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

It is the Council's view that setting targets in batches would allow a degree of flexibility in meeting the annual targets, but that this may not be desirable in the long run. It may lead to minimum levels of achievement in the earlier years and little hope of achieving the overall batch target. This strategy may carry a high risk of failure unless carefully managed. It may be more effective to set batches in 5 year terms to reduce the risk.

The Council also suggests that public accountability may be served by setting four year carbon budgets which run alongside Parliamentary terms; however these would need to be based on published annual carbon targets.

The Council believes that budgets should be set two to three years in advance.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

The Council believes that the impact on the climate of carbon emissions depends on total emissions, so delays in achieving emission reductions will exacerbate climate change. A very early move towards statutory 3% annual reductions is critical if a meaningful and adequate level of emission reduction is to be achieved.

The Council notes that the Scottish Government's own Council of Economic Advisers issued the following warning on 5th December 2008: "To reduce emissions by 80% will require an annual rate of reduction averaging more than 3%. The reduction likely to be achieved by 2011 is not sufficient to put Scotland on that downward trajectory”.

The Council believes that the implications of lower target reductions in the early years for meeting the 2030 and 2050 targets, and for overall carbon emissions over the period 2010 to 2050, should be clearly stated. This approach is in line with the principles of the Carbon Reduction Commitment (CRC) and is achievable. Consideration should be given to linking this proposal to the CRC in this respect.
Q4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

The Council is concerned that there is no reference as to the potential impact that the emissions scheme will have on SMEs in Scotland and the timeline when such a scheme may be implemented. New resources would be required to ensure that businesses in the capital can meet any new regulations and be fully equipped to take part in an emissions scheme. Edinburgh has been consistently ranked highly in quality of life and quality of environment (key determinants in choosing a business location) assessments in the Cushman & Wakefield UK cities monitor which tracks business perceptions.

The Council suggests that a weighting be taken into consideration for businesses in Edinburgh when setting any future carbon quotas that may be imposed. This should recognise the additional carbon burdens which local SMEs incur through their role or location within a vibrant capital city.

The Council believes that there is a need for a benchmark against which future reductions can be measured and there needs to be more local accountability and measurement of the performance of individual organisations or businesses.

It is the Council’s position that the purchasing of carbon units to offset failure to meet targets is contrary to the aims of the Bill and should not be allowed, or at the very least restricted. Attributing carbon units to the country of origin will encourage development of renewable resources. Buying in credits to set against Scottish emissions cannot be a substitute for effective and meaningful action within Scotland itself.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

The Council believes that emissions from international aviation and shipping must be included in the definition of ‘Scottish emissions’. The shift in the Bill which moves towards their inclusion is welcomed. Emissions attributed to Scotland should have a direct link to the country. In the case of emissions from aviation, such emissions should be attributed to the country of the airport of the origin of the flight, with some offset where multiple stopovers of the aircraft are part of the flight. It should not be applied in passenger terms; rather it should be the individual flight. This would have a major impact on the way hub airports are developed and would encourage consideration to be given to additional pollution from airport expansion, for example. No detriment should be applied to a country where international flights over fly their territory. The same principle should be applied to shipping using the port of origin of the voyage.

It is essential that the calculation of emissions fully accounts for emissions arising from production as well as from consumption; ecological footprinting may be useful in this respect.
Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government's approach to obtaining independent, expert advice on climate change?

The Council believes that independent, expert advice is essential. The Council welcomes proposals in the Bill to use the UK Climate Change Committee to provide scientific advice as there are many common issues that need to be addressed. The provision in the Bill to allow Ministers to create a Scottish version, if they see fit, may be acceptable if additional advice is limited to specific areas of climate change interest relevant to Scotland. The strong support from NGOs for the establishment of a new Scottish Climate Change Committee is noted.

The fact that membership of a Scottish Committee on Climate Change would include members with expertise/experience in business competitiveness, financial investment and technology development and diffusion is welcomed. However, it is of concern to the Council that this committee would, if the Bill is not amended, be appointed by Scottish Ministers, not Parliament. This may reduce public and private sector acceptance of its independence and scientific credibility.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

The Council believes that reporting requirements should be more specific and should include the performance of public bodies rather than a generic overview. CRC figures could be used as a comparator.

It is of concern to the Council that the Bill currently contains no consequences or sanctions for Ministers who miss their targets. Given that they are responsible for their success or failure, Ministers need to know what will happen if they fail. Ministers must be accountable.

Scottish Ministers should also report on the consequences for relevant emissions of all policy initiatives/programmes that can reasonably be expected to have a significant impact on emissions.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

It is the Council’s view that, given their central role in Scottish society, it is important that climate change mitigation and adaptation duties are placed on public bodies. Local authorities, in particular, are key to delivering reductions in emissions. However, adequate guidance and support will be essential to ensure that public bodies know what is entailed by new duties and what is expected of them in terms of reporting. Guidance should detail whether new duties extend to local government arms length organisations. Realistic resources provision from government to assist with implementing and fulfilling the requirements of new duties will be essential if local authorities are to play their part.

The Council believes that in the current economic climate, where new policies to address the economic downturn are being drawn up, it is fundamental that early guidance and realistic resources are outlined so that economic policies can be aligned with the overall carbon reduction policies promoted by the Bill.
The Council believes that major changes to behaviour will not happen without regulation. The first cities in Europe to make the necessary changes will have a huge competitive advantage over those lagging behind, which will benefit Edinburgh’s economy. Green credentials will also benefit the city in terms of tourism. There should be mitigation and adaptation incentives as well as penalties, e.g. many businesses would like to recycle but the facilities are not there.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

The Council welcomes the preparation of a Scottish Government report on objectives relating to adaptation. This report should include the impact that introduced regulations on energy performance of non-domestic buildings, waste reduction and recycling may have on SMEs.

We believe that there needs to be some form of regulation available to the Scottish Government, particularly in the case of those public bodies which fail to address adaptation issues. A robust reporting and audit procedure needs to be adopted. The use of the CRC reporting structure would reduce duplication.

The Council is concerned that it will be impossible or very difficult to successfully ‘adapt’ to many of the predicted global impacts of climate change at both a local an international level. Therefore efforts should be focused on reducing Scotland’s emissions and demanding that other countries to do the same.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

The Council is not directly concerned with muirburn or similar land management practices at this time. However, it is aware of the predicted changes to the climate of South East Scotland and of the potential impact of these changes on traditional land use practices. In this context it is entirely reasonable that the muirburn season, which is generally restricted to the period between 1st October and 15th April, may need to be varied to reflect future changes in weather conditions and growing seasons.

We believe that on this and similar land management practices effective ongoing consultation with relevant stakeholders is essential.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

The Council does not have a direct role or interest in the public or national forestry industry. However, the Council is generally supportive of measures that aim to promote renewable energy development and the diversification of energy supply at a national and local level.

Effective ongoing consultation with relevant stakeholders is essential.
Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

The Council welcomes this proposal as energy efficiency can be a rapid and cost effective way of reducing emissions. It is our view that it should detail measures for both existing and new buildings. Links need to be made to the recent introduction of Energy Performance Certificates; this could be a robust additional tool to tackle emissions from buildings. With regards to new buildings, The Edinburgh Standards for Sustainable Building states that “The Council will require all new build developments with floor space of 1000sq m or more, or ten residential units or more, or a site area of 0.5 ha or more, to reduce predicted CO₂ emissions by a Buildings Emission Rating (BER) which attains a Target Emissions Rating (TER) minus 5%”. (Equivalents to be explored in the case of conversions).

We believe that support through funding mechanisms such as CEEF should be improved and made more widely available.

The Council welcomes the recent Scottish Government report on Low Carbon Buildings. However, significant levels of government investment will also be required to achieve the potential for energy efficiency in older buildings.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?

The Council welcomes these provisions. The non-domestic sector represents a significant proportion of the built environment and therefore will have to be included to achieve even the 80% reductions proposed by government.

It is important that any measures should complement the existing E.U. legislation and should not impose additional burdens that would disadvantage Scotland within an E.U. context.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

It is the Council's view that additional incentives are needed as many renewable projects are discounted as not financially viable, and many having payback periods outwith their lifecycle.

Current Scottish Government funding schemes should be expanded to include larger projects.

As a major proportion of energy demand is for heat, it is therefore vital that heat be generated from non-fossil fuel, renewable sources. A scheme, such as the Renewable Obligation Certificates for renewable electricity, should be developed to encourage this switch by the energy providers.

It is the Council’s view that energy from waste should not be considered as a sustainable way of generating electricity and heat. As well as generating CO₂ emissions, incineration burns useful resources that could otherwise be conserved or recycled.
Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:
Waste prevention and management plans;
Waste data;
Deposit of recyclable waste;
Procurement of recyclate;
Reduction of packaging;
Deposit and return schemes;
Charges for carrier bags.

What are your views on these proposals?

Section 55 - Recyclable waste: facilities for deposit at events etc. Proposed regulations should be framed in such a way as to maximise waste streaming and recycling while minimising risk of preventing smaller groups from holding events. Account should be taken of the practicalities of ensuring that waste is segregated with as low a contamination rate as possible, and also of allowing sufficient frequency of uplift without health and safety risk to event visitors.

Section 58 – Deposit and return schemes: subsection (6). Use of packaging that can be re-used should be preferred to packaging that requires to be recycled, as this potentially reduces GHG emissions.

Section 59 – Charges for carrier bags. Action under this section could be enhanced if a life-cycle assessment for different options (e.g. biodegradable carrier bags, paper carrier bags, ‘bags for life’ made from different materials, printing inks used etc) were made available for consideration.

Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

The Scottish Government provided a number of consultation opportunities covering different aspects of the Bill prior to its publication, this was positive. However, longer consultation periods and significantly more detailed consultation documents should have been provided which would have enabled the Council to consider all relevant issues more fully. There has been a marked lack of detail during the Bill’s consultation period as to the financial resources that would be required to support and meet the requirements of the Bill by the public sector.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

No response submitted

Q18 Does the Bill raise any equalities issues you would wish to highlight?

The Council welcomes the inclusion in the Bill of an Equal Opportunities duty (Section 62). It is widely acknowledged that vulnerable groups in society such as children, elderly people, people who are poor, those in ill-health or who have disabilities or mental health problems are particularly likely to suffer from the consequences of wide-ranging dis-benefits arising from climate change. Such dis-benefits may arise both directly from the impacts of climate change but may also be the result of ill thought out or inappropriate adaptation initiatives.

For example, recent research by the Stockholm Environment Institute at the University of York confirmed that by 2031 the over 50s will make up approximately 41% of the UK’s population - a total of 27 million people. This research identified that older people are likely to be physically, financially and emotionally less resilient to climate change. The cost of heating and cooling of homes, storm damage, floods and poor access to public services due to extreme weather events were all identified as being of particular concern for older people. Similar negative impacts can be associated with other vulnerable groups. The Bill and secondary legislation arising as a result of the future enactment of the Bill must address issues such as these.
The Council notes that the Bill identifies specific initiatives on renewables and household waste management. These and others that may result from secondary legislation may all present particular difficulties and issues for elderly people and other vulnerable groups. It is essential that these and all other new projects, initiatives and secondary legislation arising as a result of the Bill are subject to meaningful equalities impact assessments which identify appropriate actions to address the needs of the most vulnerable in society.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

The Council believes that the sustainability agenda has always emphasised the need to take account of interrelated economic, social and environmental issues. However, sustainable development actions have often been one-off in nature and have failed to draw these three strands together.

The potential speed and scale of climate change, and the need for an effective reaction to it, calls for wide-ranging initiatives that are firmly integrated into all three core sustainable development issues. Unless the provisions of the Bill are successful in progressing reductions in carbon emissions and a shift to non-fossil fuel based sources of energy, development cannot be regarded as sustainable development.

If a statutory duty in respect of sustainable development is added to the existing Best Value requirements, clear guidance will require to be given as to how this factor should be reconciled with existing duties, particularly where the environmentally-optimal outcome may not accord with other obligations.

Q20 Do you have any other comments on the Bill?

The Council is pleased to see that the Bill proposes including emissions from international shipping and aviation within the definition of 'Scottish Emissions'. On the other hand, it is disappointing that no specific duties are placed on Scottish Ministers relating to transport, other than the reduction of transport packaging.

The Council therefore suggests that Scottish Ministers are given a duty to:

- ensure that the climate impact of proposed major transport infrastructure investments is taken into account in their appraisal;
- promote the use of the most energy efficient modes of transport for passengers and freight in Scotland.

The Council believes that guidance is necessary to address the growing pressure of airport expansion to support economic growth and how this sits with policy targets of 80% carbon reduction by 2050 and the Government’s vision that ‘economic development should raise the quality of life of the Scottish people through increasing economic opportunities for all, on a socially and environmentally sustainable basis’. Edinburgh airport is important to the Scottish economy and the city benefits from the added value of business routes to and from the capital. Government direction is required to balance economic growth and environmental capacity so that policy contradiction does not take place. It is vital that local authorities align policies in order to work towards the above vision.

The Council would like to emphasis again that financial assistance will need to be provided to Edinburgh not only to resource the management/implementation of new duties but also to fund any major capital works that might require to be undertaken. This might be an area where a pooling of expertise and/or financial leverage through, for example, the Scottish Futures Trust or Scotland Excel would be helpful. The issue of funding, however, will become ever more critical as the comparatively easier energy efficiency measures, which offer a reasonably short payback period, are exhausted and attention by necessity turns to other more resource intensive measures that, while reducing emissions, may not offer the same financial savings.
The Council is also concerned that there may be implications arising from the Bill for its Pension Fund: the main issue here being related to property holdings, as the property market would presumably take additional requirements arising from the Bill into account in pricing of properties. A more general point is that the councillors have "trustee" responsibilities for the Pension Fund; these could potentially conflict with the Bill’s provisions in this area.

The Council would like to highlight the fact that the extent to which local authorities may assume new duties arising from the Bill through their lead community planning role, and the resulting accountability for the delivery of targets, is unclear.
Written views to the Transport Infrastructure and Climate Change Committee

The CCBDG welcome the opportunity to give evidence to the Transport, Infrastructure and Climate Change Committee on the Scottish Climate Change Bill. We have previously set out principles we believe should guide thinking on climate change in Scotland. We have been consistent in promoting those principles and believe they are worth repeating here.

Action on Climate Change – strategic importance to Scotland

Scotland has an international reputation founded upon a perception of a clean and green environment. Scotland’s attractiveness as a great place to visit, study, work and do business in part depends upon that image. Therefore it is of strategic importance to Scotland as a whole that efforts on climate change lead, rather than lag, world effort.

Carbon saved today is better than carbon saved tomorrow

Early reductions in carbon emissions are more important than reductions in years to come. The objective must be to ensure that the cumulative amount of carbon released into the atmosphere is as low as possible, as quickly as possible. In other words the greatest imperative must be on the tasks to be undertaken now to shift Scotland smoothly to a low carbon economy and society.

Consistency with the UK, EU and UN frameworks

Scottish businesses trade on a local, national, UK, European and global basis. Therefore it is important that the Scottish framework on climate change is consistent with UK, EU and UN frameworks. The greater international co-operation there is the better, and consistency between economies will ensure no new barriers to trade are erected.

Delivery

The powers of the Scottish Parliament, while substantial do not represent all the powers that can deliver carbon emission reductions. Therefore, to meet the aspiration of Scotland leading in the UK and Europe it follows that the powers that do lie in Scotland need to be used more effectively, more quickly and to a greater magnitude than anywhere else in Europe. We believe it is vital to ensure that this will be the case without putting Scottish business at a competitive disadvantage in the short term. In the long run we believe that making the right investments now, will put Scotland at a competitive advantage by becoming an advanced low carbon economy early, for example by making the most of the significant renewable resources we have on our doorstep.

Climate Change – priorities for action

1. First and foremost, the CCBDG believe the greatest role for government in Scotland is to help bring about a change in consumer behaviour in order to reduce overall demand for energy.

2. Beyond reducing overall demand for products and services that emit carbon, the three critical areas for reducing Scotland’s carbon emissions are decarbonising electricity, heat and transport. Despite all its challenges and the progress yet to be made, delivering renewable electricity looks relatively positive compared to the challenge that must be met in heat and transport.

3. Decarbonising energy for heating is one area where there has been little progress. The potential carbon savings are great and there is a clear role for government to stimulate markets. The UK wide Renewable Heat Incentive will clearly provide a
market intervention that should help the expansion of renewable heat. Nonetheless the CCBDG believe the Scottish Government must act to make sure heat in Scotland sees a dramatic revolution in the way it is generated. Government itself can take a lead in incorporating renewable heat and Combined Heat and Power systems into its own estate.

4. There remains a long way to go in delivering low carbon road transport. While we acknowledge that fiscal powers relating to VED and product standards lie with Westminster, there are international and UK examples where municipal and regional policy has stimulated a market for lower carbon combustion engine vehicles and electric vehicles. There is much the Scottish government could do, particularly in partnership with local authorities to move Scotland to the leading edge of low carbon road transport. For example procuring electric vehicles for public sector fleets which will stimulate both the infrastructure required and a market for electric vehicles in the UK.

5. Finally, we recognise the potential for conflict between Government priorities, particularly in terms of development and carbon emissions. The aim to deliver 35,000 new build houses a year is challenging in itself, and without absolute clarity and certainty in relation to policy it will be impossible to achieve. Planning policy, building standards, affordable housing policy and policy on future energy generation and consumption must become much better aligned. We believe that the incorporation of zero carbon home standards into new build social housing in advance of 2016 is an important lead the Scottish public sector can take now – particularly in this difficult economic climate.

Response to Call for Views

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

In principle, the CCBDG believe scientific evidence should determine the rate of emissions reduction. We support targets and a framework consistent and aligned with the scientific recommendation of what is required to ensure global average temperature does not increase by two degrees Centigrade, widely acknowledged as a dangerous tipping point resulting in drastic impacts across society, nature and the economy.

The CCBDG therefore support both the Government’s minimum targets, although we recognise there may be a benefit in setting a 2020 target in law too.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

We originally supported a carbon budgeting approach although we are content with this framework for grouping the targets into batches, provided they are aligned with UK and International targets.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?
The difficulty of meeting a 3% annual target should not be underestimated. Our original preference was for a carbon budgeting approach and an alignment with the UK framework would have been simpler. However, the spirit of what is trying to be achieved is the same and we believe it is more important to ‘just to get on with it’.

Q.4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

While trading has an important role to play in tackling global climate change and should not be artificially restricted, we strongly agree that the focus of this legislation must be to reduce Scottish Source Emissions. We note that the UK Climate Change Committee has recommended a set of figures up to 2020 that specifies domestic, traded and credit purchase. This amounts to a 34% cut predominantly through domestic emissions reduction, and 42% total through domestic emissions reduction and credit purchase. We would support the adoption of this model for the purposes of both consistency and effectiveness.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

We acknowledge the difficulty government has in defining the term ‘attributable’. We agree that greenhouses gases emitted from Scotland should be the spirit of this legislation, but we should not ignore the effect of Scottish demand on global emissions. For example, we may no longer manufacture most of the steel needed in the country, but we certainly import it and it is therefore an important factor in assessing pollution generated by the Scottish people. However, we also recognise the necessity for consistent measurement and we appreciate the difficulty in assessing the end to end carbon emissions associated with any given product. Ultimately, we hope that international agreements will ensure that the price of carbon is built into every stage of the production and distribution process.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

The CCBDG agrees with this approach and believes the Climate Change Committee’s first report has made very instructive reading.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress
being made towards the emissions reduction targets set in the Bill. The Bill sets out
details of these reporting requirements.

What are your views on these proposed reporting arrangements?

Once again, we agree with the arrangements for scrutiny. Given the extremely long term
nature of these legislative targets, it is vital that government is held properly to account for
early progress towards them. Parliament has an extremely important job to do in protecting
the interests of future generations.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to
impose duties on public bodies in relation to climate change, to issue guidance to
those bodies relating to their climate change duties and to require that they report
upon the discharge of those duties.

What are your views on this proposal?

The CCBDG believe it is right to impose duties on public bodies with regards climate change,
and we recognise there is an argument to do so in primary, rather than secondary legislation.
We believe this is particularly relevant to Scotland given the scale and influence of the public
sector.

Local authorities and the private sector may benefit from the universal application of policy
measures and setting expectations as early as possible. Many of the potential requirements
on local authorities for example, could include: a duty to meet specific targets and a duty to
consider climate change impacts through all public procurement and planning. The remits of
SEPA and SNH might also include an obligation to deliver cuts in climate emissions.

We also recognise the role of the Scottish Government in guiding local authorities in particular
to ensure some consistency of approach across Scotland.

Q9 The Bill places a duty on the Scottish Government to produce a report for
Scotland, setting out its objectives in relation to adaptation to climate change,
proposals and policies for meeting them and the timescales within which they will be
introduced.

What are your views on this proposal?

We welcome this focus on adaptation, believing it has been somewhat overlooked until now.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural
habitats such as muir (Scottish word for moor) or moorland, and includes the burning
of plants such as gorse, heather and grass. The Bill contains an enabling power to
allow the Scottish Government to vary the permitted times during which muirburn may
be made where they consider it necessary or expedient to do so in relation to climate
change.

What are your views on this proposal?

No specific view.

Q11 The Bill will allow modification by order of the functions of the Forestry
Commissioners to enable the Forestry Commission in Scotland to play a greater role in
tackling climate change. The immediate intent of the Scottish Government is to take
forward proposals relating to renewable energy development on the National Forest
Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?
Given that we believe all of Scotland’s agencies and public bodies should play their part in delivering action on climate change it follows absolutely that the Forestry Commission can have a particularly special job to do. We support the Scottish Government’s proposals.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

We believe the ultimate aim of energy efficiency must be to reduce energy demand but we are mindful of the complexities of affecting consumer behaviour.

Improving the energy efficiency of existing housing stock is paramount but the current rate of progress is insufficient to meet the carbon emission targets in this Bill. By 2050, only one third of housing stock will have been built between now and then. So two thirds of stock will be ‘old’ properties. The onus is on this current generation to bring about very significant change. To make that happen every tool at the disposal of the Scottish government (local tax incentives, business rates, planning changes, significant increase in grants for householders, etc) should be used to stimulate both the improved household energy efficiency and develop the potential for microgeneration.

For example, measures could be developed to incentivise local authorities to deliver emission reductions and specific climate-friendly actions such as through procurement strategies, renewable energy development plans and energy efficiency initiatives. Business rates in respect of renewable energy developments such as wind farms could be payable directly to the local authority in which the wind farm is located for example. Permitted development rights could be incorporated in the bill to enable easier installation of low-carbon and renewable devices on buildings.

We also recognise that a ‘street-by-street’ area-based approach to energy efficiency measures may prove to be more effective and we are concerned that the current approach is inefficient, expensive and is less likely to complete the job efficiently and within the timescales required.

Finally, there is a role for government in ensuring that skills are enhanced in order to deliver the wholesale improvement of the energy efficiency of Scotland’s existing homes.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?

The CCBDG agree with this approach for non-domestic properties. However, we believe there is much more yet to be done for both domestic and non-domestic building standards not least by developing much greater clarity in the standards that are expected.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

The CCBDG welcome the Scottish Government’s nominal target of 11% renewable heat by 2020, although we note the UK government has an indicative target of 14%. Nevertheless, an 11% target represents a market expansion of over 1000% in just over ten years. This is
very ambitious. We believe this is the area where the least has been achieved to date, but the area with the greatest potential to deliver significant reductions in carbon emissions.

We are not believers in government ‘picking’ technological winners but given the scale of the renewable heat target we believe that all sources of renewable heat need to ‘remain on the table’ and deployed where best suited. We do not believe at this stage it is appropriate to be backing one technology over another and believe there will be a role for all the main heat technologies in time, including ground, air and water source heat pumps, solar thermal, biomass and biogas.

Furthermore, we believe there is potential for renewable heat deployment in the industrial and commercial sectors and this should be given sufficient weight in policy development. The economies of scale are greater in industrial and commercial uses of heat and there may also be greater potential for closed loop waste to energy systems in these sectors. We also note that the carbon intensity of heating fuels is higher in these sectors, thus delivering better carbon savings per pound of investment in renewable alternatives.

Finally, we are strongly supportive of a market intervention at the UK level that would incentivise the generation of heat from renewable sources. Without a Renewable Heat Incentive, we do not believe the market will deliver a significant uptake of renewable heat technologies by 2020.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas: Waste prevention and management plans;
Deposit of recyclable waste;
Procurement of recyclate;
Reduction of packaging;
Deposit and return schemes;
Charges for carrier bags.
What are your views on these proposals?

The CCBDG is broadly supportive of additional measures to improve waste management and recycling, provided that measures are proportionate.

We welcome the very real progress that has been made in recent years, and believe Scotland’s dramatic increase in recycling rates over the past seven years is illustrative of what can be achieved by the right combination of a legislative framework and public resources. We are optimistic that further progress will be made in the next few years.

Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

Generally positive, there appears to have been significant effort deployed at engaging with stakeholders and the wider public.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

No specific comment at this stage.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

No specific comment at this stage.

Q19 Do you have any comments on the impact of the Bill on sustainable development?
Q20  Do you have any other comments on the Bill?

Above all else, the CCBDG is concerned about the potential for speedy delivery. It is fully committed to taking action on climate change, and member companies are investing hundreds of millions of pounds into low carbon technologies. We know first hand of the barriers, the complexities and the difficulties of moving to a low carbon business model.

We would use this opportunity to urge policy makers and government to pick up pace, focus harder on delivery and develop a greater sense of urgency - especially in the areas of renewable energy for heat, renewable energy for transport and renewable electricity.

The combination of measures to bring about energy demand reduction, incentives for renewable heat and renewable transport and further significant progress in waste management and renewable electricity mean it is perfectly possible for Scotland to meet its ambitious carbon reduction targets.

About the Climate Change Business Delivery Group

The Climate Change Business Delivery Group formed in early 2007. Representing a broad cross section of Scotland’s corporate and business sectors, with 100,000 staff employed either directly or indirectly in Scotland, the membership is convinced that climate change threatens future prosperity in Scotland and every other part of the world.

The group understands how hard it is to grow business and ensure significant year on year reductions of greenhouse gas emissions. They are, however, deeply committed to making a difference both within our businesses and as individuals – and firmly believe that Scottish specific climate change laws can help achieve that.

Current membership:

Ian Marchant, Scottish & Southern Energy and Chairman
Gordon Dewar, BAA
Brendan Dick, BT Scotland
Mary Grant, First Scotrail
Fergus McConnell, Taylor Wimpey
Peter Lederer, Gleneagles Hotel
Ian MacKay, Royal Mail
Grant Hodges, PWC
Susan Rice, Lloyds TSB
Ken Ross, Elphinstone
Satty Singh, MS Namara
Mike Straughen, Wood Group
Michael Tracey, William Tracey Ltd
Andrew Murphy and Lesley Ballantyne, John Lewis
The Confederation of Passenger Transport (CPT) is the trade association for bus, coach and light rail operators across the United Kingdom. In Scotland our members run over 90% of the registered bus network. CPT has already submitted a response to the Climate Change Bill Consultation but is grateful for the opportunity to make a further response to the Transport, Infrastructure and Climate Change (TICC) Committee in advance of the Committee’s consideration of the Bill at Stage 1.

This response only addresses the questions outlined by the Transport, Infrastructure and Climate Change Committee that are relevant to the interests of our members. The earlier CPT response to the Climate Change Bill Consultation, which gives more detail on areas not specifically referred to in the questions outlined by the TICC Committee, is attached as an annex to this response.

Issues on which the Committee is seeking views:

Question 12. The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change. What are your views on this proposal?

The Confederation of Passenger Transport (CPT) supports the requirement for action plans to improve the energy efficiency of buildings as well as measures to encourage behavioural change. Many of the ways in which public transport can aid the Scottish Government in achieving the ambitious targets for the reduction of greenhouse gas emissions were detailed in CPT’s response to the initial Climate Change Bill Consultation (Annex 1). However, the business of running Scotland’s bus and coach services extends beyond the actual rolling stock. CPT’s members are also responsible for the offices and depots they operate from, to an extent, the behavioural attitudes towards climate change and energy efficiency expressed by staff.

One example of good practice is First Group, who are carrying out a series of initiatives to reduce energy usage from their depots, resulting in a drop in energy usage of 19% since 2004 (The 19% equates to 4,537 tonnes of carbon dioxide). This reduction has been achieved through behavioural changes, new and low cost energy reduction initiatives and investment in heating management systems.

First Group are also in the process of installing half hourly meters at all 600 locations with the energy being derived from 100% renewable sources -including on-shore wind, small scale hydro and biomass. The installation of smart meters will support the company in achieving further energy reductions in their buildings.

Stagecoach has also signed a contract to source most of its electricity requirement for its UK bus operations from renewables. Energy generated from mostly small-scale hydro, as well as on-shore wind and biomass, will provide more than 70% of the company’s required supply, with the remainder coming from cleaner, low-carbon sources. Smart meters are also being installed to help cut energy use across its 240 UK sites.

Other operators are following suit by reducing energy consumption through investment in new buildings and workshops, temperature control systems and smart metering; sourcing electricity from renewables; reducing water consumption through investment in low usage/recycling devices; improving waste management by the recycling of passenger, maintenance and office waste and engaging staff in environmental management through training and development.

Public transport is rightly regarded as the greener alternative to the private car. Therefore, it would be remiss of our industry if we were not readily aware of the many ways in which an operator can reduce emissions, cut energy use and encourage behavioural change amongst staff and passengers.
Scottish Government action plans on these subjects would be welcomed to help spread these messages and to give examples of best practice to enable our members to attain the enhanced Energy Performance Certificate mentioned within the Climate Change Bill.

Question 20. Do you have any comments on the Bill?

CPT supports the Minister for Transport, Infrastructure and Climate Change, Stewart Stevenson’s view that it is unfeasible to create sectoral targets as the relatively high margins for error would make it difficult to record sectoral progress in smaller sectors accurately.

However, CPT has recently carried out some research that demonstrates the potential value of encouraging modal shift to achieving the Scottish Government’s 2030 and 2050 targets:

Carbon Dioxide emissions from the surface transport sector are around 25% of the UK total
54% of UK transport sector emissions are from cars with bus accounting for 3% and train 2%
(source: Defra 2007)
Carbon Dioxide emissions from the surface transport sector continue to rise.
Carbon Dioxide emissions per passenger journey from buses and coaches are around one third less than those of cars.
Around 63% of carbon dioxide emissions from cars arise from journeys of less than 25 miles which can readily be made by bus.
Use of public transport helps reduce congestion, which in turn improves road safety and local air quality.
Moving buses produce far less emissions than an idling bus. In fact, increasing average road speed by just a couple of km/h reduces emissions significantly while also increasing reliability and punctuality.
If every bus in the UK took just one more car driver we could save up to 1.2 million tonnes CO2 per annum.

Public transport, by its very nature, is a greener solution. However, operators in Scotland are not resting on their laurels:

The average fleet age in Scotland compares favourably to the rest of the UK and is decreasing further as operators gear up to run full accessible fleets by 2017.
The introduction of the Driver’s Certificate of Professional Competence (CPC) means that all bus drivers will receive continuous professional development with training on subjects including how to drive more efficiently and economically. This includes smoother braking, slower acceleration, more efficient gear changes and less idling.
The UK’s first bio-buses, which run on 100% biodiesel, are running in Kilmarnock.
Scotland’s first carbon neutral bus network is in operation between Fife and Edinburgh; and, Hybrid vehicles will shortly be introduced in Glasgow.

Scotland is really leading the way in several of these areas.

CPT welcomes the Climate Change (Scotland) Bill and hopes that the action plans and guidance that will inevitably follow will take note of the work that Scotland’s bus and coach industries are already undertaking and will consider measures to support investment in emerging transport technologies; encourage partnership working with the public sector to improve local bus infrastructure; and promote modal shift.
Dear Sir/ Madam,

Climate Change Bill Consultation

I am writing to you on behalf of the Confederation of Passenger Transport (CPT). CPT is the trade association for the bus, coach and light rail industries and in Scotland our members run over 90% of the registered bus network.

Buses can play an important role in facilitating Scotland’s renewed focus on the climate change agenda. Buses offer the best combination of energy efficiency and space consumption in urban streets. One double-deck bus can take 75 cars off the road, giving a potential annual carbon saving of 67,200kg.

The bus industry in Scotland is committed to providing a clean and efficient fleet for Scotland’s passengers and has invested over £450 million in new vehicles over the past ten years. The industry has also been quick to trial new technologies and fund research and development. In May 2006 First switched to using ultra-low sulphur diesel for its Scottish fleet of over 1,500 buses and coaches as part of its aim to minimise First’s impact on the environment. In October 2007 Stagecoach began trialling 8 bio-buses in Kilmarnock which run on 100% bio-diesel manufactured from used cooking oil and other food industry by-products, resulting in an expected 82% cut in CO2 emissions.

CPT Scotland welcomes this consultation on proposals for a Climate Change Bill and hopes that the final bill will recognise the role that the bus industry can play and will make positive steps towards tackling congestion and encouraging modal shift.

The Consultation makes the point that hard policy measures, such as those reserved to the UK Government on taxation and regulation of product standards, may have more potential than softer devolved measures to reduce emissions. CPT believes the Scottish Government needs to utilise the devolved powers at its disposal effectively in policy areas such as planning, development and transport to compensate for an inability to amend reserved matters.

There are many measures that could be introduced within devolved policy areas that would make a considerable impact on Scotland’s emissions. This consultation needs to focus on what the Scottish Government can do and not dwell on what it cannot.

With regards to transport, the Government can place a renewed impetus on encouraging modal shift through promotion of public transport above private car use. Consideration of public transport at the outset of planning decisions, the limitation of car parking spaces in town centres and shopping outlets and investment in park and ride schemes and enforced bus priority measures are all steps that can be taken to encourage public transport use and limit emissions generated by private car journeys and the associated congestion these journeys bring.

The consultation identifies the need for new technologies to reduce emissions. Bus manufacturers are constantly working towards providing even greener vehicles. Bus manufacture uses modern materials and construction and maintenance techniques that have much in common with aviation engineering. Work is continuing on Environmentally Enhanced Vehicles (EEVs), biofuels and hybrid technology.
As well as setting emissions targets into law, the Government should consider methods to provide funding to bus operators willing to invest in emerging technologies. As with all new technologies, there is a financial risk in the form of the initial costs and the ongoing costs of maintenance. Only through the proper funding of the bus industry can the Scottish Government hope to encourage continuing research and development. However, the Government must temper their demands on the bus industry with the realisation that there is a global demand for the latest clean technologies – vehicle manufacturers are limited in the quantity of new vehicles they can provide to operators.

The consultation states that the Scottish Government is addressing the environmental impacts of transport through a package of funded measures that promote more sustainable travel. CPT feels that more can be done by Government. As well as promoting sustainable travel the Government should consider methods to discourage car use. For example, car parking charges should reflect the true impact of motoring on the environment. Rather than removing tolls the Government should be looking at increasing elements of road-charging.

The consultation states, ‘the small changes that each of us make are important. Walking, cycling and taking public transport rather than the car when we can.’ This message needs to be enforced through governmental actions and funding decisions. To encourage people to leave their cars at home the alternative modes of travel must be made as attractive and reliable as possible.

Local authorities are responsible for funding initiatives such as Statutory Quality Partnerships, Punctuality Improvement Partnerships and Bus Route Development Grant schemes. These initiatives involve local authorities working with bus operators to improve the bus services within the council area; improving reliability and tackling congestion. Such initiatives need to be encouraged to bring about further modal-shift and the associated environmental benefits.

CPT is supportive of the Scottish Government’s intent to ensure Scotland reduces its impact on the climate. CPT members are already working to improve the environmental credentials of the industry and hope the Climate Change Bill acknowledges the great importance of the transport sector and dedicates appropriate funding and attention to make Scotland’s public transport network an example of best practice for quality and reliability with minimal environmental impact.

Yours faithfully

Paul White
Public Affairs Executive
CPT Scotland
WRITTEN SUBMISSION FROM CONSUMER FOCUS SCOTLAND

Call for Views on the Climate Change (Scotland) Bill – Submission from Consumer Focus Scotland

Consumer Focus Scotland welcomes the opportunity to respond to the committee's call for views on the Climate Change (Scotland) Bill.

Consumer Focus Scotland was formed through the merger of three organisations – the Scottish Consumer Council, energywatch Scotland, and Postwatch Scotland.

We work to secure a fair deal for consumers in both private markets and public services, by promoting fairer markets, greater value for money, and improved customer service. While producers of goods and services are usually well-organised and articulate when protecting their own interests, individual consumers very often are not. The people whose interests we represent are consumers of all kinds: they may be patients, tenants, parents, solicitors' clients, public transport users, or shoppers in a supermarket.

We have a commitment to work on behalf of vulnerable consumers, particularly in the energy and post sectors, and a duty to work on issues of sustainable development.

Consumer Focus Scotland recognises the importance of climate change as a policy area, and the profound effects on existing patterns of consumption implied by substantive reductions in emissions. We have a particular concern around the issues as they affect consumers. Accordingly, this response sets out some guiding principles which, in our view, should help ensure that consumers are able and encouraged to participate in actions to help reduce emissions, and also provides specific comments on some of the detailed questions raised in the call for views.

General Approach

Descriptions of the source of greenhouse gas emissions are commonly given at national level by source, such as electricity generation, or transport. Alternatively, emissions can be linked to the activities of individual businesses, households or public services. If the latter approach is taken, the scale of existing use of carbon-intensive energy in all aspects of consumers' lives becomes more apparent, and, by implication, the scale of change implied by the targets set out in the Bill. Four points follow from this:

Firstly, there is a clear need to ensure that actions to reduce emissions take account of the needs and views of consumers, and in particular, the position of vulnerable and disadvantaged consumers. As with change in other areas, such consumers are likely to require assistance to make changes, especially where long term gains require considerable short term investment – the wider adoption of renewable heat technologies is an example.

Secondly, previous work undertaken jointly by one of our predecessor bodies, the National Consumer Council, and the Sustainable Development Commission suggests that consumers are willing to make these changes as long as they are seen to be contributing in a balanced way alongside government and business, as well as with other consumers. Work on behaviour change for all consumers therefore depends on consistency of approach across all sectors, together with clarity of respective roles. The roles of infrastructure and of consistency of approach are both important here. Decisions which are seen to increase emissions, or which influence consumer choices to do so (such as airport expansion) can undermine the credibility, and therefore delivery, of overall approaches.

Thirdly, we recognise that moves towards greater consideration of emissions will create markets for new products and services with lower carbon footprints. There is a need to ensure that claims made about such products and services are transparent and justifiable, so that consumers have confidence in the difference they make by choosing them. Again, this is an area in which one of our predecessor organisations, the National Consumer Council, has worked.

1 National Consumer Council / Sustainable Development Commission, 2006
Finally, there is a need for a long term communications and behaviour change strategy to underpin the emission reduction aims. Such a strategy should be directly targeted at the consumer viewpoint and link explicitly and progressively to other government aims. This is already the case in some areas – for example, the contribution to economic development and energy security made by the expansion of the renewable energy sector is often highlighted by Scottish Ministers. Further examples of the way in which a low-carbon future will deliver economic and social benefits are needed.

Our responses to the detailed questions follow.

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050. What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

See answer to Q3.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive. What are your views on the setting of targets in batches from 2010 to 2022?

See answer to Q3.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year. What are your views on this approach or any possible alternative approaches?

We accept the need for long-term targets which are set by the science of climate change. We also note that, as the science has become more robust, predictions of the likely speed and scale of climate change impacts have increased, and accept that targets may need to be revised if this trend continues.

In terms of presentation for consumers now, however, the changes implied are so large and so distant in time, that they are effectively meaningless at an individual level. Smaller, shorter term targets are preferable. These should be published together with action plans showing how they will be achieved, and describing the likely costs and benefits for different groups.

Q.4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

From a consumer perspective, the main issue is that any trading is transparent, and has credibility so that consumers can see the impact of their actions. It would also be helpful, if credits are to be purchased from developing countries, to link the activities funded to the Scottish Government’s overseas development aims.
Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

Presentation of the data is important in this case. We appreciate that there is a balance to be struck between practicality of data collection and accuracy; the proposed approach will deliver (comparatively) robust, consistent data, but, at the same time, would seem to exclude the emissions associated with the production of many day to day consumer goods, including imported food, clothing and household goods.

We would therefore support the publication of emissions data in this way as long as it is accompanied by material which explains that there are many actions which can be undertaken by consumers, and which can help reduce emissions at global level, even if they are not, in the short term, captured in the Scottish emissions data.

In the longer term, we would support the development of revised data of this type.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

We would suggest that any advisory committee, regardless of its location, needs to involve representatives of all groups, including consumer groups, whose actions will be affected by moves to a low carbon economy. In particular, the interests of disadvantaged consumers should be considered explicitly. In that respect, membership of such a group should include those with expertise in the social sciences, including marketing and behaviour change, in addition to scientific expertise.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

We welcome the reporting proposals, and support the inclusion of the requirement to include changes in policy to deliver emissions reductions and to explain variations, should they occur.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

In line with our initial comments, we believe that a consistent approach to reducing emissions across all public sector organisations is an essential component of delivery of emissions reductions overall. It is critical that all parts of the public sector are seen to lead by example.
Appropriate resources for investment may be needed to accompany this duty, so that public agencies are supported to make energy savings, and to adopt new, low carbon technologies. Public accounting practices should also be made consistent with this duty.

We would also favour the extension of this approach so that it applies to all bodies delivering public services. For the purposes of its recent report, the Fit for Purpose Complaints System Action Group suggested that where public expenditure is used to oversee or deliver services, the organisation using that expenditure should be publicly accountable. 2 This definition of public services (rather than public sector/public bodies) provides a useful starting point in considering which providers should be specified to comply with climate change duties.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

We support this approach as part of that outlined above – a clear adaptation plan is part of the process of demonstrating that the Scottish Government is taking action on climate change.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

No submission.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

No submission.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

See Q13

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?

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2 Fit for Purpose Complaints Action Group (July 2008) Report to Ministers
Consumer Focus Scotland has duties and powers under the Consumers, Estate Agents and Redress Act 2007, to promote consumer interests, and in particular the interests of vulnerable consumers, in issues around domestic energy use. As an example, we were very much involved throughout the development of the recently-launched Home Reports in Scotland, and welcomed the inclusion of the energy report as part of the package. We strongly support the development of an action plan which comprehensively addresses measures to be taken to help address this issue in domestic buildings. In addition, we have recently commissioned a series of focus groups to help explore attitudes, behaviours and barriers to improving energy efficiency for these consumers, the findings from which, when available, may be of interest to the Committee in this respect.

We would also suggest that addressing energy efficiency issues in public buildings is an integral part of demonstration of action on the part of the public sector. Because of this, we would welcome the extension of this action plan so that, ultimately, it covers all buildings in which public expenditure is associated, as the approach we have outlined in our answer to question eight suggests.

We are concerned that there appears to be very little detail about the ‘behavioural change’ aspects of the action plan in the Bill. We believe that public engagement is absolutely fundamental to the achievement of reductions in emissions in two respects.

Firstly, there will be a need for consumers to use existing technologies or products in ways which reduce carbon impacts – taking public transport rather than driving, for example. We would also reiterate that the infrastructure put in place by the public sector has a critical, long-term influence over the choices made by consumers in examples of this type.

Secondly, there will be a need for consumers to adopt lower-carbon products and services as they are developed. One of our predecessor organisations, the National Consumer Council, undertook a great deal of work in assessing green claims associated with new products and services (including, for example, the credibility of ‘green electricity’ tariffs). Lessons from those studies show that credibility and consistency are critical in the adoption of new products.

We would strongly suggest that the issue of behaviour change receives considerably more attention.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

We strongly support an approach to the promotion of heat from renewable sources which takes social factors into account. We recognise that heat from renewable sources can, in particular, have significant benefits for consumers in rural areas who do not have mains gas connections. In these locations, both carbon and financial savings are likely to be larger compared, to other forms of heat, than in comparison to gas central heating.

Given that the physical and financial impacts of installation of renewable heat sources can be significant, it makes sense for this to be done at the time of construction, of building renovation, or at the end of life of existing heating systems, and any approach should seek to influence consumer decisions on heating sources at these stages.

However, the initial cost of investment, as well as the innovative nature of the technologies involved, are likely to be barriers for consumers at present, and particularly so for low income consumers. As these groups would benefit most from the longer term financial savings, we would emphasise the need for work in this area to be, in part, explicitly targeted towards them.
Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

- Waste prevention and management plans;
- Waste data;
- Deposit of recyclable waste;
- Procurement of recyclate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

What are your views on these proposals?

We have responded to the waste-related questions in more detail, as this is an area in which one of our predecessor bodies, the Scottish Consumer Council, commissioned more detailed work. As a preface to our detailed comments, we would note that, although waste management forms a relatively small proportion of total emissions, recycling is consistently the single most important activity identified by members of public when asked about actions they have taken to reduce emissions. It is therefore critical for the credibility of work on climate change that sustainable waste management is addressed in this context, so that success in this area can be used as a springboard for wider changes.

**Waste Prevention & Management Plans**

We support this approach. Work commissioned by the Scottish Consumer Council, one of our predecessor bodies, found that some consumers were put off recycling because of the contrast between the actions they were asked to undertake at home and the experience of observing ‘piles of waste on the streets outside businesses’. This relates to our earlier comments on consistency of approach. For the same reasons, we also support the proposals to encourage collection of recyclable waste at public events or in workplaces.

**Waste Data**

Insofar as robust information is critical to good decision-making, we support the proposal to improve data collection.

**Procurement of recyclate**

There is a need to close the recycling loop by demonstrating to consumers that material they recycle is indeed used in new products – this helps reinforce recycling behaviour. We therefore agree with the Sustainable Development Commission for Scotland’s assessment that the Scottish Government has a clear leadership role in this area, to help develop the market for recycled products, as well as because of the demonstration value.

**Reduction in packaging**

This provision proposes to make regulations on packaging which would set statutory targets on retailers for packaging reductions. This is clearly an area where consumers have an interest, and Consumer Focus Scotland is a stakeholder in an initiative by Valpak and the Scottish Waste Awareness Group to help identify and reduce (at the point of manufacture and design) excess packaging. Voluntary measures such as this, the Courtauld Commitment and increasing media and consumer pressure, are all having an impact in this area.

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4 A range of material at http://www.defra.gov.uk/evidence/social/behaviour/index.htm [Link no longer operates]
5 See reference 1.
Given that there are benefits to voluntary schemes and there are indications such schemes may be successful, this route should be sustained before considering statutory regulation. Regulation is costly and these costs are often passed onto consumers. However, if satisfactory progress is not forthcoming we would review the possibility of statutory regulation. We would also note that the provisions designed to allow consumer complaints about excess packaging under the Packaging (Essential Requirements) Regulations have not been effective, with only 4 successful prosecutions to date across the UK. Such forms of enforcement, which are reliant on action being taken by individual consumers, are unlikely to be effective.

Deposit and return schemes
Consumer Focus Scotland supports deposit and return schemes in principle, because they emphasise clearly to consumers the (financial) value of ‘waste’; this is particularly relevant to those for whom the environmental arguments are not currently sufficient to encourage participation. However, we would have concerns about the impact of including a deposit in the price of the some articles, particularly the effect this will have on low income consumers, and also the potential for consumer confusion and inconvenience.

Any scheme of this type would also have to consider potential effects on existing kerbside recycling services, particularly as such services are now bedding in and recycling rates are rising.

Accordingly, we would welcome further information and debate on the impact and success of voluntary deposit and return schemes currently running both in Scotland and elsewhere, and their likely impact in Scotland, before any new schemes were introduced.

Charges for carrier bags
As urged by one of our predecessor organisations, the Scottish Consumer Council, we support the introduction of a levy as a means to change consumer behaviour, as long as it is accompanied by a strong education and awareness campaign. Charging consumers for their use of plastic bags is often cited as an important element in raising awareness of environmental issues in general, and a potential catalyst for wider behaviour change.

In order to demonstrate support for suppliers ‘to charge for carrier bags at the place where the goods are supplied for the purpose of enabling the goods to be taken away or delivered’ we would also want more information on the suggested provisions, including, for example, the circumstances in which the requirement applies and the suppliers to whom the requirement applies.

We would need to consider the impact of this regulation on all groups, including low-income consumers and small businesses. Re-iterating the theme of the Zero Waste Consultation, there should be a threshold below which the regulations would not apply so that, for example, smaller businesses are not overburdened or disadvantaged.

The carrier bags to which the requirement applies: we would like to see paper bags included in the definition of carrier bags. A shift to paper carrier bags (which has already taken place in a number of large retail chains, including Primark) would lessen the impact of a future regulation. Paper bags have their own considerable environmental impact.

We welcome the objective that regulations would require that the charge for carrier bags would be used for the advancement of environmental protection or improvement or to any other purposes that may be reasonably regarded as analogous. We are aware that, among others, both Marks & Spencer and WH Smith are taking this approach, and would recommend that any future regulation should take account of such experience as it develops.

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6 http://www.letsrecycle.com/do/ecco.py/view_item?listid=37&listcatid=313&listitemid=9007
7 Scottish Consumer Council (2005) Written submission to the environment and rural development committee on the environmental levy on plastic bags (Scotland) bill.
8 See reference 8.
Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?
No submission.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?
No submission.

Q18 Does the Bill raise any equalities issues you would wish to highlight?
No submission.

Q19 Do you have any comments on the impact of the Bill on sustainable development?
No submission.

Q20 Do you have any other comments on the Bill?
No submission.
Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

COSLA members are supportive of the ambitious proposals for an 80% emissions reduction target for 2050 which is in line with recommendations at a UK level from the Climate Change Committee. We believe that it is right that Scotland should seek to lead the way in the United Kingdom on emissions targets and investment in renewable energy technologies. Progress on both will enable us to be even more ambitious in the years to come. Indeed, COSLA has long argued for an integrated Scottish Energy strategy and encouragement for the development of renewable technologies.

COSLA also supports the inclusion of international aviation and shipping in these targets as has now been proposed in the bill.

COSLA stated previously in its response to the Climate Change Bill Consultation that a useful interim target to highlight could be 2020 as this is the target point for EU climate change reductions and the EU package of actions and policies will have a bearing on Scotland. It would also be a useful early marker with time to take corrective action should this target not be met.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

COSLA recognises the need to have human scale planning horizons and so agrees that phased reduction of CO₂ emission, to reach the 2050 target, will be essential to enable sectors to adjust their carbon budgeting accordingly to change processes, to re-invent and to modify inherent practices.

Our main concern is in the instance that such targets are applied to local authorities. In this case COSLA advocates four year carbon budget reporting periods for local authorities so that reporting periods can both use the inevitable political dimension to provide an additional driver for action on the part of each administration and avoid any overly onerous reporting process which might overly burden council staff should they be required to report more frequently. Any such reporting should be done through the Single Outcome Agreement mechanism on a local authority by local authority basis.

Setting carbon budget steps that tie in with the above will allow for short and medium term planning towards the 2050 target. The longer term achievement will rely on technological change and it is for the Scottish and UK Governments to drive this forward. Sectors will also be vulnerable to missing targets if external circumstances intervene. An example would be alternative energy sources failing to meet predicted output. However, while cyclical carbon budgeting set in secondary legislation is, in principle, a sound approach, the Government must ensure that the environmental, social and economic needs are in balance, and recognise through the implementation of this and other legislation that climate justice is a fundamental and increasing responsibility of Government.

COSLA members agree there should be at least three budget periods in statute at any one time. This will assist the planning of successive carbon budgets against circumstances.

The Government must show leadership by ensuring that targets are challenging but also realistic and achievable against current technological progress and other external factors that will influence the meeting of targets.

Emission budget periods should be set for a cycle appropriate in relation to our answer above and for a long enough time period to permit investment in energy generation to be scheduled and financed in a manner acceptable to industry.

Major infrastructure projects are normally financed over 25 years. It would be useful to have certainty in terms of CO2/ GHG targets over the same period.
Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

This is a reasonable approach, given that a 3% per year target is highly ambitious and will require some lead in time to achieve. However, a rigid 3% per year target seems like an unnecessary constraint in the face of inevitable fluctuation in success due to unforeseen circumstances, including weather events, etc.

Further, while local authorities will no doubt play a large part in achieving these targets COSLA would have concerns about aggregating these targets down to the local level again because the targets are not flexible enough to deal with unforeseeable circumstances. Also this would set in motion a process of reporting that would be difficult for councils to keep up with given current resources and staff capacity. Additionally some councils will be further ahead in the process of reducing emissions and thus would not benefit from the relatively low cost of initial emissions reductions measures which could be available to councils who are less advanced in this area.

See also answer to Question 2 with regards to reporting periods and potential implications for local authorities.

Q4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

COSLA is largely against the use of purchased carbon credits, but agree that if used, this should be limited and as a last resort. If international carbon credits are to be used towards reduction targets they should be used as a “clean development mechanism” or “joint implementation credits” as verified by international processes supporting the Kyoto Protocol and would be in line with the international principle of “supplementarity” i.e. that the primary focus would be emissions from Scotland and that only a minor amount of emission reductions would come from international credits.

We would also suggest that permissions to use these credits be subject to scrutiny by the Committee on Climate Change (or other related Scottish body) to ascertain that the Scottish Government has done enough to stimulate domestic action and is not using international credits for ‘quick hits’ against emissions targets. We want to avoid a situation where companies and governments are prepared to pay in exchange for the right to do nothing to cut down on their own emissions.

COSLA would also support the reporting of emissions from consumption information as a parallel process to the achievement of emissions reduction targets. We would not be looking for targets or caps on such consumption but would consider this a useful tool for informing the public of their role in reducing emissions worldwide through their consumption choices.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

In an ideal world COSLA would like to see targets based on end user inventories, as this will account for energy efficiency measures, renewable energy generation, as well as taking account of CO2 caused elsewhere by our consumption in Scotland.
For practical reasons however we accept that this would prove highly complex. Thus, ultimately, any system we are likely to have will be based on source emissions. COSLA would accept a measure based on production accepting that where such an approach would disadvantage Scotland (i.e. the export of renewable energy), there are other areas where such an approach would provide a ‘gain’ for Scotland (i.e. the export of highly pollutive industrial processes to other countries).

While such a measure may not be ideal there is a need for easily accessible measures in order to provide the political steer to this process. In the short term, these may not be entirely rigorous but will provide a starting point from which to focus political will, something which is urgently needed. In the medium to long term fuller measures will of course need to be developed, but we need a focal point for action in the short term and can not wait for these fuller measures to be developed.

Any system adopted needs to be based on scientific consensus and evidence based.

**Q6** The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

COSLA believes that actions are needed, not new bodies. The primary source of advice to the Scottish Government should in the first instance be the UK Committee on Climate Change, with an evaluation of its effectiveness after 3 years. It is most appropriate to use this source as it comprises leading experts from all sectors and will provide a consistent approach throughout the UK, this will aid the sharing of best practice. Using existing Scottish public bodies might prove problematic as they may not have sufficient skills, knowledge and expertise, and there would be the issue of resourcing and pressure on already stretched NGOs. Creating a new public body is not supported.

That said, Scotland has already begun to take a diverge from the UK with the inclusion of international aviation and shipping in the proposed bill. Should the Scottish agenda develop to include areas of climate change mitigation or adaptation outwith the scope of that covered by the UK Climate Change Committee terms of reference, Scotland would then need a way to secure expert advice. Further discussion is needed on where such expert advice would come from.

COSLA would also stress that the UK Climate Change Committee would be looked to provide advice on the scientific information needed to set targets appropriately, independent of the political process, while how to go about achieving Scottish targets will be an issue to be decided within Scotland.

**Q7** The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

Scottish Ministers should collect data on issues that are set out (Forecast emissions; an assessment of the effectiveness (measured or projected) of current and/or planned policies; a measure of the energy efficiency of domestic and non-domestic buildings in the public and private sectors; the capacity of Scotland’s renewable energy sector; emissions produced by the Scottish element of international aviation and shipping; and a measure of energy/ carbon consumption in Scotland such as carbon footprint) – should be reported with other factors to establish a clear picture. Advice could be sought from the UK Committee on Climate Change (or other related Scottish body) as to how often these ‘other’ issues should be reported, but should fit in with target and budget setting framework.

COSLA sees a need for flexibility within secondary legislation to allow for changes to the bill should international consensus change quickly. Similarly such flexibility is needed to allow for a situation where local adaptation needs in terms of climate change may also change quickly. There should be a mechanism for central funding of adaptation measures outside normal budgeting arrangements to meet unforeseeable demands. This would mean looking at contingency funds for developments/events which cannot be adequately addressed through adaptation measures and thus will result in an unavoidable increase in cost.
As mentioned below Scottish Ministers should be expected to report on the progress of the upcoming Adaptation Strategy.

Targets should be the responsibility of the First Minister and these should be subject to publicly published scrutiny in addition to Parliamentary scrutiny. This could be done by an independent Scottish audit body, such as Audit Scotland.

This is because political accountability also needs to be backed up by public awareness raising to ensure that the public is fully behind the targets, and the measures to meet them. Political scrutiny will only have meaning if it has the weight of public opinion behind it.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

COSLA has no issue with the proposal to bring forward enabling powers so long as any duty imposed on the public sector to take specified actions on climate change or other specified environmental issues is backed up with the appropriate resources to enable those duties to be carried out and that reporting on any new duty be fully integrated into the Single Outcome Agreement process.

All 32 of Scotland’s Local Authorities have signed up to Scotland’s Climate Change Declaration, a voluntary agreement to work towards climate change mitigation and adaptation. This high level commitment is expected to be increasingly reflected in the new Single Outcome Agreements and in partnership with Community Planning Partnerships. Information gathered on work towards the declaration commitments is expected to provide valuable material to inform the SOA process and inclusion within this process will effectively roll out the principles within the declaration to the wider public sector as COSLA has recommended in the past. In time, with adequate resources provided through the local government settlement, more specific local indicators with regards to climate change work could and should be integrated into these agreements to see that they address more fully the range of climate change activity agreed by local authorities under the declaration.

Any duties with regards to Local Authorities would, in accordance with the Concordat, need to be developed jointly between COSLA and the Scottish Government. Any new duty would also need to be integrated into the Single Outcome Agreement process.

Some thought might be worthwhile around the objectives of a climate change duty being best achieved by strengthening and re-focusing the existing Best Value and Community Planning legislation, wherein local authorities are required to discharge their Best Value and Community Planning duties in “a way which contributes to the achievement of sustainable development”. Achieving the objectives of a climate change duty through this approach would require improved, climate change-focused Best Value (and also Strategic Environmental Assessment) statutory guidance. This could be an iteration or extension of the Best Value and Sustainable Development Toolkit, which some local authorities are already using to inform performance management and improvement, and which has support from all key stakeholders.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

COSLA is in favour of this proposal. Adaptation must be an integral part of any climate change strategy. COSLA’s response to the Adapting Our Ways consultation reflected that some degree of climate change is already underway, and further change is inevitable even if substantial mitigation takes place. We need to promote strong national leadership and co-ordination to ensure that Scotland can face the ensuing challenges – by minimising risk and damage, ensuring there are arrangements for continuity of public services, and maximising opportunity and potential benefit. COSLA’s stated position is that there is a need to fully integrate mitigation measures as part of a comprehensive long-term adaptation strategy in order to minimise further necessary adaptation measures in the future.
If we are going to succeed in changing the way we live in order to mitigate against future climate change we need to adapt not only to changing weather patterns but to the need to reduce emissions wherever possible. This means adapting to sustainable methods of transport and reducing the amount we travel; adapting to the need to skill up Scotland’s workforce to grow the renewables industry and other green businesses; and adapting to new ways of daily living, including energy efficiency and waste minimisation – as a behavioural change and as part of the way we build and repair homes and other buildings, and the way we buy, deliver and dispose of products and services.

Along the way, as we adapt to inevitable environmental changes and to a lower carbon economy it is imperative that we effectively educate, inform and reassure communities about the plans and decisions that are being made to manage the impacts of climate change.

Producing a report as proposed will be one step in this communication with the public.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

We have no comments on these proposals at this time.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

With regards to renewable energy development the national forest estate is likely to include a number of locations suitable for wind, hydro and micro-renewable energy generation. Locating windfarms and hydro schemes within forestry can help to reduce detrimental impacts, in that both activities can share the same road systems; commercial conifer forests are already man modified landscapes so impacts are likely to be less than in wildland areas; and forests can help to limit the potential for close views of turbines, dams and other structures by reducing the availability of open views across the landscape.

However COSLA does have some reservations with regards to the proposals to offer leases and cutting rights over parts of the national forest estate. Our main concerns are:

- Lack of business case.
- Impact on the function and funding of the remaining part of the national forest estate.
- Loss of regional presence.
- Impact on the stability and development of timber markets as presently underpinned by FCS.
- Impact (immediate and longer term) on FCS employees and the communities they live in.
- Loss of community acquisition opportunity through the National Forest Land Scheme.
- Loss of a wider range of non-market community benefits as provided through FCS and which will be greater than provided through any lease arrangement.
- No guarantee that funding raised will be placed specifically to forestry related climate change measures.
- Potential for further leases.
- Member states of the E.U. have generally supported and protected their national forests.
- A concern that private operators will not have the same sense of duty to the public.

Any proposal will need to go through the usual process of public consultation as well as early consultation with the effected local authorities to ensure for adequate compensation with regards to local income from timber production, recreation or indeed potential future uses.
COSLA would expect there will be a need for negotiation and management of appropriate community benefit and would advocate that efforts be made to provide opportunity for partnerships with Local Authorities to provide heat and power for local communities from any new renewables projects on the National Forest Estate.

We would also advocate a national strategy on renewables to map out suitable locations across Scotland rather than looking at this on a piecemeal basis.

Any proposed future developments would also need to consider the implications of the Land Reform (Scotland) Act 2003, with the need to retain access rights for the general public.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

This proposal is to be welcomed but does raise some practical issues with regards to financial resources, additional capacity and consistency with activity at the EU level. There is already some concern on the part of Scottish councils following the review to the EU Energy Performance in Buildings Directive around the added up front cost to councils of extending the scope of this directive. We would have similar concerns of a resource and capacity nature with any such Scottish proposal.

Our member Councils are already functioning at full capacity to fulfil the requirements of the existing EPBD, having committed budgets and allocated staff time to completing the Energy Performance Certificates (EPCs) for the buildings covered in the scope of the existing Directive. Similarly, additional workload dealing with applications etc. is likely to force an increase in fees passed down to the public; otherwise Councils will face even more pressure to deal with the applications. There is also already a concern that the extension of the EPBD might necessitate extensive re-training for Building Standards Officers. A concern which would also apply to any new proposals at the Scottish level.

While councils are highly in favour of the principle of addressing energy efficiency in Scotland’s buildings and see it as a key tool in both saving carbon and lowering running costs to building owners and tenants, they are very mindful of the added costs and any proposal to improve the energy performance of buildings in Scotland needs to be paired with the appropriate resources to carry it through.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?

See answer to Question 12.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

COSLA as a general principle is in favour of pursuing options with regards to promoting renewable energy including renewable heat. We would of course expect any steps taken on this to be managed within a consultative process, including early engagement with includes COSLA and the Scottish Government.

Several local authorities have renewable heat programmes underway for some of their communities and are providing good practice examples of what can be achieved. (discussions with Glasgow Council, Island Authorities and elsewhere?)

There is great potential for the development of green jobs in Scotland should appropriate incentives to grow the industry be put in place. COSLA looks forward to further discussions on the potential in this area of work.
Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

- Waste prevention and management plans;
- Waste data;
- Deposit of recyclable waste;
- Procurement of recyclate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

What are your views on these proposals?

COSLA is in favour of measures to reduce waste and increase recycling and re-use as part of an integrated strategy to divert waste from landfill. Comprehensive use of waste resources is a key part of the climate change mitigation process.

We would expect climate change to be one of the issues considered as part of ongoing Zero Waste discussions and as part of the review of the National Waste Plan.

COSLA would also expect that any regulations brought forward would be done so only following consultation and negotiation with Scottish Local Authorities and accompanied by the necessary resources to carry out any new burdens on local authorities that may result from such regulation.

Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

We are content with the way the process was conducted.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

No.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

It would be useful to keep in mind that both within Scotland and globally climate change is likely to affect those with the least resources first. Thus any mitigation or adaptation strategy should take in to account the effect of policies on those living on lower incomes or with poor health or mobility, i.e. taxes on less fuel efficient cars or the effects of falling land values as a result of environmental changes. There will also be an unequal effect on those living in rural or remote communities when it comes to increased fuel costs as well as the increased costs of making some rural homes energy efficient.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

COSLA believes that Scotland is well placed to adapt to the changing realities we now face. We are well placed to grow the renewables sector in Scotland, to take advantage of new green industries and become a good practice example for others. We see an opportunity for Scotland to make the best of the bad situation that is climate change. However we believe there is a need to temper widely accepted commitment to ‘sustainable’ economic growth. Many of our members doubt that a growth model can indeed be sustainable as mitigating and adapting to climate change will require decreasing consumption and emission producing activities. Instead of the traditional economic growth models we would want future sustainable economics to be based on replacing old high carbon industries with new green ones.
As we have stated in our response to Scotland's Climate Change Bill Consultation we are now in an era of tough choices and the time for procrastination on this is over. We need to be prepared to go further and seriously look at the effects of past, current and future consumption. If we are really to meet the challenges of social and environmental justice we need to be prepared for a debate on the fundamental values and priorities of our society and the effects these have on our stewardship of the planet. Support is going to be required for a range of complementary action across a range of governmental policy areas. Ultimately this will require difficult decisions to be made collectively affecting personal choice and responsibility, as well as individual aspirations and the general way we lead our lives. This includes looking at the choices we make in terms of infrastructure investment – we need to move away from investments that add to the problem of climate change and towards those that help to protect us from it. We must work with the people of Scotland to develop the consensus and political will that will be needed, so that we can act locally, nationally and as part of the international community. Clearly there are no genuinely simple answers, and acting alone will make no sense.

**Q20**  Do you have any other comments on the Bill?

No submission.
WRITTEN SUBMISSION FROM CROWN ESTATE

General Comments

The Crown Estate welcomes the opportunity to provide comments on the Climate Change (Scotland) Bill to the Transport, Infrastructure and Climate Change Committee.

The Crown Estate is committed to sustainable development and to working in Scotland, with the Scottish Parliament and the Scottish Government, to help meet the twin challenges of securing the energy needs of the Scottish people and reduction in greenhouse gas emissions, so as to minimise the magnitude and impacts of future climate change.

ABOUT THE CROWN ESTATE

The Crown Estate in Scotland owns and manages around 50% of the foreshore and beds of tidal rivers, together with almost all the seabed out to the 12 nautical mile limit. As landowner of the seabed The Crown Estate has a key role in the delivery of offshore wind, wave and tidal generation projects through the granting of site options and leases. There is approximately £20m of investment proposals in renewable energy in progress across The Crown Estate in Scotland. The Crown Estate has supported innovative energy initiatives, both stimulating and actively investing in the development of offshore renewable and alternative energy for nearly 10 years. Our Rural Estate in Scotland is responsible for 43,000 ha (106,253 ac) of land including 5,000 ha (12,355 ac) of forestry. The portfolio comprises five estates which include 185 agricultural tenancies and 102 residential properties. These are located in Dumfries and Galloway, Midlothian and Moray where our land management activities make a significant contribution to the economy of remote rural areas. We also manage important mineral resources and almost 140 salmon fishing tenancies.

The Crown Estate believes that the ambitions in Scotland to reduce Green House Gas (GHG) emissions through securing future renewable energy supplies, increasing forest cover, improving energy efficiency and dealing with waste are compatible with the aspirations for sustainable management and protection of Scotland's marine and rural areas, which are of direct interest to The Crown Estate. The Crown Estate is active in renewable energy in Scotland across a broad front and is working to identify mitigation and adaptation measures on our properties to help reduce GHG emissions. The Energy Act 2008 which received Royal Assent on 26th November 2008 conferred upon The Crown Estate the rights to the storage of both natural gas (NGS) and carbon dioxide (CCS) under the seabed on the UK Continental Shelf. The Crown Estate has been preparing for this development for some time, including playing its part in the outcome of the UK Government’s competition for a demonstration post-generation carbon dioxide (CO2) capture CCS scheme. Scotland has extensive resources of coal and also significant coal-fired generation plant (particularly on the Forth). The Stern Review (2006) showed that CCS has a very substantial and important role in achieving carbon reduction targets. The Crown Estate is very keen to work with the Scottish Parliament, Scottish Government and other stakeholders to facilitate the development of CCS in Scotland, so that Scotland’s reserves of coal may be used for future energy production but in a low-carbon ‘clean’ emission mode.

The Crown Estate has already invested in geological studies to identify possible safe storage sites around the UK but further detailed work will be required when specific carbon capture projects from designated sources have been identified. This will need partnership working between The Crown Estate, industry and the Scottish Government.

Energy supplies and distribution are an important part of The Crown Estate’s work in Scotland (and in the UK). The Crown Estate is involved in the development and facilitation of a very broad and diverse range of energies, with a strong focus on low-carbon, renewable technologies. There are excellent prospects for future energy security and reduced carbon emissions in Scotland, but The Crown Estate believes that more detailed strategic planning would assist conversion of these prospects into actual delivery. The Crown Estate wishes to work closely with the Scottish Government, Scottish Parliament and other stakeholders to realise the potential for a secure and low-carbon energy future for Scotland.
The Crown Estate therefore congratulates the Scottish Government for taking a proactive approach to the Climate Change issue and for the ambitious measures set out in the Bill to meet the carbon challenge. We strongly support the targets set out in the Bill and the statutory framework it establishes for the monitoring, accounting, reporting, reduction and mitigation of greenhouse gas emissions, subject to the comments we have made below in answer to the consultation questions.

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

The Crown Estate acknowledges the serious threat posed by climate change and the scientific basis for the anthropogenic contribution to changing climatic systems. As a large landowner we further recognise the potential impact a changing climate will have on land use and the need to take action now to help reduce both present and future GHG emissions. We also acknowledge that as a global issue, climate change needs to be tackled at local, regional, national and international scales and Scotland and the UK as a whole have an opportunity to help lead the world in dealing with this issue. It is important to set ambitious targets to reduce GHG emissions to help reduce the possibility that significant changes to natural climatic processes are not amplified by man’s activities and to reduce the possibility that certain climate system thresholds are crossed (e.g. systems driving ocean circulation patterns). Such dramatic changes have real potential to make a significant difference to the UK climate.

Scotland has a large wind, wave and tidal resource and a fledgling industry – we believe that with strong political support these sectors can help achieve the targets. Without proper support there is a risk that the market could disappear overseas and the technological advantage we currently enjoy will be lost. The Crown Estate recognises that it has an important role in delivering Scotland’s renewable energy objectives. We are working with both the Scottish Government and the UK Government in advancing projects that have the potential to deliver significant energy supply. Planning and consenting, access to the electricity grid, onshore infrastructure (ports, etc) and supply chain are key constraints on the delivery of large-scale marine renewable energy projects. The Crown Estate is working with Governments, industry and others to help overcome these issues. We are also working to support the commercialisation of marine technologies in Scotland and investing in research on the vital improvements to access to the transmission network that would be needed to ensure the targets of the Scottish Government on renewable energy are met.

In Scotland, The Crown Estate supports innovative energy initiatives, both stimulating and actively investing in the development of offshore renewable and alternative energy for nearly 10 years. We are committed to sustainable development and to working in Scotland, with the Scottish Parliament and the Scottish Government, to help meet the twin challenges of securing the energy needs of the Scottish people and reduction in greenhouse gas emissions so as to minimise the magnitude and impacts of future climate change.

Therefore, The Crown Estate agrees with setting a 50% reduction target for 2030 and an 80% reduction target for 2050. We consider these targets very challenging but necessary if Scotland is to make a significant contribution to the mitigation of GHG emissions, to set global standards for emissions reductions and to stimulate the development of alternative technologies to secure a more sustainable future.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

It is the view of The Crown Estate that significant changes to emissions are likely to occur in steps – rather than as a gradual reduction over time. E.g. if large scale renewable energy plants are commissioned during a relatively short timescale after several years of planning, research and development. If targets are set in batches as suggested as this will help focus government priorities within these defined timescales to ensure appropriate measures are being put in place to ensure the respective batch targets are met thereby advancing progress towards the ultimate target. If these are
not set there is a danger that successive governments might well put off making hard decisions on the basis that the target timescale is far in the future. This will also help drive technological advances and stimulate research and development which will be needed to help drive long term sustainable economic development and allow diversification into new business ventures.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

This approach sets statutory limits for targets beyond 2020 but not before then. It is important that there is sufficient flexibility in the approach towards target setting to ensure for sufficient focus to be made on adjustments in business processes and to allow for the effects of research and development (both on mitigation and adaptation technologies) and investment in renewable technologies to work through to the economy and impact on the net Scottish Emissions. The Bill provides for a year-on-year reduction in the net Scottish emissions account up to 2020 but there is a danger that a minimum 3% annual target up to 2020 and indeed the longer term targets might not be achievable unless the constraints to large scale renewable energy technologies are overcome. A non-statutory 3% annual emissions reduction target up to 2020 will provide flexibility for Ministers to adjust targets during this period but it is important that progress towards the 50% reduction target by 2030 is not compromised.

Q4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

The Crown Estate does not hold a particular view on this aspect of the Bill but is supportive of the concept of “net Scottish emissions account”. However we would urge that it is important that measures to balance the account in relation to reduction targets by carbon trading are not pursued in detriment to mitigation measures in Scotland. This would indicate that there should be a limit to the number of carbon units which Scotland can purchase.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

If genuine reductions in GHG are to be achieved to help reduce the concentrations of man-made GHG in the atmosphere, then it is important that ALL emissions attributable to human activity within defined geographical boundaries, and those associated with that areas economic or other activity, but which are emitted outside of that geographical boundary, are taken into account. In a globalised economy this can be extremely difficult to quantify. On this basis The Crown Estate would support the definition of ‘Scottish emissions’ in the Bill.
Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

The Crown Estate believes that Scottish Ministers should be able to take what action is necessary in order to obtain independent, expert advice on climate change issues that relate to Scotland.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

The Crown Estate supports the reporting details as set out in the Bill.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

It is important that public bodies help to lead the way in relation to responses to climate change and that they demonstrate ways forward to reduce GHG emissions and contribute to meeting the targets set out in this Bill. Public bodies are in a position to provide advice and support to the private sector and need to be proactive towards actions to mitigate against climate change. Without clear defined duties public bodies may fail to take appropriate action which might place them out of step with government and the private sector. The Crown Estate therefore supports these provisions in the Bill.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

The Crown Estate supports the provision to produce a report for Scotland setting out its objectives and proposals.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?
Given current understanding of climate change and its effects on moorland there appears to be no strong evidence that the current dates for muirburn need to be varied. The Crown Estate would maintain that issues associated with changing weather patterns and concerns over controlling fires in difficult conditions or burning when the ground is too dry can be addressed through stricter adherence to The Muirburn Code. Indeed by placing restrictions on burning moorland managers may be forced into undertaking burning activities at less than optimal conditions which may have adverse climatic impact than otherwise would be the case. The Crown Estate supports the view that not enough is known about how long-term trends in climate will affect muirburn and therefore we are not convinced that, at this stage, additional powers are required. It is also difficult to see how changes in permitted dates on a Scotland-wide basis would be appropriate, given that there is so much local variation in terms of weather conditions, fauna, vegetation and many other site-specific environmental or management factors.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

The Crown Estate responded separately to this aspect of the proposals. The Crown Estate supports measures that enable the Forestry Commission in Scotland to play a greater role in tackling climate change through joint ventures and through the development of renewable energy projects on its estate. In order to address issues associated with the provision of additional funding for woodland creation, The Crown Estate would support measures to increase the flexibility available to FCS to manage its assets to raise capital. However depending on how this was taken forward there are potentially significant consequences for the forest industry in Scotland that need very careful consideration. FCS are leaders in the implementation of integrated forest management combining commercial forest management with the delivery of substantial public benefits. Any move that threatens the integrity of the national forest estate through a transfer of a proportion of the estate to private control, would need to take full account of the impacts on future timber supply chains, rural employment, competition with other timber growers (particularly for limited public funding), investment in timber processing businesses and delivery of the Scottish Forestry Strategy, including delivery of biodiversity and environmental targets. The Crown Estate would recommend that if this option were adopted, any transfers (granting of leases) are considered over a phased and extended period, and subject to reservations that ensure sustainable forest management (including timber yields and biodiversity objectives) and consideration for local community needs, regional economic impact and local business activity. The Crown Estate would also urge the Scottish Government to address the issues associated with the Scottish Rural Development Programme to accelerate the uptake of planting and forest management grants to help meet the existing demand from the private sector to increase planting rates in Scotland.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

The Crown Estate welcomes the production of such an action plan, particularly one that identifies support and incentives, which help to upgrade Scotland’s housing stock.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?
The Crown Estate would support measures to improve the information available to business premises and other owners of non-domestic buildings to allow them to improve the energy efficiency of those buildings. Indeed The Crown Estate is working to improve the energy efficiency of its let housing stock and our business premises. However we would urge that regulation is used as a last resort and any legal requirements should be backed up by appropriate financial assistance or other incentives to ensure such requirements do not unacceptably compromise business enterprise.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources. What are your views on this proposal?

The Crown Estate supports the measures outlined in the Bill to promote the use of heat from renewable sources. We would also support the addition of a target to increase the amount of heat generated in publicly owned buildings from these sources so as to help stimulate investment in renewable technologies and biomass supply chains.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

- Waste prevention and management plans;
- Waste data;
- Deposit of recyclable waste;
- Procurement of recylcate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

What are your views on these proposals?

The Crown Estate supports the provisions in the Bill to promote recycling and reduce waste.

Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

The consultation was adequate.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

The Crown Estate does not have a view on the SEA carried out on the consultation proposals.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

No

Q19 Do you have any comments on the impact of the Bill on sustainable development?

It is important that any economically restrictive measures to combat climate change in Scotland are proportionate to the impact that they have on global atmospheric GHG concentrations and that fragile economic activities are not adversely affected in ways that will compromise sustainable economic development – particularly in rural areas. While it is important to reduce GHG emissions, it is also important to ensure that business competitiveness is not compromised disproportionately to the global benefits gained from mitigation measures. The Crown Estate would strongly urge that efforts to hit reduction targets are backed up by support and initiatives which focus on the economic opportunities presented by the climate challenge backed up by research and development rather than an inappropriate focus on regulation.

Q20 Do you have any other comments on the Bill?

No
Diageo welcomes the opportunity to provide the Committee with our views on the Scottish Government’s Climate Change (Scotland) Bill. Climate change is an important priority for Diageo. Scotland is the home of Scotch Whisky and therefore it is the home of a significant part of Diageo’s business. We produce over 30m cases of Scotch Whisky annually, making us the world’s single largest producer, and as global demand for our brands continues to grow, we have responded by investing £100m in expanding our whisky manufacturing capacity in Scotland.

Diageo also produces around 12m cases of white spirit brands in Scotland. As with our Scotch Whisky brands, the majority of these drinks are sold globally in over 180 markets, confirming Diageo as Scotland’s top manufacturing exporter. Diageo currently employs over 4,500 staff at around 50 sites throughout Scotland.

As members of the Scotch Whisky Association (SWA) we fully support the response to the Committee by SWA. In addition, we would request the Committee note the following points:

• **Introduction** – In the context of our CCA targets and the significant savings achieved since 2001/02 we would note that in addition to extensive capital investments, these improvements have also been achieved through investment in cultural change in organisations and companies such as Diageo. We have a comprehensive strategy for embedding a permanent carbon culture change within our business. Our overall commitment and results were recognised in October 2008 when we were awarded the Carbon Trust Standard for our Scottish operations.

• **Overall Targets** – Globally Diageo has set itself ambitious targets for reductions in greenhouse gas emissions – 50% in absolute terms by 2015. This is especially challenging given our (and other distillers) continued investment in increasing whisky production.

• **Energy Efficiency** – In the context of the energy efficiency of buildings, it should be noted that whilst incorporating energy efficiency measures into the design and construction of a new building, such as Diageo’s new distillery at Roseisle which aims to attain an excellent accreditation with Building Research Establishment Environmental Assessment Method (BREEAM), improving energy efficiency in existing, older buildings is significantly more challenging, especially if they are listed.

• **Deposit and Return Schemes** – We strongly support the SWA’s opposition to the proposed Deposit and Return Scheme, and would add the following as general points for all Diageo products:

  - The increased raw materials and energy required to increase the weight of bottles for multiple use would be substantial – as would the associated increase in greenhouse gases
  - Current kerbside collection and producer responsibilities are established schemes; the deposit system would work against these successes for many types of packaging waste
  - It is likely that the majority of materials collected through a deposit scheme would be diverted from the existing household collection schemes, rather than being new material that is not currently collected
  - Deposits could be seen to impose an additional cost to householders who are not easily able to participate.

We look forward to the opportunity to further contribute to the Committee’s work on this important issue.
Q1. The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed by the Bill?

Although ambitious, East Ayrshire Council is supportive of both the 2030 and 2050 targets as contained within the proposed Climate Change (Scotland) Bill which is in line with the UK Climate Change Bill.

Q2. The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

East Ayrshire Council is supportive of the proposed methodology regarding the setting of targets, as importantly the budget setting timetable crosses Scottish Parliamentary cycles. And, whilst section 6(1) provides scope for Scottish Ministers to amend targets and dates if they consider it appropriate to do so, we support that advice of the relevant body must be sought in advance and that where Scottish Ministers make different provision from that recommended, they must publish a statement setting out the reasons why.

Q3. The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

East Ayrshire Council is supportive of this measured approach to the setting of annual targets. Further we fully support the reporting methods built into the Bill i.e. the production of an annual report by the relevant body which will take cognisance of not only the annual target but also the interim and 2050 target, and seek advice as to how to progress further, and the production of an annual report which assesses performance during the preceding “target year” – a reporting requirement which requires a response by Scottish Ministers to the Scottish Parliament.

Q4. The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

East Ayrshire Council in principle is supportive of the concept of the “net Scottish emissions account.” We support a framework which ensures that the focus is on achieving emission reduction and emission avoidance. Of concern is the support and framework required by businesses and industry to both invest and innovate, given that in establishing annual targets, each target must be less than the previous net Scottish emissions account level.
We do support the inclusion of a limit on the number of carbon units which can be purchased, and we would propose that this be aligned to the timeframes as established at section 4(2) which would allow for any unexpected or indeed planned spikes in emissions, to be offset during established timescales.

We are unable to provide a view on the number of carbon units which can be purchased.

Q5. The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

East Ayrshire Council is supportive of this view of Scottish emissions.

Q6. The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

East Ayrshire Council is supportive of the Scottish Government’s proposed approach.

Q7. The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

Whilst East Ayrshire Council is supportive of the proposed reporting framework contained within the Bill para 29 (4) relates only to gross electricity generation and consumption – why exclude other fossil fuel sources such as gas, coal and oil? The requirement on Scottish Ministers to produce time bound systematic and comprehensive reports on progress towards achievement of the Interim and 2050 targets; to detail corrective actions required in order to achieve these targets and to detail the justifications for identified course of action provides a reporting framework which is transparent and provides a consistency of approach.

Q8. The Bill contains a duty on the Scottish Government to produce a report for Scotland, setting its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on these proposed reporting arrangements?
East Ayrshire Council is supportive of the Bill having authority to impose duties relating to climate change on public bodies, and supports subsection (3) which enables different duties to be imposed on different public bodies thereby recognising the degrees of impact which different public bodies actions will effect on climate change. Further the publication of guidance which public bodies will be required to follow ensures accountability and clarity of reporting direction to public bodies and their partners and stakeholders. The Bill affords Scottish Ministers the opportunity to appoint a “monitoring body”, whose purpose will be to ensure compliance with reporting guidelines. We would envisage that such a role could be performed by Audit Scotland in line with the wider Best Value reporting framework.

Q9. The Bill places a duty on the Scottish Government to produce a report for Scotland, setting its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

This is a statutory obligation as required by the UK Climate Change Act which is triggered when the Secretary of State lays a report before Parliament under Section 56 of the Act. Following receipt of this report Scottish Ministers are obliged to report on any risks identified in the report and sets out Scottish Minister’s objectives, proposals and policies in relation to adaptation to climate change. East Ayrshire Council notes this position – it is anticipated that clear national guidelines will be forthcoming upon completion of the Adapting Our Ways consultation.

Q10. Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

East Ayrshire Council agrees with this proposal but presume the needs of certain communities will be considered e.g. if grouse shooting areas are an important part of the local economy licenses to manage moors would be available. Additionally there will be biodiversity issues which will be required to be taken into account when determining at what times of the year muirburn would be acceptable. Further, international and national areas for nature conservation pose a question as to whether muirburn should occur. Cognisance should be made of local biodiversity action plans, in particular with regard to programmes for the conservation and enhancement of local species and habitat. We would suggest Scottish Natural Heritage be consulted by the Scottish Government.

Q11. The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

The woodland estate has an important role to play in energy conservation in that it can both create a renewable source of fuel (wood for fuel in burners) and provide an environment for CO2 consumption by standing forests in the process of photosynthesis. The conservation of forest land also protects and provides habitats for wildlife to thrive and destruction of habitat is a major symptom of climate change.
Q12. The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change. What are your views on this proposal?

East Ayrshire Council believes that behavioural change is essential to energy conservation. The most energy efficient building is of little benefit if its occupiers are ignorant of the effects their actions can have on the energy consumption of their premises. The energy efficiency of some older buildings is far more difficult to improve upon and we must ensure that the owners of some of the historic buildings are not over-burdened with implementing costly energy efficiency measures. A balance is required between what is economically viable and the desire to improve the build environment. Further recognition is required of the associated costs and resources needed to pursue and deliver this objective.

Q13. The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area. What are your views on this approach?

East Ayrshire Council has complied in full with the requirement to produce Energy Performance Certificates (EPCs) for non-domestic public buildings with an area >1000m2 which came into force on 4th January 2009. To date there has been no evidence of enforcement measures being implemented against those public bodies and local authorities who have failed to comply. Further we are of the opinion that premises under 1000m2 should also be required to produce EPCs. Compliance of the regulations should be rewarded by the awarding of green credits or a funding package to facilitate the introduction of recommendations which have resulted from the production of the EPCs.

Q14. The Bill places a duty on the Scottish Government to take such steps as it considers appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources. What are your views on this proposal?

East Ayrshire Council is supportive of the Scottish Government’s intention to encourage, incentivise and promote the generation of heat from renewable sources as we believe that Scotland is in a position to benefit from the wealth of natural resources which surround it.

Q15. The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

- Waste prevention and management plans;
- Waste data;
- Deposit of recyclable waste;
- Procurement of recyclate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

What are your views on these proposals?
East Ayrshire Council is supportive of the provisions contained within the Bill and concludes that by including powers to make regulation for each of the provisions is designed to support Scotland in its efforts to reduce greenhouse gas emissions to the 2050 target levels. We concur with the viewpoint that whilst all provisions within the Bill are subject to a form of voluntary agreement, the tonnage of waste sent to landfill will reduce due to the success of introduced/emerging voluntary actions. However, we welcome the flexibility within the Bill to allow statutory intervention measures should progress be insufficient to meet either waste specific or wider climate change targets. We note and welcome that should regulation be required, the Scottish Government would intend to consult with stakeholders.

We note that the provisions reconfirm the Scottish Government’s commitment to becoming a “zero waste society” and acknowledge that the measures are designed to reaffirm the importance of the waste hierarchy with a focus on waste reuse and recycling activity. Further we support the opportunity that highly efficiency energy from waste plants may afford in utilising waste as source of energy.

Q16. What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

East Ayrshire Council welcomes the opportunity to participate in the ongoing consultation process. The extent and wide ranging consultation undertaken has afforded maximum opportunity for interested parties to participate.

Q17. Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

East Ayrshire Council does not have any views on this Strategic Environmental Assessment process.

Q18. Does the Bill raise any equalities issues you would wish to highlight?

There are no equalities issues which East Ayrshire Council would seek to highlight.

Q19. Do you have any comments on the impact of the Bill on sustainable development?

In order to achieve the exacting targets as established in the Bill, there is a clear requirement for Scotland to become more sustainable in its actions. Within the Bill the establishment of advisory bodies and the introduction of a clearly defined reporting framework which not only tracks progress, but requires that any corrective actions in the period to 2050 be defined, clearly demonstrates a requirement for all sectors of Scotland to be more sustainable in their actions, from concept through to delivery.

Q20. Do you have any other comments on the Bill?

East Ayrshire Council would comment that this is an important Bill for Scotland which will require to remain the focus of the Government’ commitments. Further, the Scottish Government will require the support and ingenuity of its partners both at home and internationally to successfully deliver the targets.
The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

**What are your views on the 2050 target and a 2030 interim target proposed in the Bill?**

The targets reflect the current best advice on the minimum emissions reductions required to mitigate Climate Change effects.

The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

**What are your views on the setting of targets in batches from 2010 to 2022?**

If Climate Change impacts are to be minimised then action is required now. So annual targets present a clear imperative to deliver. Setting these targets in batches seems sensible to allow both public and private sector organisations to include these targets in medium to long term plans.

**What are your views on this approach or any possible alternative approaches?**

The “at least” 3% lower than previous year annual emissions target is supported if the Bill’s overall objective of 80% GHG reductions by 2050 is to be achieved.

The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

**What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?**

Having a net Scottish emissions account may help to deliver targets, but carbon (or other GHG) trading should have a limited role to play to assist in meeting targets in the short/medium term, and only where there are definite commitments to emissions reduction projects that will deliver on the targets in the medium/ longer term. Scotland should not seek to buy its way out of emissions reduction targets in lieu of delivering actual emissions reductions. There should be a limit on purchase of carbon units.

The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.
What are your views on this definition of Scottish emissions?

This definition is supported.

The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

The Scottish Government approach is supported. The UK Committee on Climate Change has considerable expertise which should be able to meet Scotland’s needs as well as provide a focus for the global challenge of climate change. Only if that does not work should a separate Scottish Committee be established.

The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

These are satisfactory

The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

East Lothian Council recognises that there may be a need for Scottish Government to impose duties on public bodies, but would emphasise that the Council would wish to work in partnership to deliver the Bill objectives. It is noted that Scottish Government will issue guidance to public bodies, this is welcomed, but it is noted that there are considerable uncertainties in how targets will be met and paid for. The Council will be looking for a clear lead from Government in issuing such guidance.

The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

Supported
Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

To protect moorland biodiversity, any future changes to muirburn operations should take place outwith the breeding seasons of moorland birds and animals.

The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

Although East Lothian has very little National Forest Estate the Council recognises that the Forestry Commission locally and nationally has done much in recent years to encourage public access and recreation, as well as develop biodiversity. This work should be further advanced in any proposals to develop renewable energy and release of capital from the National Forest Estate for woodland creation.

The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

Supported. Improving energy efficiency in existing buildings will be a key measure in delivering GHG reductions. The action plan needs to clearly identify where the resources to implement the plan will come from, and where responsibility lies.

The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?

The policy direction of requiring development of EPCs to improve energy efficiency, and inclusion of powers in the Bill is supported. There will clearly be resource implications for local authorities as many of the Council’s own buildings would come under the enhanced EPC regime.

The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

The proposal is supported.
The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

- Waste prevention and management plans;
- Waste data;
- Deposit of recyclable waste;
- Procurement of recylcate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

**What are your views on these proposals?**

The policy direction behind these is supported and the provision of the various powers in the Bill. These measures will only be really successful if they have wide public support and are in many ways self policing / reported. Alternatively it will require an army of enforcement staff to implement with probably mixed success in achieving the bill objectives.

**What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?**

There has been good opportunity to participate in the consultation process. The events run by Scottish government in 2008 appeared well supported.

**Do you have any comments on the impact of the Bill on sustainable development?**

Passing the Bill should help to raise the profile of the challenges of Climate Change and the need to develop more sustainable life styles, business practice etc. Meeting long term targets of 80% emissions reductions will be very challenging to the way we currently live and work, and will require in particular a reduction in our consumption patterns and dependence on fossil fuels.

**Do you have any other comments on the Bill?**

Delivering the targets will require a major awareness raising campaign of what these emission reductions will mean for the people’s lives. (see above) There is a real risk of being overwhelmed by the challenges ahead.

Government in particular, but also LA s, public sector and business need to envision what a low carbon economy looks like and the opportunities that should come forward. Getting public support for these measures will be critical for their success.
The Eco-Renovation Network is a voluntary initiative set up to encourage individuals to take action to increase the sustainability of their own homes. Our aim is to make it easier for people to find out and share information on eco-renovation and to reduce the costs to people through co-operative buying. We are based in Glasgow and our activities cover mainly Glasgow and the West of Scotland.

The Climate Change (Scotland) Bill is an opportunity to produce world-leading legislation to put Scotland ahead of the game in terms of reducing greenhouse gas (GHG) emissions, developing flourishing, low-carbon communities and cities, and demonstrating Scotland’s willingness to take the lead in moves towards a truly sustainable future.

We believe that we can drastically and quickly reduce Scotland’s emissions while building resilient and happy communities. This does, however, require a deep commitment from the Scottish Government in providing leadership, the right incentives and regulation, wise and innovative infrastructure development and having the confidence to address issues of equity.

The Bill, as it stands, is not ambitious enough. In order to avert dangerous climate change we need to make deeper GHG reductions sooner, with an immediate start and set an interim target for 2020 of at least 42%.1

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

We welcome the adoption of a target of an 80% reduction in GHG emissions by 2050. However, recently evidence has emerged that the build up of greenhouse gases in the atmosphere is happening more rapidly than expected. We also know more about the dangers of positive feedbacks in accelerating climate change. We recommend that provision is made within the Bill to ensure that targets are consistent with current knowledge of the science of climate change.

The 2030 target is not sufficient to make the reductions needed to play Scotland’s part in avoiding dangerous climate change. In order to stabilise atmospheric concentrations of greenhouse gases, the key figure is the cumulative amounts of gases emitted, which depends on how quickly GHG emissions are reduced, as well as the level of interim targets. Since CO2 and many other greenhouse gases, are long-lived in the atmosphere, an early emission-reduction pathway is vital in minimising the cumulative effects of GHGs. Both the Stern Review and the UK CCC Report state that early reductions in GHG emissions are more effective, and that deeper cuts will be necessary later if we do not take immediate action.

Both the UK and European legislation have 2020 as a key reporting target. Given the importance of early reductions, this 2020 target gives a statutory commitment towards faster cuts in the short to medium-term. Scotland’s Bill should sit comfortably alongside legislation emerging from UK and Europe which have a 2020 target.

The UK CCC has recommended a reduction target below 1990 levels of 42% below 1990 levels, if a global agreement emerges at Copenhagen, and cuts of 34% if the UK acts unilaterally. We believe that we should adopt this tighter target to ensure that Scotland’s effort counts.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that

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1 Below 1990 levels
2 31% below 2005 level
3 21% below 2005 level
these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

No comments.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

The Bill allows for an effectively horizontal trajectory of emissions up to 2020. This is because there is no statutory 2020 target and the draft legislation asks only that emissions decline up to 2020 but does not define the speed of cuts. It is important that percentage reductions are set in the legislation up to 2020 as early cuts will reduce Scotland’s cumulative emissions, ensure that Scotland is ahead of the game in developing a low-carbon economy and demonstrate the leadership which will encourage the rest of the world to engage with immediate reduction of greenhouse emissions.

Q.4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

Cuts in Scotland’s greenhouse gas emissions should represent a true reduction of Scotland’s own greenhouse gas emissions. It is important that every nation plays its part in reducing global carbon emissions.

Within the Kyoto Protocol, permits can be purchased by Kyoto signatories from the non-signatory developing countries through the Clean Development Mechanism (CDM). This system is subject to leakage as there is no absolute global cap on emissions. We do not believe that Scotland should use permits from this mechanism, or similar, to ease their domestic commitments on GHG reductions.

Over the next few years, however, discussion for a successor for the Kyoto protocol, which will end in 2012, will take place. If a global cap on carbon emissions can be negotiated then a system of trading permits to emit between nations becomes practical.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

Greenhouse gases are emitted in order to provide goods and services to consumers. The consumers create the demand for the goods and services and are, therefore, responsible for the greenhouse gases emitted during production and transport of those goods and services.
It is estimated that the UK has a ‘carbon deficit’ \(^4\), this has not been broken down for Scotland. This means that our imports are responsible for more greenhouse emissions than our exports.

We acknowledge that conventional frameworks for attributing greenhouse emissions to nations work on the basis of gases emitted in the country and not those attributable to the consumption of a country’s citizens. This is governed by the availability of quality reporting data and the importance of reporting production-based figures such as GDP.

In the current system, where Scotland’s greenhouse gas reduction effort is not set within a truly global framework for reduction and reporting, we acknowledge the limits of the consumption-based approach for attributing emissions. However, we would like the Scottish Government to work towards a consumption-based reporting system for future global agreements and, until then, to monitor consumption-based emissions alongside those attributable to production and report on these alongside other climate change figures.

Aviation is the fastest growing source of greenhouse gas emissions, it has enjoyed the benefit of tax-free fuel, despite the increased damage that GHG emissions at altitude inflict on the climate. If aviation and shipping were excluded from the bill, low-carbon forms of transport would be at a competitive disadvantage which would damage research and development of low-carbon transport for the future and put food producers in Scotland at a disadvantage to overseas producers.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

No comments.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

No comments.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

No Comments

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change,

\(^4\) Carbon Trust (2006) ‘The carbon generated in all that we consume’ http://www.carbontrust.co.uk/Publications/publicationdetail.htm?productid=CTC603
proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

No submission.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

No comments.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

No comments.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

Greenhouse gases from buildings account for up to 40% of total emissions, with domestic dwellings accounting for 25% of GHG emissions. Huge reductions can be made quickly and efficiently by increasing the energy efficiency of homes. We agree that an action plan to improve energy efficiency of buildings is essential, and this needs to include increased investment in energy efficiency measures for homes and more assistance for people to access the financial help that is available. This will tackle fuel poverty as well as reducing greenhouse gas emissions.

Building standards for energy efficiency should also be tightened with the inclusion of passive design for heating and cooling. We need an aspiration to make our housing stock in Scotland carbon neutral and the ambition and vision to make this happen.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?

No Comments.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.
What are your views on this proposal?

Renewable heat is one of the areas where Scotland must start to make more progress. At present huge amounts of heat is wasted, including in the production of electricity and in the biomass that is left to decompose in landfill, which could be converted into heat for homes. It is vital that these, and other heat sources, are used for heating homes and businesses. It is right to note, however, that insulation and draft-proofing should be undertaken before a renewable heat project to ensure that the efficiencies are as high as possible.

Community heating projects should be encouraged and included in new-build developments, both private and public, where this is appropriate. Community heat and power leads to even more efficiencies, with the opportunity that the energy can be, not only efficiently used, but from 100% renewable resource if biomass is used to make the heat.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:
- Waste prevention and management plans;
- Waste data;
- Deposit of recyclable waste;
- Procurement of recyclate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

What are your views on these proposals?

No comments.

Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

No Comments.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

No Comments.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

The most effective way of changing people’s consumption behaviour and decisions is to change the price signals so that higher carbon goods are more expensive. This can be done through a cap-and-trade system with the price being set by the availability of permits to emit, or by a carbon tax. People reacted to the summer rise in the cost of petrol by buying 20% less fuel and this shows that, even a small rise in the cost of carbon-intensive products can have an effect on consumption behaviour. However carbon taxes or cap-and trade will have a disproportionate impact on the poor. Although greenhouse gas emissions are closely related to income, poorer people are often tied into existing inefficiencies due to being unable to afford insulation, new appliances or other lower carbon technologies.

The solution to this is to redistribute the proceeds of a carbon tax or a cap and trade auction for permits to householders, alongside direct help for households to obtain insulation and other energy-saving technologies. Various mechanisms have been proposed for this and we propose a synthesis of some of these in the answer to Question 20.

Q19 Do you have any comments on the impact of the Bill on sustainable development?
It is important that the single goal of reducing our GHG emissions does not overshadow the broader goals of sustainable development for Scotland. It is true that ending our reliance on fossil fuels and drastically reducing our GHG emissions will contribute to making our planet more sustainable, however we need policy and practice that will bequeath a planet with all eco-system functions in tact to future generations.

Reductions in GHG emissions can be achieved in many ways and not all of these are equally desirable. We need to be careful in choosing the path that offers a sustainable future for everyone. Forum for the Future’s report ‘Climate Futures’ examines five sharply different scenarios for 2030. We need to ensure that our policy leads us to a future that fosters well-being for all at local and a global level, while maintaining our eco-systems and planetary support systems, including maintaining and enhancing biodiversity and places of wilderness.

In order to work within the earth’s capacity to provide energy, materials, ecosystem services, and biodiversity we need to focus on improving qualitative aspects of growth and leave behind the obsession with quantitative growth that has taken us into, not only an economic crisis, but a climate crisis and a looming resource crisis.

This means using our resources to improve people’s lives, rather than simply increasing national income, and involves both the sustainable use, and more equitable distribution, of those resources. Much of what is of most value to us as humans is invaluable (or immeasurable) and we need to acknowledge the limits of a metric such as GDP in guiding our decision making.

Q20 Do you have any other comments on the Bill?

In order to achieve the targets set out in the Climate Bill it is going to be necessary to set up a system of pricing carbon. At present, consumers do not pay the full price of the damage that greenhouse gases do in the prices of our goods and in some cases there is even a subsidy (for example no fuel tax on aircraft fuel). This means that we consume more carbon intensive goods than we would otherwise do if this price was internalised and there is less innovation in low-carbon technology than there should be. A price for carbon in the economy would encourage innovation to low-carbon technology, encourage conservation and efficiency and encourage consumers to make different consumption decisions.

We propose a carbon pricing system that is easy, effective, equitable and efficient. Since all greenhouse gases need to be included, but CO₂ is the major gas, when we use the term carbon, we mean all greenhouse gases as carbon equivalents.

1. **Easy**: Carbon is priced only when it enters the economy, which means only a few producers (coal/gas/oil/cement and fertiliser) will be directly affected. This reduces the transaction costs of the system, makes it easier to minimise leakage and to police effectively. The price will be determined by an annual auction of permits with a decreasing cap each year. The cap on permits will be determined by a scientifically established safe level and an achievable decent plan.

2. **Effective**: The additional costs will be passed down in the price of all goods. The advantage of a universal system like this is that the information on carbon content of the goods is automatically transmitted down the production and supply chain through the price. This leads to efficiencies at all levels, substitution of lower carbon alternatives, low-carbon innovation and changes in investment behaviour by individuals, government and companies. Price signals to the consumer will change consumer behaviour.

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6 Several schemes internalise the costs of carbon emissions in a small way, for example, the Climate Levy on business, the European Trading Scheme and fuel tax. The ETS has not achieved as much as was promised due to the failure to auction permits and to have a low enough cap on the levels of carbon dioxide emitted. Caps should be decided with a view to the decent path and the carrying capacity of the planet, rather than companies own estimates of how much emissions they have had in the past.
7 The use of fertiliser on the soil leads to the production of Nitrous Oxide, N₂O, a greenhouse gas 298 times more potent than CO₂.
3. **Equitable:** The price for carbon will increase the costs for the consumer. To avoid this becoming a regressive tax on the poor, a proportion of the proceeds of the auction of the permits to the firms will be redistributed, through the existing tax and benefits system, to everyone to cover the basic increases in the cost of living. Because there is a close relationship between income and greenhouse gas emissions, poorer citizens will get more than they need to cover the increases in their bills. The wealthiest people, who are producing the greatest quantities of greenhouse gases will not be fully compensated for the increased prices. Because the payment is no longer acting as a subsidy on high carbon goods, people will switch to lower carbon goods and be able to pocket the difference.

The remaining portion of the proceeds from the auction of permits will be divided and used, firstly to support climate change adaptation measures for developing countries. And secondly, as an adaptation and mitigation fund for Scotland. This will go towards investing in energy conservation measures such as insulation, innovation and investment in alternatives and investment in infrastructure to support low-carbon living, such as transport infrastructure, community heating etc.

4. **Efficient:** Permits to emit are auctioned to the emitting companies, and these permits can be traded to ensure that the reductions are achieved in the most efficient way.

Annex 1 gives a diagrammatic representation of how the system works.

**Looking forward to the future:** As the cap on carbon comes down year on year, people will begin to invest in a low-carbon future. People will buy products that will last and repairing broken items will become the norm. An expectation of lower carbon caps in the future will lead to major decisions being made with a sustainable future in mind. For example: where to live, which house to buy/build, which transport options to choose.
Annex 1: An illustration of the process of the proposed scheme

- **Start Here**
  - Coal, gas, oil, cement, fertiliser companies

- **Government**
  - Auction of permits annually
  - Proceeds of auction

- **Providers of goods and services**
  - Pricing carbon results in incentives to invest in alternatives, conservation, efficiency and infrastructure to support low-carbon living
  - Increased costs passed on
  - Increases in prices of high carbon goods and services
  - Consumer demand for lower carbon goods
  - Investment in innovation

- **Consumer**
  - Payment to citizens to compensate for price rises on basic goods
  - Investment in energy conservation, innovation and infrastructure to support low-carbon living

- **Adaptation and mitigation fund**
  - For developing countries

- **For developing countries**
  - Investment in energy conservation, innovation and infrastructure to support low-carbon living

- **For developing countries**
  - Investment in energy conservation, innovation and infrastructure to support low-carbon living

Green arrows represent the cycling of money
Black arrows represent the cycling of incentives and benefits
Blue arrows represent investment
The Energy Saving Trust is grateful for the opportunity to respond to this consultation. Please note that this response does not necessarily represent the view of Energy Saving Trust members.

The Energy Saving Trust was established as part of the Government’s action plan in response to the 1992 Earth Summit in Rio de Janeiro, which addressed worldwide concerns on sustainable development issues. We are Scotland’s (and the UK’s) leading organisation working through partnerships towards the sustainable and efficient use of energy by households, communities and the road transport sector and one of the key delivery agents for the Government’s climate change objectives.

We have offices in each of the countries in the UK, and have had a dedicated office in Scotland since 1998 delivering programmes for the Scottish Government, which funds our work in Scotland.

Our response follows the format and order of the consultation document.

**Q1** The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

**What are your views on the 2050 target and a 2030 interim target proposed in the Bill?**

The Energy Saving Trust strongly supports the proposed 80% reduction target for 2050. We also welcome the inclusion of an interim point target. This is because early action is key in terms of reducing the absolute level of emissions in the atmosphere, and an interim target will help to ensure that a minimum amount of action is undertaken by a set date well before 2050. In terms of the level of the 2030 target we believe it is important that this puts Scotland on the necessary trajectory to ensure its 2050 targets are met, and ensures that it puts Scotland on the necessary trajectory to ensure it makes an appropriate contribution to the UK’s interim target of a of 26% (against a 1990 baseline) reduction target by 2020.

**Q2** The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

**What are your views on the setting of targets in batches from 2010 to 2022?**

It is important that policies to deliver each ‘batch’ of targets are viewed in context of meeting longer term targets. Otherwise there is a risk that policy options to deliver in the longer term might be discounted unnecessarily. The experience of the UK Climate Change Programme Review has shown that the focus on a particular timeframe (in this case 2010) can result in a sub-optimal analysis of options, including rejection of policies that have minimal impact in the given timeframe (but could have a significant impact beyond that timeframe). This is also well illustrated by the results of our recent microgeneration modelling work\(^1\), which shows that policies implemented now will result in limited savings in the shorter term (even with very supportive policies in place including some form of compulsion) but significant savings in 2050. This is not to say that interim targets are not important, simply that action in the short term should not be at the expense of longer term measures. It is important that short term actions are considered in parallel with actions that will deliver carbon savings in the longer term.

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Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

The Energy Saving Trust agrees that a regular series of targets needs to be set for the reduction of greenhouse gas emissions in Scotland. We note that there are practical issues associated with annual targets – in that the ability to meet them can be unduly impacted by changes in weather or economic activity. On the other hand however, targets over a 5-year timeframe could be too infrequent to adequately assess progress towards meeting climate change targets. It is worthwhile noting that both approaches have been adopted across the UK, with the UK Climate Change Act adopting 5-year carbon budgets, and the Welsh Assembly Government proposing annual targets (of 3 per cent per year\(^2\) by 2011 in areas of devolved competence). In this context consideration could be given to the option of rolling targets outlined in our response to the UK Climate Change Bill\(^3\), but we note this would add a degree of complexity.

As noted above early action is key in terms of reducing the absolute level of emissions in the atmosphere, and as such we recommend that annual targets up to 2020 are as challenging as possible. In this context it is also worthwhile noting that we believe that a percentage reduction approach is better than a straight line approach since the scope for absolute savings now is higher than it will be once emissions approach the target figure.

Q.4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

We are supportive of the concept of a “net Scottish emissions account”. In terms of purchasing units and using these to offset Scottish emissions, we believe that ideally the focus should be on reducing Scotland’s emissions. Although credits from international projects have a role to play. However, these need to be robust and deliver real long term additional carbon savings. In this respect we note that major concerns have been expressed by many environmental NGOs on international projects, which has led to the creation of the CDM gold standard. In our view the best projects are energy efficiency and renewable projects that can be replicated elsewhere to deliver long term sustainable benefits to developing nations.

We see no reason why sectors that do not face international competition should not secure emission reductions in the Scotland, for example all reductions required of the household sector should be made by the Scottish household sector. International credits should only be able to account for a minority of Scotland’s emissions reductions, and we believe that a limit should be set on credits counted towards Scottish targets. This would ensure significant emissions reductions in Scotland. However, consideration needs to be given to the current framework of the EU Emissions Trading Scheme and the ability to use non-UK credits. We therefore believe that the use of international credits to meet Scottish objectives should be

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\(^2\) Note: It is proposed that the target is a reduction in greenhouse gas emissions by an additional 3% of the baseline in each subsequent year.

\(^3\) See: http://www.energysavingtrust.org.uk/uploads/documents/aboutest/Defra%20Climate%20Change%20Bill%20120607.pdf [Link no longer operates]
limited to between 5 and 10 per cent, although we would like to reiterate that ideally Scottish carbon budgets should be delivered by Scottish carbon reductions. We would strongly advocate that the use of non-Scottish credits is reported in a transparent manner.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

We believe it is important that the targets are set in such a way as to encourage actual emissions reductions in Scotland, and as such we broadly agree that with the proposed definition of Scottish emissions, and are supportive of the inclusion of emissions from international aviation and shipping within Scotland’s climate change targets.

We note that actions in Scotland (e.g. importing and consuming goods and services from elsewhere in the world) will encourage the production of greenhouse gas emissions elsewhere in the world. In this context we note that the Welsh Assembly Government is currently proposing to ‘report separately on Wales’ total consumption emissions…’. We believe it might be appropriate to consider equivalent reporting requirements in Scotland.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

We strongly support the use of Committee on Climate Change for the provision of independent, expert advice on climate change. It is vitally important that the provision of such advice remains independent of Government. We agree it is sensible that the Bill contains provisions which allow the Scottish Government to establish a Scotland-specific Committee, but such a body should only be established if the advice from the Committee on Climate Change is deemed, after a certain period of time, not to be specific enough or useful enough to the Scottish Government. Because we believe that true independence is vital for any body that is to be monitoring the progress of the Scottish Government on reducing emissions we do not believe this is an appropriate role for any existing public body.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

We are supportive of the proposed reporting arrangements. As noted above we note that the Welsh Assembly Government is currently proposing to ‘report separately on Wales’ total consumption emissions…’. We believe it might be appropriate to consider equivalent reporting requirements in Scotland.
Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

We are supportive of the provisions within the Bill to allow the Scottish Government to impose duties on public bodies in relation to climate change.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

The issue of adaptation is outside of the Energy Saving Trust’s remit.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

The issue of muirburn is outside of the Energy Saving Trust’s remit.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

The issue of forestry is outside of the Energy Saving Trust’s remit.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

The Energy Saving Trust very much welcomes the provision within the Bill to require the Scottish Government to produce and energy efficiency action plan.

Energy efficiency has a key role to play in delivering Scotland’s climate change targets. The priority in meeting climate change targets in a secure, efficient and environmentally friendly manner in Scotland must be to reduce the level of demand. Demand side activity can be implemented far quicker than changes in the supply side and will allow delivery of carbon reductions with lower levels of low carbon supply. Energy efficiency also helps improve security of supply by reducing the demand for primary energy, and hence dependence on supply side investment and energy imports. Most energy saving options are more cost effective than investing in any new supply capacity. Energy efficiency also plays an important contribution in alleviating fuel poverty. It should therefore always be the number one solution.
Also of relevance is that it is more cost-effective to deliver carbon savings in the household sector than in any other (see table below).

**Figure 2: Cost effectiveness (benefits net of costs per tonne of carbon saved), by source (£/tCe)**

![Chart showing cost effectiveness by sector](chart.png)


Indeed the findings of the CCC's analysis highlight that "One key feature of the sectors covered, in particular of the residential sector, is that there appears to be scope for significant energy efficiency improvement at a cost to the economy and to individuals which is low, nil, or indeed negative (i.e. where upfront investment would be quickly repaid and give a good return)." Our own figures highlight that the average householder could save up to £340 per year on their energy years, every year based on current energy prices, simply by installing cost effective energy efficiency measures.

In the context of improving the energy efficiency of Scotland’s housing stock we therefore believe the Bill could and should go further. The Scottish Government may well find that household energy performance needs to be regulated in the future if it’s to meet climate change targets. Therefore it would seem sensible to include some provision within the Bill to make it easier for the Scottish Government to regulate energy performance improvements in the housing stock in the future. In this context we note that the Bill says that “Scottish Ministers may, by regulations, make provision relating to the assessment of the energy performance of non-domestic buildings”. Thus allowing future regulation to be applied to non-domestic buildings. We also note that the Scottish Government will (once the consultation report for the consultation relating the energy performance of non-domestic buildings has been published) consider whether the energy performance of non-domestic buildings section of the Bill should be amended, and that this could include consideration of the mandation of the implementation of action plans for the improvement of energy performance.

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4 See: [http://www.theccc.org.uk/reports/](http://www.theccc.org.uk/reports/)
5 From (uncorrected) evidence provided by the Scottish Government at the Economy, Energy and Tourism Committee, Wednesday 4th February.
Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government's thinking in this area.

What are your views on this approach?

The issue of non-domestic is outside of the Energy Saving Trust's remit.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

Homes in Scotland are responsible for around 34 per cent of Scotland’s energy demand, and around 85 per cent of a typical households energy demand is for heat. Therefore measures to reduce heat demand and to reduce the amount of carbon produced in the production of heat will play a key role in delivering Scotland’s climate change targets.

The Energy Saving Trust therefore very much welcomes the provision within the Bill for the Scottish Government to take steps to promote the use of heat from renewable resources. We note6 that at stage 2 the Scottish Government (subject to ministerial approval) plan include within the Bill an obligation to produce a renewable heat action plan. We very much support this intention and believe it will strengthen this part of the Bill.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:
- Waste prevention and management plans;
- Waste data;
- Deposit of recyclable waste;
- Procurement of recyclate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

What are your views on these proposals?

Waste is currently outside of the Energy Saving Trust’s remit in Scotland.

Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

No submission.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

No submission.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

No submission.

6 From (uncorrected) evidence provided by the Scottish Government at the Economy, Energy and Tourism Committee, Wednesday 4th February.
Q19 Do you have any comments on the impact of the Bill on sustainable development?
No submission.

Q20 Do you have any other comments on the Bill?
No submission.
The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

Falkirk Council welcomes the proposal. It is essential that the Scottish Climate Change Bill establishes a statutory target for at least an 80% reduction of greenhouse gases in Scotland by 2050. But it is recognized that this will present significant challenges to all sectors. The Council notes that the UK emissions reduction target has been increased to match the Scottish target.

The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

Falkirk Council supports the move with the provision that the targets can be revised if necessary, subject to recommendation by a wholly independent scientific body on the basis of changing scientific knowledge or consensus amongst the climate change lobby.

The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

Falkirk Council supports the proposal emphasising the importance of retaining flexibility in light of scientific developments and other international climate change targets.

The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

Whilst Falkirk Council supports the purchase of international CO2 units, recognising that this will allow the lowest cost methods of emissions reduction to be implemented, it believes that the purchase level should be limited to avoid complete dependence on this route which could result in no reduction in emissions. Clear identification of unit origins would, of course, be essential and desirable in such a scheme.

The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

Falkirk Council supports the proposal that “Scottish emissions” should be those emitted in Scotland. It also welcomes the move to include consideration of emissions arising from international aviation and shipping, in recognition of the significant quantities of greenhouse gases arising from them and the rate at which they continue to increase.
The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

Falkirk Council supports the move to initially seek guidance from the existing UK Committee on Climate Change to avoid unnecessary duplication. However, it also welcomes the option to explore other sources of guidance and advice should that prove necessary.

The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

Falkirk Council supports the proposed arrangements.

The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

Falkirk Council acknowledges the role that local authorities can and should play in reducing greenhouse gas emissions and also acknowledges that it is appropriate that national and international government commitments should be reflected by targets at local government level. The Council reiterates its request for additional funds to support such action. Installation of improved technology, retrofitting of energy inefficient buildings, CO2 budgeting and management, along with achieving fundamental behavioural change amongst staff cannot be delivered on existing resources. Additional duties require additional funding and support in the form of expertise and systems change support.

The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

Falkirk Council welcomes this proposal but with due consideration to the additional funding required to undertake the actions necessary to deliver the report objectives. Parts of the Falkirk Council area are recognised as being at high social, economic and environmental risk from climate change, in recognition of the combined issues of flood threat, housing and industrial concentration in the Grangemouth area.

Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

Falkirk Council supports the proposal provided due regard is given to biodiversity considerations in the areas and ecosystems involved.
The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

Falkirk Council supports the twin objectives as expressed but recognises that environmental considerations in terms of landscape impact and community engagement will require to be managed effectively.

The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

Falkirk Council welcomes this proposal and acknowledges the role local authorities can play in achieving greater energy efficiency in the built environment and the effect that behavioural change can have on that aim. This can be readily set out through performance target for buildings within the Building Standards (Scotland) Regulations. However, the mechanism for delivery of the proposal on existing properties will impact significantly on local authorities, should targets be made mandatory and enforced through statutory legislation applied by local authorities. The impact on existing service provisions, resources and ensuring compliance (due to the number, complexity and condition of existing properties) will require additional funding to adequately service such a proposal.

The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government's thinking in this area.

What are your views on this approach?

Falkirk Council in principal supports the twin objectives. The proposals could be enshrined within the Building Standards (Scotland) Regulations and administered through local authorities, again raising concerns over resources and funding. However, the number of properties this would impact on and the mechanisms for compliance require further development, before any direct comment could be offered. In this instance it may be that an incentive based scheme (tax based, rather than at a local level) to encourage owners / occupiers to engage with energy efficiency would be of greater benefit rather than relying on enforcement protocols and placing additional burdens on owners and local authorities given the impact of the economic downturn and the rate of recovery.

The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

Falkirk Council supports the proposal in principle, but would highlight that the initial increased cost and the time frame for a return on the initial investment may preclude people from adopting new technology in this area.
The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

- Waste prevention and management plans;
- Waste data;
- Deposit of recyclable waste;
- Procurement of recyclate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

What are your views on these proposals?

Falkirk Council welcomes the inclusion and recognition of the key role that these issues play in terms of the contribution to climate change, but are cautious until supporting legislation detailing the roles and responsibilities of each key stakeholder are available for further review.

What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

Falkirk Council considers that consultation in advance of the bill was adequate.

Do you have any views on the Strategic Environmental Assessment (SEA) which was carried out by the Scottish Government out on the consultation proposals?

Falkirk Council considers that the SEA on the consultation proposals was adequate.

Does the Bill raise any equalities issues you would wish to highlight?

No

Do you have any comments on the impact of the Bill on sustainable development?

The bill should include a sustainability duty to ensure that measures taken in pursuit of its objectives do not lead to perverse environmental, social or economic consequences. This sustainability duty should be firmly based on the definition provided in the Scottish Sustainable Development Strategy.

Do you have any other comments on the Bill?

No
WRITTEN SUBMISSION FROM FIFE COUNCIL

Q1  The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

Fife Council supports the 2050 and 2030 targets with the proviso that these may need to be adjusted according to best available scientific knowledge.

Moreover, an additional interim target for 2020 could be useful as this is the target point for EU climate change reductions. 2020 would also be a useful early marker with time to take corrective action should this target not be met.

Fife Council supports the practice of reducing carbon emissions not only as a useful proxy for improving the technical efficiency in the generation and use of carbon-based fuels and improving the economic use of such fuels across the areas outlined in the Bill, but also working to achieve a massive emissions reduction in transportation fuel consumption.

Fife Council encourages a clear relationship between the amount of effort and resources dedicated to routes to meet the targets and the projected proportion that is likely to achieve. Moreover, other likely impacts should be borne in mind to ensure broader sustainability is not sacrificed to reduce carbon emissions.

Meeting the targets may require a total rethink on the mechanism of achieving these targets, which is not made clear in the Bill. While a large proportion of current efforts is to task the power companies, this does not comply with a proper view of sustainability, in terms of both international security of supply (political stability) and native security of supply (constancy of guaranteed supply), including economic viability.

The use of carbon trading allows developed countries to abrogate much of their responsibilities for real reductions and improvements in sustainability, makes meeting targets an end in itself and does nothing for the aim of long-term sustainability. Carbon trading should be tightly controlled and be allowed only where a real carbon reduction is achieved through actions that would not be achieved in normal trading or environmental improvement – in other words it must be demonstrable that any potential negative environmental impact is being addressed.

Fife Council reiterates the view expressed in our response to the Financial Memorandum: viz. that there must be consideration by the Scottish Government of the costs associated with the scrutiny, measurement and reporting incurred. Fife Council urges the consideration of full costs associated with the Bill, not reliance on market changes or efficiencies savings making it possible for public bodies (or others) to cover the costs incurred in execution, monitoring and compilation of the reports to be analysed by the Scottish Government. A lack of sufficient resources for the implementation, enforcement, scrutiny, measurement and reporting will put achievement of the targets in jeopardy.

Q2  The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

Fife Council supports the setting of batches of targets, 12 years in advance. It is essential for local authorities to have interim targets and prior notice of the targets will help to monitor progress and give guidance on what actions are working. The Council does however encourage full consideration of the complication and bureaucracy that could arise, and urge the Scottish Government to ensure that planning, monitoring and reporting is set with common units of measurement and formats across the issues covered by the Bill.
Local authority target setting should be aligned with Single Outcome Agreements (SOA), which themselves represent the priorities for Community Plans. In this way, reporting tied to the Climate Change Bill could be incorporated into Community Planning, although full reporting would have to remain outwith the SOA to facilitate detailed coverage of areas of progress and challenges and future intentions.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

Fife Council have committed to achieving a 3% reduction in Council emissions year on year, as a drive to making a sufficient and equitable contribution to the global emissions reduction effort. The Council however, seeks clarification on how the annual 3% reduction targets will be applied in relation to the longer term ‘batch’ targets and is of the view that any penalties imposed for not meeting targets should relate to periods of longer than a year.

A focus solely on annual 3% reductions could be seen to promote the adoption of short term views and is not desirable. Striving to achieve reductions in a planned manner over a number of years, and allowing some elements to achieve lower reductions in some years, could be in the best long-term interest. It would also allow organisations to iron out unforeseen circumstances. However, it should still be borne in mind that the 3% reduction is a minimum and that the “at least” element should not be airbrushed out by common usage.

The urgency of the climate change challenge is masked by not requiring significant action (i.e. targets of at least 3%) until 2020. The earlier that emissions reductions are achieved, the less the impact of climate change will be. To encourage much earlier implementation of measures to reduce emissions, it is recommended that targets of at least 3% per annum are required much sooner, while still allowing a sufficient period for forward planning (e.g. from 2012). In that regard, Fife Council urges the Scottish Government to take steps to ensure that those Councils and other organisations that are currently progressing with work to reduce emissions are not penalised in future. In other words, the progressive Councils and other organisations would not benefit from the relatively low cost of initial emissions reductions measures from 2020, should that target date for reductions be retained, whereas Councils and other organisations, who are less advanced in this area, would benefit.

Q4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

Fife Council would support a limit on the number of carbon units that Scotland can purchase to avoid creating a disincentive for ‘home’ emissions reductions. The emissions account is a necessary reference. However, the “offset” mechanism makes meeting targets an end in itself and detracts from the aim of long-term sustainability. Wealthier countries should not be able to buy themselves out of reducing carbon units.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?
Fife Council accepts this definition and welcomes the inclusion of emissions from aviation and international shipping.

Targets based on end user inventories would account for energy efficiency measures and renewable energy generation, as well as taking account of carbon generated elsewhere by our consumption in Scotland. The council also supports the reporting of emissions from consumption information as a parallel process to the achievement of emissions reduction targets and believes that this could prove to be a useful tool for informing the public of their role in reducing emissions worldwide through their consumption choices.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

Fife Council supports the above approach and encourages the early setting of parameters for the decision of whether and how a Scottish Committee on Climate Change should be created. This is a global issue that requires joined up thinking: if a Scottish Committee is established it will still need to work closely and positively with the UK Committee.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

The monitoring and reporting are an important factor in assessing target achievement and need to be as detailed and accurate as possible. Fife Council supports the reporting set out and asks the Scottish Government to ensure that meaningful and efficient reporting is achieved by timely issue of guidance to facilitate the efforts of those bodies who will inform the reports. There may be resource implications attached to such reporting requirements and these should be addressed.

Fife Council suggests that reporting on meeting targets should include statements on sustainability and the way in which the achievement of elements of the Climate Change Bill targets, meets the aspirations of the Government and local authorities regarding the component parts – e.g. energy conservation, transport emissions, etc.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

Public bodies should have a duty imposed on them to take leadership on this agenda, but must be given the role and resources to do so effectively.

In order to ensure that public bodies are able to meet the duties imposed by the Scottish Government in relation to climate change, Fife Council encourages the allocation of realistic resources, clear guidance, and cross-reference between the reporting and scrutiny of the various elements covered to facilitate the successful execution of the duties assigned to public bodies. Clear duties and a “level playing field” would be preferable to vague expectations.
Local authorities’ climate change duties could be supported by strengthening and re-focusing the existing Best Value and Community Planning legislation, wherein local authorities are required to discharge their Best Value and Community Planning duties in “a way which contributes to the achievement of sustainable development”. In order to ensure a real reduction in emissions, these improvements would need to work concurrently with local action plans.

The Scottish Government should encourage collaborative working between bodies (including through the community planning process as above) to tackle this challenge. Real progress will require joint efforts between the public, private and voluntary sector, and engagement with the public.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

The Bill is correct to place a burden of duty on the Scottish Government in terms of producing a report and setting out achievable objectives and more importantly the necessary time frames within which adaptation proposals and policies will be introduced and duly measured. The early issue of guidance in those regards would be to the benefit of local authorities.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

Muirburn is a conservation activity which should consider broader sustainability, including preservation of wetlands and protection of soils. In setting additional regulation protection against loss of carbon from soils should be taken into account.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

Fife Council has already responded to the specific consultation that was effected in this regard. The Council’s main concerns are that:

The proposals could be interpreted as turning over the control of substantial portions of the national forest estate to commercial interests at the expense of other benefits. This could potentially impact negatively upon biodiversity, access and other public benefits, and also upon the Forestry Commission’s strategic priority to sustain sufficient regional presence to exercise policy development, exemplar and leadership roles.

While broadly in favour of Scottish Ministers having the ability to lease land and for the Forestry Commission to grant cutting rights, this should be on the advice of the Commission and on the basis of professional judgement taking into account all aspects to ensure a net public benefit. As outlined, the proposed arrangements could provide too much flexibility for leases and cutting rights to be entered into on the basis of purely financial considerations. Fife Council urges the introduction of formal safeguards that are adequate and effective in protecting public benefits in respect of nature conservation, public access opportunities and rights, and community involvement.
Fife Council does not wish to see a diminution in any public benefits as a result of changes in management responsibilities and forestry practices being undertaken by a third party. It is essential that the Commission retains appropriate accountability and have the necessary powers on behalf of the public for ensuring that any safeguards that are put in place are effectively applied, monitored and publicly reported through a process that is robust, accessible and transparent. The benefits establishing a-not-for-profit trust to act as a potential delivery mechanism to invest the income from leases and cutting rights are unclear. Moreover, there would be a number of governance issues that would require to be adequately addressed. More information on why this is the preferred option would have enabled a clearer view to be given.

In discharging its functions it would be essential to ensure that the proposed trust, and any other new proprietors, would be prepared to work with or be receptive to the views of local people and organisations.

An alternative approach might be to keep the national forest estate under direct public control and ownership, avoiding the ambiguities inherent in endeavouring to release capital while safeguarding public interest via a trust. It is unclear, given that the Forestry Commission is already a public body serving the public interest, why the Commission cannot undertake this re-investment role. In this instance might it not be more effective to use an existing body, extending its powers if needed?

A programme of increased forestation should not lead to emissions increases such as through disturbing peatland. The consultation paper makes reference to rigorous selection of appropriate areas in other contexts: a logical further step is the identification of an appropriate public interest body for such selection.

Developing supply chains for local markets is of high importance particularly in regard to fuel wood. With regard to renewables, there should be a presumption in favour of using wood for local heat.

Measures such as the Freight Facilities Grants to reduce road miles of timber are also important.

Consideration should be given to revisiting contracts where building operators are currently locked into high carbon heating regimes.

In addition to fuel, wood has enormous potential for lower-carbon buildings. Increasing the availability of wood for renewable energy should not be at the expense of research and development in improving timber quality.

Forest crofts and enhancing public transport to forests should not be overlooked.

In addition to carbon emissions, planting and felling should be planned with regard to climate change adaptation (particularly but not exclusively flooding) as well as other environmental, social and economic factors.

The Council wishes to underline its view that all developments that may arise in this regard will be subject to the normal planning process and will be considered in the light of relevant planning parameters. There should not be any presumption in favour of such development and all proposals must be considered on their merits as is the usual case.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

The waste section of the Climate Change Bill sets out in detail the issues that should be covered in efforts and reporting. However the energy efficiency section of the Bill states there will be an action plan, with no parameters set. The elements of the energy efficiency action plan would benefit from being set out in the Act. For example, the energy efficiency action plan should be required to state for each proposal:
• The type of actions that will contribute to the reduction of energy associated emissions (similarly to the outline of efforts on waste later in the Bill);
• Resource implications and associated anticipated impact on emissions;
• Projected timescales for production and publication of relevant guidance, and monitoring and reporting requirements;
• Projected timescales for implementation and impacts.

Reducing emissions from energy use is an essential part of any attempt to tackle climate change. There is a real need for continual encouragement and engagement of all sectors of the community for real change to be achieved. It is submitted that it is only through the proper education of all these sectors together with their partners, that the Scottish Government will achieve target emissions reductions. To date, efforts to persuade organisations and householders to improve efficiencies and encourage behavioural change have produced varied results. Real change may require greater elements of compulsory action and improved financial input.

The fiscal and organisational improvement of energy conservation of new and existing buildings in Scotland is paramount. Clear links between energy efficiency and broader sustainability standards for existing housing stock in all tenures and buildings in other uses should be tackled, beyond the current reliance on Energy Performance Certificates driving of market forces to create improvements.

It should not be assumed that concurrent targets to eradicate fuel poverty and tackle rising fuel costs will contribute to carbon emissions reduction targets. Those policies may indeed not save any carbon as, instead, they facilitate increased warmth in homes, with less waste of energy but not necessarily less energy use (because homes are warmer). The Policy Memorandum makes reference to “possible carbon savings”, but no solution is suggested or even said to be required, and so Fife Council seeks clarity from the Government on how differentiations between carbon saving energy efficiency and fuel poverty energy efficiency will be made.

**Q13** The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?

The gathering and use of such information could be useful for baseline setting and monitoring of government policy. However as noted in the response above, achievement of emissions reduction targets for both domestic and non-domestic buildings will require a marked increase in support/incentive schemes, and stronger regulation to facilitate actual energy efficiency improvements and emissions reductions.

**Q14** The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

The Scottish Government could usefully explain how it proposes this duty to be translated and applied through planning policies and building standards, and the extent to which this duty is discharged through promotional policies or more stringent requirements. There is an obvious need to ensure the focus on minimising resources in conjunction with using renewable sources, both in relation to achieving high energy efficiency levels prior to installing renewable heat technologies, but also to ensure that refurbishment with such technology is taken into account in early refurbishment which could incorporate the renewable heat technologies at a later date.

Renewable technologies are not yet at all at a point where they make economic sense for individuals or many organisations. Clear links should be established on existing resources, such as the Carbon Emission Reduction Target for domestic installations.
Fife Council also urges a clear plan relating the acquisition of fuel to ensure that broader sustainability is not disadvantaged by efforts to cut Scottish emissions, such as may be disastrous for world food production and globally as well as locally important habitats.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

- Waste prevention and management plans;
- Waste data;
- Deposit of recyclable waste;
- Procurement of recyclate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

What are your views on these proposals?

Fife Council is of the view that the need to minimise waste at source cannot be overstated. Such minimisation, if complemented by similar action on the part of the retail sector, will produce significant and, therefore, meaningful benefits for society. The Council is of the further view, therefore, that the Scottish Government should take the lead in that regard also. It is also the Council's view that by doing so the Government would be augmenting and complementing the good work that is being done by local authorities by way of recycling. In short, what is required is a strong shift in focus from recycling to reduction of waste across all sectors of the community: public, commercial and industry.

The Council would welcome a consideration of "deposit and return" schemes, which work well in other countries and questions the degree of focus on carrier bags in proportion to the impact this will have on emissions targets.

Collection and separation of a broader range of dry recyclates (including bulky uplifts and dirty materials) at central facilities would improve performances but is likely to need central funding.

Procurement with carbon reduction in mind, should go far beyond recycled and recyclable materials. Procurement portals that public bodies are bound to use currently gives little weighting to sustainability, and indeed many procurement systems give no value to carbon impacts. Fife Council is currently trialling a methodology to build carbon into elements of procurement.

Q16 What are your views on the adequacy of the Scottish Government's consultation in advance of publishing the Bill?

Fife Council is satisfied with this.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

No submission.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

Financially disadvantaged households and low/no profit organisations will find it difficult to attain efficiency targets without a major change in support/incentive schemes. In the longer run, such groups may benefit from spinoffs from mitigation such as better energy efficiency, fuel security and lower carbon transport but this will require planning and direction rather than reliance on an invisible hand or trickle down of benefits.

In addition to global and historical equity issues, failure to mitigate adequately would have significant equalities consequences: the tendency for many of the most vulnerable sectors of society to be sited in areas most at risk from flooding provides one example, as cited in Scottish Planning Policy 7: Planning and Flooding, Scottish Executive February 2004.
Q19  Do you have any comments on the impact of the Bill on sustainable development?

Fife Council encourages clearer consideration of broad sustainable development issues, and not solely a focus on carbon. This should be reflected in guidance, implementation plans and in reporting requirements.

The Council also believes that instead of traditional economic growth models, future sustainable economics should shift the focus from traditional industries to those based on environmental protection and energy efficiency. This comes from doubt that a growth model can indeed be sustainable, as mitigating and adapting to climate change will require decreasing consumption and emission producing activities, contrary to the aims of traditional economic growth models.

Q20  Do you have any other comments on the Bill?

Until the actual detail of the targets/proposals/timescales and the ‘how’ of the implementation are developed, prior to the agreement of secondary legislation and setting regulations, it is difficult to comment on the real potential for the success of the Climate Change Bill.

As part of Fife’s 2008/09 Single Outcome Agreement, an ‘Ask’ was submitted to the Scottish Government. This sought increased investment in measures to tackle climate change, highlighting that any substantial increase in implementation of community heating schemes would require new funding mechanisms such as grant funding for the required infrastructure. The November 2008 response from the Scottish Government cited the Climate Challenge Fund as a key part of the response to this. Fife Council urges further consideration of the costs of infrastructure to facilitate carbon emissions reductions as the Climate Challenge Fund is not open to local authorities, yet many communities will rely on the initiative, support, motivation and coordination by their local authorities to achieve the carbon reduction targets.

Fife Council believes that it is critical to ensure there is enforcement of the range of measures and clear associated penalties for failure. In many areas, such as private sector housing energy efficiency, a national joined up approach is essential. Throughout the Bill references are made to enforcement agencies and roles. Fife Council urges the Scottish Government to ensure that the units of measurement, plans and formats, timescales and standards applied are standardised, clear and draw on current best practice. This would be essential to minimise the burden placed on local authorities and to increase the efficiency of the monitoring and reporting systems employed.

Fife Council is concerned by the lack of acknowledgement of the impact of transportation in the Climate Change Bill. Even if the intention is to draw efforts to reduce emissions associated with transportation through other routes, this should be clearly stated in the Bill.

We should look at how we embed ‘sustainability’ as part of what we do in everyday life rather than always using it as a ‘badge’ to justify add ons. Sustainability should be intrinsic to everything we do; one example is developers not adding a few environmental benefits at the end to tick a box, but looking at it from the start of a project. To this end greater awareness raising and education would be beneficial, but the design of schemes and processes should also require consistent consideration of sustainability.

Another example of essential integration to achieve the Climate Change Bill targets is the development of clear links and relationships between carbon budgets and financial budgets. While Fife Council has started to tackle some of the challenges in this area, guidance from Government is essential to ensure a consistent value of carbon being adopted across organisations.

Fife Council reiterates the need for care in relation to carbon trading so that people are not encouraged to maintain current emissions and off-set this elsewhere. There must be a clear and consistent focus on reducing emissions.

An overall emphasis needs to be placed on a simplified message, effectively promoted and communicated to all individuals. Everyone has an important part to play in the areas of climate change, sustainability and energy conservation.
WRITTEN SUBMISSION FROM FIRST GROUP

FirstGroup plc is the largest bus and rail operator in the UK. We are therefore ideally placed to work with the Scottish Government to deliver carbon reductions from the transport sector. The Confederation of Passenger Transport has indicated in their response the opportunities from bus and light rail services. The Sustainable Rail Programme has produced a number of documents setting out the case for rail. In developing their strategy to deliver the carbon reduction targets proposed in the Bill we would encourage the Scottish Government to work with the industry to promote modal shift through partnership working and measures to support investment in emerging transport technologies.

In relation to the questions outlined by the Transport, Infrastructure and Climate Change Committee we would provide the following observations.

We have no particular comments to make in relation to the long-term targets. We agree that interim targets will need to be established in batches as it is difficult to project beyond a certain timeframe. We are unsure as to the wisdom of setting 3% year on year reductions unless there is a clear strategy by which such annual reductions can be achieved. Our own carbon projections show relatively small gains in the short term becoming greater over time as technology develops and becomes more commercially available.

This approach should not, however, override the need to act now in particular in relation to promoting behaviour change whereby we can achieve the most significant reductions in the short-term.

We understand the Scottish Government’s rationale in relation to establishing a Committee for Climate Change. It is, however, important that climate change is addressed in line with other broader sustainability goals as, for example, those set out for transport by the Department for Transport in “Towards a Sustainable Transport System”. We appreciate this does not apply to Scotland but the document illustrates the need to consider climate change within a broader social context if we are to deliver a truly sustainable transport network.

Within this context we also consider it important that independent, expert advisors on climate change maintain an overview of the broader sustainability agenda and ensure their advice does not conflict with this.

We support the need for reporting duties and the powers for regulation to impose duties on public bodies in relation to climate change.

Overall the Bill appears to provide an appropriate framework for driving greenhouse gas emission reductions in Scotland. The challenge moving forward will be to develop the appropriate strategies and action plans to deliver the carbon savings required and we look forward to being involved in that process in relation to the transport sector.
WRITTEN SUBMISSION FROM FRIENDS OF THE EARTH SCOTLAND

Introduction

Friends of the Earth Scotland (FoES) is an independent registered Scottish charity (SC003442). We empower people to take individual and collective action to deliver positive and fair solutions to pressing environmental problems. Friends of the Earth Scotland is an independent member of the Friends of the Earth International network.

We wholeheartedly welcome the introduction of the Climate Change (Scotland) Bill and much of the framework it contains. As a member of an international network, we are particularly proud that Scotland has brought forward legislation which has the potential, if strengthened in key areas, to be world leading. We are aware that countries both inside and outside the EU are taking a keen interest in legislation which reaches statute before the vital UN climate negotiations in Copenhagen in December 2009.

The importance of this Bill, both as one of the first pieces of legislation on climate change and in terms of its timing before Copenhagen, means it is vital to get it right. The Bill should ensure Scotland makes its full and fair contribution to preventing dangerous climate change. Friends of the Earth Scotland believes that, in order to do this, there are a number of key amendments that need to be made to the Bill.

We are also a member of Stop Climate Chaos Scotland and agree with the contents of its response, in particular that the Climate Change (Scotland) Bill must:

1. Set out a framework that will achieve at least an 80% reduction in greenhouse gas emissions by 2050.
2. Establish in statute annual emission reductions of at least 3% year-on-year from the start, not just from 2020, compatible with a fair and safe cumulative budget identified by the advisory body (see 4).
3. Include emissions from all sectors in the framework and targets set out in the Bill, including those from international aviation and shipping, from the very start.
4. Establish a Scottish advisory body, a Scottish Climate Change Commission, in the primary legislation to support delivery of the Bill when it is enacted.
5. Ensure that at least 80% of the effort to cut emissions takes place in Scotland.
6. Establish duties on all public bodies to reduce greenhouse gas emissions in line with the national target.
7. Set in place robust, transparent reporting measures so the Scottish Parliament is well informed on progress in meeting targets and Government is held to account on mitigation and adaptation.
8. Ensure that strong enforcement measures are set in place in statute.
9. Ensure Scotland counts all its emissions and reports on those produced by products and services we consume as well as emissions produced domestically.
10. Be explicit that sustainable development is core to the purpose and delivery of the statute in relation to mitigation and adaptation.

The following is provided to the Committee as additional evidence, reflecting Friends of the Earth Scotland’s particular concerns and expertise.

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050. What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

Friends of the Earth Scotland welcomes the long-term reduction target of at least 80% by 2050. We do not regard this as an end-point, but as a critical milestone in progress towards a zero-carbon Scotland. The science of climate change continues to develop in ways that – on balance – imply tougher targets. Friends of the Earth Scotland therefore believe the Bill should both enable the potential to achieve 80% earlier (for which the annual targets procedures currently provide capacity) and provide enabling powers to stipulate greater effort by 2050, should the science so indicate.
Moreover, we would stress that with regards to averting dangerous climate change it is not just the percentage reduction target that matters, but also the total cumulative level of emissions that are released. A cumulative budget is one that takes account of the total level of emissions that we can emit between now and 2050. The lifespan of greenhouse gases in the atmosphere means that such cumulative budgets are best defined over multi-decade periods. The Tyndall centre has estimated UK cumulative budgets for the period 2000-2050 based on an equitable convergence of global budgets between countries.

To illustrate the significance of cumulative budgets, using one of the Governments own emissions reductions trajectory scenarios (Technical Note, scenario 1) and attributing a Scottish share of a UK budget by population, our calculations suggest the 2050, 2030, and ongoing annual targets could all be met whilst still over-shooting a fair cumulative budget by 37% or 542mtCO2e.

Meeting a fair cumulative budget for Scotland will be critically dependent on early emissions reductions before 2020 (see below). Early action is essential not only to ensure Scotland is making a fair contribution to the international cuts needed to avoid a two degree warming of global average temperatures, but also to maximise the potential benefits of low-carbon technologies to the Scottish economy.

Other countries and the EU have set interim targets for 2020 (which is also half-way between 1990 and 2050). We do not see any justification why Scotland should set its interim target later.

The interim target, as it stands, does little to ensure anything like a cumulative budget would be met. For these reasons, we believe the interim target should be brought forward to 2020 in order to push early and significant emissions reductions that ensure we keep within our cumulative budget. A 50% 2020 target, while ambitious, is achievable in Scotland. The UK has an ‘intended’ 42% target for 2020 (to which Scotland must contribute) and Scotland’s unique renewables potential suggests we can go above this. An interim target of 50% by 2020 would go a long way towards making Scotland’s legislation genuinely world-leading.

We also believe that a fair cumulative budget, should be considered alongside the 2050, and interim, targets that the Bill provides for, as a vital consideration on the annual targets set by Ministers – in other words, that the Bill should establish a duty on Ministers to set annual targets that are compatible with a fair and safe cumulative budget. We recognize that there are uncertainties in the methodologies to link particular emissions levels and consequent atmospheric concentrations of greenhouse gases to particular climate outcomes (temperature rises); and in the ways in which emissions budgets might be fairly allocated between countries. We therefore reiterate that the Bill should require the relevant advisory body to provide its advice on what would constitute a fair and safe cumulative budget for Scotland, through to 2050, so as to enable Ministers to take this factor into account when setting targets.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

The need for early and significant emissions has been demonstrated both scientifically and environmentally, as well as economically by the Stern review. In light of this, and as Stop Climate Chaos Scotland has argued, annual targets need to be set to at least 3% from 2010. Without this safeguard, the Bill runs the risk of back-loading effort, postponing action, and failing to ensure emissions are kept at a safe cumulative total.

Friends of the Earth Scotland does however support the setting of annual targets in multi-annual periods, with appropriate legal constraints established by the Bill, as this provides the flexibility through which to revise targets upwards in light of the latest science. The setting of annual targets in multi-year periods should therefore remain, so long as it is implemented alongside a requirement that annual emissions reductions be at least 3% from 2010 and a duty to ensure that the annual targets are compatible with the delivery of a fair and safe cumulative budget.

However we fear that the periods proposed in the draft Bill have two flaws. First, the Bill proposes that the first batch of targets is set in June 2010 – half way through the first target year. This seems to build in an excuse for missing the first annual target (or, if not missing, for setting a weak target). Second, the 12-year period set for the first batch is too long to enable Ministers to respond swiftly to the latest science – notably that of the next major IPCC assessment, the fifth assessment report, expected in 2014.
Friends of the Earth Scotland would advocate that subsequent to an initial one-year target for 2010, set as soon as possible, annual targets should be set covering periods of 4-5 years. They would however have to be set with regard to a fair cumulative budget. Ministers would therefore be able to set annual targets of their choosing so long as:

- each was above the basic 3% baseline; and
- each had regard to the cumulative budget as recommended by the advisory body
- each had regard to an interim target of 50% by 2020

This would have the advantage of ensuring business and other important sectors are aware of the scale of emissions required (at least 3% per annum), while Government would have the tools to adjust targets upwards if needed. We believe this appropriately bridges the gap between flexibility and certainty.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

FOES believe failing to ensure cuts of at least 3% between now and 2019 runs counter to the purpose of the Bill in setting an effective framework to cut greenhouse gas emissions at a national level. It therefore also runs counter to ensuring Scotland plays its part in contributing to a global effort to prevent dangerous climate change.

A Bill that does not ensure emissions reductions of at least 3% from the start would fatally damage the claim that Scotland was leading on climate change. With the world waiting on a deal in Copenhagen, both developed and developing countries are looking to Scotland to see what can – and will – be done. Annual emissions reductions of at least 3% throughout would demonstrate this leadership; a Bill that only provided 3% per annum from 2020, and delayed significant action in the meantime, would not.

Rather than delaying serious action and relying on administrations from 2020, annual targets of at least 3% should be on the face of the Bill from 2010. This would have the benefit of providing the framework for the ‘easy wins’ - policies that pay for themselves over a short space of time – such as action around energy efficiency, to be implemented straight away. These have the added benefit of multiplying up into large savings against the cumulative budget if carried out promptly. Research from the OECD suggests significant action is perfectly achievable with cuts in energy use in the region of 10-15% over 2-3 years – both in the fields of energy and transport - being achieved in countries and regions such as Sweden, New Zealand, Brazil and California.7

We do not accept the argument that it will take up to a decade to reach the necessary sustained rate of emissions reduction, and do not see adequate reason to claim that significant cuts cannot be made promptly. The previous Scottish Executive introduced plans to contribute to a goal of Scotland cutting emissions in the period up to 2010 by 1mt-C more than a ‘Scottish share’8, and businesses have continued to develop and improve emissions saving technologies and techniques in response to UK and Scottish policy measures. We are not starting from a blank sheet, but from a position in which accelerated and widespread deployment of existing solutions – especially relating to efficiency - can be achieved rapidly with the necessary political will and relatively small additional expenditure9. Moreover Scottish Ministers enjoy wide-ranging executive powers, and have the opportunity to establish others in the present Bill, to be able to accelerate rates of emissions reduction. For instance powers to introduce road-user charging are available to Scottish Ministers, and could be implemented well before 2020.

We would also here like to comment on the criteria that Ministers will be expected to take into account when setting targets under the Scottish Climate Change Act.

In particular we are concerned that, among the long list of factors ministers have to take into account 4(4), all measures are given equal weight. We believe that science should be the over-riding factor and primary driver in the setting of annual targets. This was the rationale behind the Bill’s introduction and should therefore be the rationale behind the annual targets set. As a result we believe the long title of the bill should make direct reference to the intention of the Bill in avoiding dangerous climate change.
Additionally, we have concerns about the process in which annual targets are set. While Ministers have to take advice from the advisory body before setting annual targets, that the Bill appears to envisage Ministers initially proposing targets on which the relevant body then comments (see section 22). In order to ensure that targets are science based and avoid political framing, we believe that the process should re-ordered with the relevant body first providing advice, including recommendations on the appropriate targets, and Ministers then determining the statutory targets in the light of that advice. This is in line with the UK process where the UK Climate Change Committee suggests targets, and Ministers then respond with their decision.

Q.4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

As stated in the policy memorandum, the main purpose of a climate change Bill should be to reduce Scottish emissions by 80% by 2050 (or, as FOES might phrase it, playing Scotland’s part in tackling climate change by keeping within a fair cumulative total of emissions). We recognise and welcome the aspirations expressed by Ministers to avoid the use of traded credits to fulfil their obligations. We also acknowledge that the definition and creation of the net Scottish emissions account is probably necessary to account properly for the traded sector (those operations in Scotland able to buy and sell EU ETS credits). However we believe the Bill must introduce measures to ensure that domestic action predominates over the use of credits, or else risk not fulfilling its overriding objectives.

Friends of the Earth Scotland believes that the best way to implement Ministers’ welcome aspirations in this respect is to set a ‘domestic effort target’ as part of the mechanics of delivering the Bill’s objectives. A legislative cap or limit on the number of credits that can be bought by Scottish entities might be open to legal challenge by bodies in the traded sector. An effort target would not.

The Bill should establish such a target (defined in terms of the proportion of the total annual reduction achieved which has resulted from domestic effort), and require Ministers to report on it in tandem with reports on annual targets, and to present compensatory measures if it is breached (as with annual targets).

The domestic effort target should be set at a level which reinforces and buttresses the effects of the EU Emissions Trading Scheme (ETS). FoES suggests it should begin at the level of 80%, and be progressively increased to reach 100% by 2040. This follows the reasoning set out by the UK Climate Change Committee that, as 2050 approaches, no countries will have credits for sale, and all effort will need to be domestic. The Committee’s recent report stated that: ‘The majority of the 80% cut will in the long term need to be achieved via domestic action’.

The purposes of such an approach are two-fold. First to ensure that the economic benefits of action to cut emissions are realised within the Scottish economy, and second to minimize the extent to which credits generated outside Europe - and legally allowed into the ETS, despite their questionable quality – are used by Scotland. Researchers at Stanford University recently estimated that as many as two thirds of projects paid for through the Clean Development Mechanism (CDM) would have happened anyway. Moreover, there is a significant body of research identifying negative social impacts arising from projects designed to generate credits.

The UK Climate Change Committee recommended a limit of 10% on the number of overseas credits the UK Government can buy directly. This is welcome advice, yet it pertains only to those domestic sectors not operating under the European emissions trading scheme (EU ETS). Given that the EU Climate package, agreed in December 2008, allows up to 50% of the traded sector’s emissions reductions to be met through the CDM, and given that the EU package is not of a sufficiently ambitious trajectory (either of that required or that of the Scottish and UK Bills); FOES are calling for the ratio of effort to be substantially domestic across the whole Scottish economy.
In practice, if it seems likely that the target will be missed because businesses choose to buy more ETS credits, there are two routes open to the Scottish Government to rectify the problem. First, already identified as necessary for other reasons by the UK CCC, are measures to buttress the ETS and stimulate the traded sector to do more domestically (such as an emissions performance standard for new power stations). This will reduce the extent to which the ETS sector purchases credits through the auctioning process or from other registered bodies in the ETS. Second, is to take opportunities to increase effort elsewhere in Scotland, outside of the traded sector, such that the overall balance meets the target.

While we acknowledge that additional emissions savings within the traded sector could be bought up in the form of credits by other European countries, domestic action would have significant benefits for Scotland and further afield. In particular it would:

- allow Scotland’s unique renewables potential to be fully harnessed
- place Scotland at the forefront of the move to a low-carbon economy
- demonstrate leadership at both a European level – by demonstrating that significant cuts need to be made in all sectors of the economy by 2020; and internationally - given climate science dictates the developed world has to reduce its own emissions as well as fund green development in the South.

We believe this is not only desirable, it is also entirely possible within the parameters of the Scottish Climate Change Bill. The Bill already provides for the measurement of net Scottish emissions (not including credits) and the inclusion of credits in the net emissions account. It is therefore easy to present these figures as a ratio, which represent the share of domestic effort. This will allow Ministers to report on - and implement policies that ensure - the majority of Scottish emissions reductions are actually made in Scotland.

**Q5** The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

**What are your views on this definition of Scottish emissions?**

Friends of the Earth Scotland are concerned about three issues in relation to the definition of ‘Scottish emissions’.

Firstly, we are concerned that, as drafted, international aviation and shipping emissions are not actually included within the targets set by the Bill. Instead, the Bill makes provision for Ministers to include emissions from international aviation and shipping 'by order'. This harms credibility and could delay practical action. Given the scale and rapid growth rates of emissions from international aviation and the sheer scale of emissions from international shipping, it is vital that these emissions are included in the annual and long-term reduction targets on the face of the Bill.

Aviation is the fastest growing source of greenhouse gas emissions in the UK. Globally, one in five flights departs from or arrives at a UK airport. In 2005 aviation accounted for 6.3 per cent of total UK CO2 emissions. In Scotland the figure is 2.4%, and rapidly growing (at an average of almost 8% per year for the decade to 2006 and over 10% a year from 2004 to 2006). However, due to the extra warming effects of non-CO2 emissions released at high altitude, aviation’s real contribution to climate change is probably closer to 15-20 per cent. The Tyndall Centre for Climate Change has predicted that unless government policy changes, CO2 emissions from UK aviation will more than double by 2030 and treble by 2050. By 2050, aviation could be responsible for over 30 million tonnes of CO2 a year, meaning that to deliver an 80 per cent reduction every other sector would have to reduce emissions to zero.

According to a recent UN report, international shipping accounts for an estimated 4.5 per cent of global GHG emissions. This is more than double the amount previously reported by the International Maritime Organisation. Projected growth rates mean that unless measures to reduce emissions are introduced, world shipping could see a 72 per cent increase in fuel consumption and consequent emissions between 2000 and 2020.
It is entirely practical to include these emissions from the outset. There is no need to wait until international agreement on apportioning emissions is reached, as states are currently required to report international aviation and shipping emissions as a 'memo item' under the terms of the Kyoto Protocol, and do so using internationally agreed International Panel on Climate Change (IPCC) guidelines.27 The UK GHG inventory now uses the most accurate IPCC methodology to calculate international aviation emissions; however international shipping emissions are based solely on fuel bunker sales,28 and therefore underestimated in the inventory as relatively little fuel is sold in the UK. In the long term a more robust methodology based on consumption should be sought to ensure that Scotland does not simply export emissions.

The Bill should include emissions from international aviation and shipping based on data from the recently available regionally disaggregated International Aviation and Shipping Emissions 1990-2006 GHG Inventory, but include provisions to allow for revised methodology to be sought and used. Failure to include emissions from international aviation and shipping from the outset of the implementation of the Bill – as inclusion by order risks – undermines the credibility of the entire framework.

It has been suggested by some that IAS emissions should not be included. Two contradictory reasons have been suggested – first that Scotland lacks the devolved powers to affect such emissions; and second that including such emissions would disadvantage the Scottish economy (presumably because of the delivery of effective measures to reduce air travel and shipping).

Neither argument is valid. Scotland can influence emissions through – for example - planning powers relating to airports or ports, and the surface travel links to them, and through public education and other measures, ranging from the promotion and marketing strategy of Visit Scotland, to government policy on travel by civil servants. In this respect international aviation is little different to energy generation and use, where key powers are reserved, yet others devolved – and no one has seriously suggested that we could tackle climate change without including energy sector emissions!

The idea that measures to reduce IAS emissions would harm the Scottish economy is based on a misconception that Scotland gains more from incoming visitors, than outgoing Scots spend elsewhere. The available comparative evidence suggests that the net balance of economic activity is strongly negative.29 Even though the currently weak pound might temporarily reduce this effect, the conclusion to be drawn is that further indiscriminate increases in air connectivity to Scotland would further damage our economy; and that measures to discourage non-essential aviation would clearly benefit the economy.

Secondly, Friends of the Earth Scotland believes it is vital to ensure that in reducing emissions from domestic sources, Scotland does not simply export its emissions. Therefore, we would like to see included in an alternate definition of Scottish emissions, calculated on the basis of Scottish consumption (adding emissions associated with imports, and subtracting those associated with exports). This would help demonstrate international leadership in establishing valuable foundations for future international climate negotiations, particularly with China, a country which is legitimately concerned about being expected to take full responsibility for emissions associated with products exported for consumption elsewhere (accounting for fully one third of China’s total emissions according to recent reports)30.

We agree that the Bill’s targets should be defined according to production emissions, but that in addition, Scotland should develop and report on full annual consumption side accounts for GHG emissions. While consumption and production figures are relatively close at present, it seems plausible that this could change, especially as North Sea oil and gas activities decline and import trends continue. The development of consumption side accounts would ensure that we were promptly alerted to any future increase in ‘exports’ of emissions; and would help clarify how changes such as the closure of Ravenscraig genuinely affect emissions.

This would provide a massive step towards proper accountability for GHG emissions. In economic policy, national income is calculated both by production and consumption, and the difference is a critical check on the balance of trade. This is not considered a duplication of effort but a valuable tool in economic understanding, policy making and accountability.

Thirdly and finally, as noted above, we are concerned that despite the definition of ‘Scottish emissions’ the use of the ‘Net Scottish emissions account’ to measure progress against targets means that inadequate domestic emissions reductions may be hidden by increased use of credits. As proposed above, a domestic effort target should be incorporated into the Bill to avoid this risk.
Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

Friends of the Earth Scotland supports the collective view of SCCS that the Scottish Government should establish a new Scottish Commission on Climate Change to advise it on emissions targets and budgets from the start. Constitutionally, politically, socially, economically and environmentally, Scotland’s specific circumstances make it imperative that the Scottish Government be able to seek advice from and be held to account by an independent, arms length body.

The provision of effective independent advice is essential to the functioning of the Bill. In this evidence, under question 3, we have already raised concerns about the way advice is sought.

The Bill should therefore establish a Scottish Climate Change body with duties to advise Ministers, Parliament and as appropriate, any monitoring body or bodies appointed under the Act, on:

- the current scientific understanding of appropriate targets, and the distribution of effort to deliver them (including between sectors), carbon budgeting, policy options, reporting standards,
- the scale of Scotland’s fair cumulative budget, and compatible annual targets (see previous answers regarding a cumulative budget)
- any tightening of the proposed domestic effort target;
- whether public bodies were effectively fulfilling duties imposed on them within the Bill

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

Friends of the Earth Scotland believes that stringent annual reporting to Parliament is an essential component of a strong Bill, and welcomes the reporting duties the Bill places on the Scottish Government. However, we share the collective view of SCCS that these can be further strengthened – in particular by making certain reporting duties under Part 3, section 30, subject to affirmative procedure. We also believe the reporting duties should include detail on key measures such as energy demand reduction, and parallel consumption side reporting (see answer to question 5 above).

We are also concerned that the effectiveness of the reporting regime may be hampered by delays in obtaining up-to-date information. However, as GHG emissions grow in significance to the economy we can expect enhanced investment in measuring and accounting for them. The Bill should provide for powers to tighten the deadlines for reporting in line with improved procedures in data gathering and provision. The relevant advisory body should be mandated to advise when such changes would be required.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?
Friends of the Earth Scotland believes it is crucial that the basic provisions set out in Part 4 of the Bill relating duties on public bodies should be implemented from the start. The IPCC’s 4th assessment report demonstrates the need for early action – with their estimate that global emissions will need to start declining by 2016. The Turner Committee report is based on the same aspiration yet expects developing country emissions to continue to increase for some years: the reductions in developed countries such as Scotland therefore must be rapid and significant. In this context the wait and see approach that relies on ‘hope’ to ensure public bodies start delivering emissions reduction targets in line with the Bill is simply not sustainable. The unnecessary delays implied by using secondary powers and further consultation could seriously hamper the delivery of the Bill’s aims. We strongly support a general duty on public bodies to reduce their emissions annually in line with the national targets and report on the progress made.

The mechanisms foreseen by the Bill to ensure delivery of any public duties are weak. We believe that the advisory body should be given a remit to refer a public body to the monitoring body for investigation of its compliance; and that a public body failing to comply must – like ministers – provide a report of the new and additional measures it plans to achieve compliance.

Further, we believe the Bill should provide enabling powers to establish more specific duties on public bodies, and in particular, like other SCCS bodies, we support amendment of the Bill to ensure that specific powers to establish financial incentives for public bodies - through the setting and (re)allocation of carbon budgets with commensurate financial transfers between public sector budgets - are available as an option for Ministers.

This would ensure that Ministers could adopt effective measures to ensure delivery of public duties. In this context we would refer to our recent joint report with Oxfam on models for a public sector climate fund which explores how such an approach might be implemented. This proposes that the Bill divides up responsibility for all Scottish emissions between Government portfolios, local authorities and public bodies, and that Ministers establish a fund to create a mechanism for incentives and sanctions to reduce emissions. Government departments, local authorities and public bodies would be allocated an annual emissions allowance for the sectors for which they are responsible: bodies emitting more than their allocated share would make a payment into the fund proportional to the extent to which they had exceeded their allowance; however, bodies could also bid into the fund for support to cut their emissions.

While ideally public bodies would meet their targets every year, any revenue raised from financial sanctions would provide an additional resource pool for public bodies to bid into for assistance in making further emissions cuts. Though the fund would require pump-priming from Government initially, the circular flow of incentives and sanctions could make the fund self-sustaining over time.

A Climate Fund could also be used to compensate the international community for the damage done by any failure to meet targets, proportional to the extent to which any allowances were exceeded. Any compensation paid would be in addition to existing overseas aid budgets and reserved for mitigation and adaptation measures in developing countries. This would help mainstream principles of ‘climate compensation’ within public policy and, at a time of crucial global climate talks, demonstrate genuine international leadership and solidarity for those worst affected by climate change.

In addition to implementing a general climate change duty on public bodies, and providing enabling powers to introduce others, such as a public sector climate fund mechanism, a list of specific duties for public bodies should be drafted in the event that public bodies do not meet their general duty. This could encompass measures such as the adoption and meeting of energy demand management and efficiency targets, a tightening fleet average emissions limit for public bodies’ vehicle fleets, a limit on use of domestic aviation by public sector staff and a requirement to use procurement powers in ways which support emissions reductions. While prescriptive, and we would favour a general duty under which public bodies can choose their own emissions reductions policies, a list of specific duties could be used as back-up in the event that public bodies fail to meet their general duty.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?
Friends of the Earth Scotland supports the collective view of SCCS that while Ministers should be required to produce a report on their Adaptation Programme for Scotland, the Programme as detailed in the Bill will not be adequate to deal with Scotland’s adaptation needs.

We also endorse Scottish Environment Link’s proposals on adaptation, that the Scottish Government should produce a Scottish Adaptation Programme every three years including an assessment of the impacts of climate change on Scotland; Scottish Government adaptation objectives; proposals, policies and timescales for meeting these objectives; and key indicators to measure progress by. Scottish Ministers should be required to report annually to Parliament on its programme for adaptation. The Bill should ensure that Scottish Ministers are obliged to seek independent assessment of their progress on implementation of their adaptation programme at least every two years; and to report annually to Parliament on progress.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

FoES endorses the Scottish Environment Link view on muirburn.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

FoES supports the proposals for renewables joint ventures. We believe this would help with developments relating to biomass, small hydro-power and other renewables and is not controversial.

However, we do not believe that the other main proposal - to lease off a chunk of the forest estate for commercial logging, and use the financial returns to extend the forest area - has been properly evaluated. It appears to assume that the private sector can make the forests more profitable than Forestry Commission Scotland (FCS), and carries risks to the sustainable management of the estate. This might be the reason profit rates could be raised by such a transfer. It has not been made clear whether lessees would be bound by UK Woodland Assurance Standards standards, and it is also possible that they might be able to claim Scottish Rural Development Programme grants that the Forestry Commission Scotland can't. This would not only reduce the money available for environmental land management elsewhere, it would also mean the state was paying indirectly for the higher profit rate. Overall this appears an unnecessarily complex approach.

Secondly, and critically, the carbon saving claims for Scottish forestry at large are still poorly substantiated. We would be concerned that this approach would raise emissions in the short term (from commercial harvesting, and new planning on organic soils), and not deliver as large a sink as anticipated. We welcome additional appropriate woodland planting for all sorts of reasons (enhanced biodiversity, hydrology, recreation etc) but are concerned about the validity and accuracy of counting it against national carbon targets regardless of current Kyoto rules. The Carbon Accountability Project (hosted by FoES, see www.carbonconfidence.org.uk) is examining the quality of carbon claims for landuse change in Scotland amongst its early projects. While, on balance, new Scottish forests would probably be a carbon sink, how great, how sustainably, and over what timescale are still too uncertain to reliably count towards our targets.

However, although new forests planted by a not-for-profit trust might be good for biodiversity and landscape, the large areas of leased forests would probably see harvesting and replanting of exotic conifers on a large scale. Private companies will not want to lease the most marginal upland forests, and if they are not allowed to lease forests of major recreation and biodiversity value; the replanting they undertake will be mainly in the broad swathes of mid-altitude forestry away from towns and cities.
Thirdly, we would question whether these arrangements are the most effective way of moving towards the desired outcomes. Putting FCS under a clear climate change or broader sustainability duty, may be a better way of ensuring the forest estate is managed to maximize climate change benefits. This could require them to take a number of actions which might include: requiring FCS to restore peat bogs where that is better for carbon management than planting trees; manage forests to produce construction grade timber to replace carbon intensive steel and concrete in construction; and, where appropriate, buy new land for afforestation.

In light of this we support LINK’s view that the forestry leasing proposals should be withdrawn from the Climate Change Bill and analysed in their own right as part of a land use action plan. This would allow proper debate around the role of forestry and other measures related to land use change that would properly, and accountably, help reduce Scotland’s net emissions; and ensure that there was no risk that other welcome measures within the Climate Change Bill were sidelined while the forestry proposals are used as a political football.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

FOES support the proposals to produce an energy efficiency action plan for Scotland. Frustratingly, a plan or strategy on this issue has been promised since 2004 and is yet to be delivered. Within the Bill there is little detail on what this plan may entail, although the policy memorandum contains more information. Given the massive potential for both carbon and monetary savings from energy efficiency, this action plan must be of the strongest and most comprehensive nature. In particular, the Bill must require Ministers to establish targets for energy conservation and energy efficiency in Scotland as a whole, and for those sectors with the highest gross energy consumption and greatest intensity of energy use. The targets and plans must include use of energy for transport and heat, and not just electricity. The plans must provide specific and separate measures for energy efficiency in both existing and new buildings. FoES believes that such plans should ideally be rooted in a statutory energy hierarchy which sets targets for demand management, energy efficiency, renewable and decentralized energy. Progress against such targets should be reported as part of the Bill’s annual reporting provisions.

The Bill should also require Ministers to establish measures to require local authorities and other public bodies to establish enforceable energy demand reduction targets, and to adopt plans for their delivery.

While recognizing that the Bill broadens the scope of an efficiency action plan beyond that required by section 179 of the Housing (Scotland) Act, we are concerned that the Government intends to repeal section 179 of the Housing (Scotland) Act. This requires a strategy for improving the energy efficiency of living accommodation. The Scottish Government’s proposals, in the present Bill, are weaker, given that section 48 of the Bill merely requires ministers to ‘prepare and publish a plan for the promotion of energy efficiency in Scotland’. From our point of view, this wording is neither as ambitious nor as prescriptive as that in the Housing Act. Our preferred solution is for a wording which meets the higher ambitions of ‘improve’ applied across the breadth of sectors foreseen in the present Bill.

We are also concerned that microgeneration is not included in the provisions of this section (apparently because of legal advice34) despite the Bill defining energy efficiency broadly to include ‘the use of technologies reliant on renewable sources of energy’ (Section 48 (8) (a)).

Microgeneration should be included, and specific provisions made to require that Ministers issue or revise planning guidance so as to facilitate the installation of microgeneration technologies, and in particular to require a minimum contribution to building energy demand from microgeneration in all new construction. This would help establish a firm market for Scottish manufacture and installation of microgeneration technologies.
This section of the Bill is also the appropriate place to resolve an outstanding shortcoming of Scottish law in respect of the promotion of energy efficiency and microgeneration. Where English and Welsh local authorities can offer a one-off discount or rebate from council tax to households installing efficiency or microgeneration, there are no similar enabling provisions in Scotland. Given the SNP has postponed any attempt to reform the local taxation system it is no longer appropriate to wait for such a reform bill to introduce such powers. **The Bill should therefore contain enabling provisions to provide rebates from council tax to households installing efficiency or microgeneration.** Similar provision is merited for business rates for small businesses.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

**What are your views on this approach?**

While FOES welcomes proposals to make regulations for the assessment of the energy performance of non-domestic buildings **we would like to see these enabling powers extended to domestic buildings; and powers provided to compel building owners to adopt all recommendations included in a performance certificate within a specified period, or at a minimum, before resale or leasing of the property.**

We advocate provision for an enhanced system of building labeling, linked to funding for upgrading to improve standards, which ensures that progressively it becomes impossible to sell or rent a substandard building, with the benchmark to be achieved progressively rising over time.35

Within the proposals discussed in the policy memorandum, there is a wide range of scenarios proposed. Extended across all buildings, Friends of the Earth Scotland would support measures that extend the scope of Energy Performance Certificates (EPCs) to take account of operational ratings. We would also support measures that require owners to formulate cost-effective action plans relating to their enhanced EPCs and ensure compulsory uptake of recommendations over time. Without both these measures, applied across domestic and non-domestic buildings, the proposals suggested fall short of delivering rapid and substantial contributions to climate targets.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

**What are your views on this proposal?**

We welcome the recognition that heat is a major issue in Scottish emissions. Around half of all primary energy use in Scotland is for heat. We support measures to reduce heat waste, such as combined heat and power and district heating, to improve the efficiency of heat use, and to produce heat from renewable and sustainable sources. We are concerned that – perhaps because of uncertainties in the UK regime for heat – the Bill only includes some very vague and general enabling powers. **We would support the inclusion of heat in the demand management, efficiency and microgeneration action plans, with explicit targets.**

However we are particularly concerned at the implications of the exclusion of all waste materials from the definition of fossil fuels (in Section 48), which deviates from previous practice in thereby designating non-renewable waste materials such as plastic as a ‘renewable source’ for energy (or heat) generation. **Friends of the Earth Scotland strongly opposes excluding all waste materials from the definition of fossil fuels**, as it would result in increased greenhouse gas emissions from the replacement of waste materials used for energy. In fact even biomass wastes such as paper, card and wood are typically better recycled – in climate terms - than used as energy sources. However we would accept the inclusion of uncontaminated, fully segregated biomass wastes as a renewable resource, and encourage their use for heat generation where recycling is impractical.
The use of waste as a “renewable” fuel directly conflicts with the attempts to reduce CO2 emissions. Incinerator technologies typically emit almost a third more CO2 than coal fired power stations per unit of electricity produced. However we support promotion of anaerobic digestion as the preferred approach to generate energy from biodegradeable wastes, as being the least harmful thermal technology to human health and climate change emissions.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

- Waste prevention and management plans;
- Waste data;
- Deposit of recyclable waste;
- Procurement of recyclate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

What are your views on these proposals?

Waste prevention has a critical role in delivering a zero waste Scotland, yet to date has received very limited focus. We welcome many of the proposals within the Bill as they should help move action up the waste hierarchy. We have previously provided detailed views in our response to the zero-waste consultation paper, and merely summarise those views here.

Friends of the Earth Scotland therefore supports the development and implementation of requirements for site waste management plans and the establishment of mechanisms to support enforcement. Where plans are not implemented, within reason, SEPA or relevant local authorities should be permitted to undertake remedial action and charge for it at a penalty rate. The regulations should empower the setting of reporting provisions and standards. The establishment of such a plan should be a requirement at the planning stage for new developments. Specific requirements should perhaps be designed for those sectors that generate waste in the largest volumes (mineral and mining; agricultural and construction).

With regards to waste data, if business is to manage waste it must measure it. In addition, improved data on waste arisings can better inform policy and infrastructure decisions which will improve recycling and waste prevention in the business and commercial sectors. A statutory duty on businesses to report on their waste arisings would support SEPA and Government in developing and implementing waste and resource policy aimed at achieving a zero waste Scotland.

We would also support statutory targets on retailers for reducing packaging, improved powers to enable the public to more readily challenge excess packaging and legislation to require that packaging materials are taken back by retailers for reuse/recycling. The regulations must be readily enforceable by SEPA. Civil penalties may be preferable, as long as such a regime is used to ensure that penalties reflect the retailer’s ability to pay, rather than to enable fixed penalties of limited deterrent effect.

Furthermore legislation should also specify the requirement to use recycled materials, identify the extent of materials covered and enable a phased increase in the proportion of recycled material over time. In addition legislation should set out how these commitments are to be enforced. We are aware of voluntary approaches to stimulate specification of recycle in public procurement that WRAP have developed and support these being strengthened through legislation. Ensuring requirements for both public bodies and businesses to procure in this manner would help significantly increase the impact, and stimulate the supply chain. This would give considerable support for closing the zero waste “loop”, and ensuring demand for recycled material.

Regarding charges for carrier bags, countries that have implemented charges have delivered 70-90% reductions and voluntary measures no more than 25%. We remain convinced that the most effective way of cutting carrier bag usage would be through a plastic bag levy or ban, as has proved effective in Ireland. However, we would encourage powers to be drawn in broader terms to cover a full range of single-use, disposable products, of which plastic bags are perhaps the most obvious example.
There is also significant community support for reduction in use of single-use plastic bags. Friends of the Earth Scotland has seen this clearly demonstrated from our delivery of the CREW project, which included several plastic bag free community campaigns across the country.

Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

Friends of the Earth Scotland are disappointed with the lack of effort the Scottish Government made to engage with communities and individuals around Scotland. This will probably hamper the Government in implementing the provisions of the Bill, and subsequent action plans which will require wider public engagement to deliver behaviour change, and to ensure support for the necessary major infrastructure developments in transport, and energy generation and transmission. In this respect we are gravely concerned that the similar lack of wide public engagement in the preparation of the National Planning Framework could hamper the delivery of projects important for climate protection in the future.

The delivery of the Bill’s climate targets will depend on effective outreach and engagement backed by effective social marketing to ensure that there is broad support for restrictions on climate damaging ‘anti-social’ behaviour, in the same way as broad support for challenging health improvement restrictions (such as the ban on smoking in public places) was achieved.

It is telling that despite the limited outreach, over 20,000 people responded to the consultation, a response rate second only to that of the consultation on the Smoking Bill over which the Government made considerable effort to engage with the public.

In light of this high response rate – achieved largely on the back of work by NGOs including Friends of the Earth to inform and engage the public with the process – it is disappointing that the Government apparently chose to place a lower value on responses received from individuals using or adapting text provided by NGOs.

We also feel that the consultation document could have been clearer and consulted more on general principles, and on matters of public concern. We note in particular that there was no consultation question on the inclusion of international aviation and shipping emissions.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

As is typical of SEA practice, it delivered limited quantified analysis of the benefits and impacts of the programme. While in this case it is difficult to envisage the Bill programme having a net negative environmental effect, FoES believes that SEA procedures should be tightened in this respect. Indeed it would be appropriate, in our view, for the Bill to amend the SEA Act to require quantification of any significant climate effects identified in SEA practice.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

Climate change impacts upon the poorest hardest. Poverty increases people’s exposure to the adverse effects of climate change, and poor communities are the most vulnerable, even though they have minimal responsibility for creating the problem. Between 2000-2004 262 million people were affected by climate disasters annually. 98% of these were in the developing world.37

Fundamentally the aims of the bill would reduce inequalities between Scotland and poorer developing countries, and benefits those disadvantaged groups already suffering from the impacts of climate change and sea-level rise. However the pursuit of climate targets could have unintended international consequences, such as those being seen at present with biofuels production increasing food scarcity and human rights abuses.
Within Scotland unintended consequences could foreseeably impact disproportionately on the elderly, or those with disabilities: if for example, measures to reduce domestic energy use led to increases in fuel costs faced by the fuel poor; or measures to reduce car use (such as road user or parking charges) failed to provide exemptions for those with disabilities. In addition, increases in flooding in Scotland could adversely affect our poorest communities, who are less able to pay for insurance and the costs associated with flood damage or displacement from their homes. The Bill may therefore need to make provision for appropriate compensation if such impacts arise, and should include a sustainability duty to ensure that the choice of measures to deliver the Bill's objectives minimises the risk of such consequences.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

Global sustainable development must be an underpinning principle of the Bill. In light of this, FoES supports Stop Climate Chaos calls for sustainable development to be acknowledged in the long title of the Bill. It should be noted that this has a precedent given the Flood Risk (Scotland) Management Bill is set to be amended to include 'a more specific reference to sustainability in the Bill's long title'.

SCCS further believes that the Climate Change (Scotland) Bill should place a duty on the Scottish Government to ensure that any mitigation and adaptation efforts contribute to the furthering of sustainable development and ensure the avoidance of negative social and environmental impacts; either within Scotland or in the developing world. Such a duty would help ensure that the massive potential of the Bill to contribute to sustainable development could be realised.

Q20 Do you have any other comments on the Bill?

Friends of the Earth Scotland is keen to ensure that the provisions in the Bill are implemented effectively. We propose that, as in England and Wales, the courts be given a role. Ideally the courts should be given an effective preventative role – an opportunity to use their powers to quash Ministerial decisions on issues such as future targets or budgets, or projects or programmes that were likely to lead to breaches of the targets. In doing so, the courts would have to be able to consider the merits of the matter, and in particular the relevant advice of the relevant Advisory Body. It would also be critical that access to the court was timely and affordable. Unfortunately, these three criteria, despite being established by the Aarhus Convention, are not met in Scotland at present.

Even judicial review is less easily accessible than in England and Wales where the courts have accepted the principle of ‘protective costs orders’ where such actions are taken in the public interest by voluntary organisations. These provide a guarantee that the threat of a punitive costs award cannot deter a legitimate action to seek judicial review. In Scotland new provisions are needed to ensure that affordable and merits-based access to justice is available in cases relating to the Bill’s objectives. This would ensure that public interest groups could seek a court ruling if Ministers were failing to comply with their duties under the Bill. Such provisions may not require primary legislation, but we would expect Ministers to commit to ensuring that the necessary provisions are brought forward.

As noted above, in our answer to question eight, FoES also supports provisions for effective financial incentives and disincentives.

Further, we believe that the discipline of Strategic Environmental Assessment for plans and programmes should be used to ensure effective scrutiny of the extent to which new plans and programmes are compatible with the Climate Bill’s objectives. The Bill should require Ministers who are minded to approve a plan or programme for which the SEA has identified significant GHG emissions to seek advice from the relevant body on whether and how the plan or programme can be made compatible with relevant annual targets, and if such a plan or programme is then approved, the relevant Minister should be under a duty to explain to Parliament what measures will be taken to ensure compliance with annual targets.

Fossil fuel power stations and an emissions performance standard

The Turner Committee report recommended further consideration of an emissions performance standard (EPS) for fossil power generation, as a means to help stimulate carbon capture and storage. FoES acknowledges that direct legislative competence in this area is not devolved. However administrative devolved arrangements give Scottish Ministers the power to set guidance for consents on such power stations. We believe the Bill should include provisions mandating Ministers to use their powers to define guidance under section 36 of the Electricity Act 1989 to introduce an EPS by a certain deadline.
Ozone Depleting Substances
Recent research has revealed the significant amounts of potent greenhouse gases currently stored in insulation foam blown with hazardous ozone depleting substances - principally found in steel framed buildings. In the UK as a whole the stock is equivalent to some 3-4 million tons of CO2 (and outweighs the volume of similar gases in refrigerators by 20:1). However, unlike waste refrigerators which are strictly controlled and the gases recovered, demolition wastes from these sources are not properly controlled. Consideration should be given to bringing these gases within the ambit of the climate change bill, to provide a solid base and incentive for proper controls.

Therefore Friends of the Earth Scotland’s priorities for the Climate Change (Scotland) Bill and concluding comments on the Bill, are:

1. The SCCB is the most important piece of legislation to come before Holyrood so far, and is very welcome. As it sets a framework for four decades of action we believe it is essential to get it as good as possible now.
2. The objective of the Bill must be to play a fair role in preventing dangerous climate change (more than 2°C warming) by reducing Scotland’s emissions in a sustainable manner.
3. The 2050 target of at least 80% is in line with current scientific advice, but may well need to be further tightened or achieved earlier. The advisory body must be empowered to advise of when and whether long term targets should be tightened.
4. In setting annual targets Ministers should be subject to the ‘minimum floor’ of at least3% per annum from the beginning (including the 2010-2019 period), and also required to be compatible with a fair and safe cumulative budget to be identified by the advisory body.
5. The interim target of at least 50% reductions should be met by 2020, not by 2030, to ensure early and rapid action in line with scientific advice, and deliver a fair and safe cumulative budget.
6. For reasons of equity and sustainable economic development, a target should be imposed that at least 80% of the effort to reduce emissions on an annual basis must occur within Scotland, with international trading minimised. The net account must therefore be constrained to reflect this. It also needs parallel consumption accounting to ensure that Scottish emissions are not reduced by off-shoring economic activity.
7. International aviation and shipping emissions should be included in Scotland’s account from the outset using existing Kyoto reporting methodologies, with powers to amend the methodology in line with international practice.
8. The Bill should include the necessary enabling powers to provide effective financial incentives for delivery (such as a public sector climate fund) and provide clarity that access to the courts to ensure justiciability over targets and their delivery will follow the principles of the Arhus Convention.
9. A duty on public bodies, to reduce emissions in line with national targets, and report appropriately, should be imposed and resourced from the outset. The Bill must ensure it is enforceable; and establish powers to amend it, or specify more detailed duties to help deliver targets.
10. Energy efficiency measures should be placed within a statutory energy hierarchy which promotes sustainable energy management and supply, and the objectives of the action plan should be in line with those in the Housing (Scotland) Act – to ‘improve’ efficiency, not just ‘promote’ it. The powers to regulate building improvements should be extended to all buildings, and include powers to require all identified recommendations to improve operational ratings.
11. The Bill should include a requirement to take such steps as necessary to deliver sustainable supply of renewable heat. The definition of renewables should exclude mass-burn incineration technologies, and prioritise heat management, efficiency and biogas from anaerobic digestion, in line with an energy hierarchy.
12. The waste management measures included in the Bill are all welcome, but fall short of a comprehensive approach to zero waste which would prioritise waste reduction, and seek to phase out incineration, and minimise energy-from-waste in preference to reuse and recycling which save more energy.
13. The proposals for joint venturing by the forestry commission are welcome, but those on leasing the estate are of questionable value. Measures to maximise climate benefits from forestry and upland land-use should be addressed in an integrated manner in a land-use strategy for Scotland. The Bill could usefully require Ministers to bring forward such a strategy, compatible with the CCB targets.
1 Living within a carbon budget’ (2006), available for download at: http://www.tyndall.ac.uk/publications/briefing_notes/Livingwithinacarbonbudget.pdf
3 The Tyndall Centre has identified a safe carbon budget for the UK of 4.6 Gigatonnes of Carbon Equivalent (Gt-Ceq) – equal to 16.9 Gigatonnes Carbon Dioxide equivalent - between now and 2050 (Bows et al, ‘Living within a carbon budget’, 2006). Crudely extracting this to a Scottish context, suggests a Scottish budget of 0.4 Gt-Ceq – or 1.47 Gt-C02eq
4 Intergovernmental Panel on Climate Change (2007), Fourth Assessment Report, online at: www.ipcc.ch/ipccreports/ar4-syr.htm
5 Stern Review, online at: http://www.hm-treasury.gov.uk/sternreview_index.htm
6 See: http://www.ipcc.ch/
10 In response to a question at the Scottish launch of the Committee on Climate Change’s first report, the Cabinet Secretary for Finance and Sustainable Growth stated that the Government intention is to reduce domestic emissions in the first instance before considering the purchase of credits
11 UK Climate Change Committee, inaugural Report, , Inaugural report ‘Building a low-carbon economy - the UK's contribution to tackling climate change’, online at: http://www.theccc.org.uk/reports/
13 See for example Goush, S (2007) ‘Aid, the Clean Development Mechanism and Some Open Questions’;
14 UK Climate Change Committee, inaugural Report, Inaugural report ‘Building a low-carbon economy - the UK's contribution to tackling climate change’, online at: http://www.theccc.org.uk/reports/
15 WWF, unpublished briefing (December, 2008), The danger of “offset Europe”
21 The IPCC calculates that the extra warming effects of aviation amount to 2 to 4 times that of the forcing of its CO2 emissions alone. See IPCC 1999, ‘Aviation and the Global Atmosphere’
23 Tyndall Centre, 2005, ‘Decarbonising the UK: Energy for a Climate Conscious Future’
24 According to a UN report leaked to the Guardian newspaper, international shipping accounts for 4.5% of global GHG emissions. http://www.guardian.co.uk/environment/2008/feb/13/climatechange.pollution
26 Marintek, 2000, report to the IMO ‘Study of Greenhouse Gas Emissions from Ships’
28 UK Greenhouse Gas Inventory, 1990 to 2006 report to UNFCCC April 2008
29 See: http://www.dft.gov.uk/consultations/archive/2002/fd/scot/mc/chapter90therkeypolicyissues1516. Paragraph 9.1.17 notes annual tourism receipts from inbound passengers were £0.5bn in 2000, while the comparative figures for outbound expenditure by Scots travelling abroad was £0.7bn.

30 Oslo Centre for International Climate and Environmental Research report (February, 2009) online at: http://www.cicero.uio.no/webnews/index_e.aspx?id=11095

31 Intergovernmental Panel on Climate Change (2007), Fourth Assessment Report, online at: www.ipcc.ch/ipccreports/ar4-syr.htm


33 For a more detailed briefing see Oxfam Scotland and Friends of the Earth Scotland’s joint report, Shirra, K (November, 2008)

34 Cook, G (15 January, 2009), SPiCe Briefing, ‘Climate Change (Scotland) Bill’


37 UNDP 2007 World Development Report

In 2008 the Scottish Government consulted on its proposals for a Scottish climate change bill. Glasgow City Council’s approved response was submitted at that time. On December 4th 2008, the Climate Change (Scotland) Bill was introduced in the Scottish Parliament.

Glasgow City Council’s response to the questions raised in the ‘call for views’:

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

We welcome the proposal. It is essential that the Scottish Climate Change Bill establishes a statutory target for at least an 80% reduction of greenhouse gases in Scotland by 2050, following the Kyoto Protocol basket of six gases and the target suggested by Intergovernmental Panel on Climate Change for Developed Countries (80%).

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

The action taken in the next few years is crucial to the progress in tackling climate change. Therefore statutory annual targets would appear to be more efficient in achieving the 50% target in 2030 and 80% in 2050. With the multiyear target, there is a risk that early inaction may compromise further progress and achievement of interim and long term targets.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

To achieve both the 2030 and 2050 targets, the bill must establish year-on-year reduction targets of at least 3% from the start. This will also ensure that Scotland fulfills its aspiration of providing an example of good practice to other countries.

Q4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

It is suggested that the priority of the Bill is to establish domestic emissions in Scotland and that international emissions credits are kept to a capped minimum.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?
The definition appears to be fairly comprehensive and robust. The inclusion of emissions resulting from shipping and aviation is a valuable measure.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government's approach to obtaining independent, expert advice on climate change?

The use initially of the UK Committee on Climate Change is supported. If necessary in the longer term would appear that the existing bodies, e.g. SEPA, SNH, could advise, monitor and scrutinise the implementation of the Bill.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland's emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

The statutory reports are welcome; those will ensure clear and concise monitoring of the process and actions being taken.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

Those measures are welcomed to ensure the action of public bodies is in line with national measures; however this can only be done with adequate funding support as well as guidance and capacity building.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

This action is welcome. Adaptation is an essential complement to mitigation action against climate change, rooting it in the bill will ensure that it will not be undermined.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

This proposal is welcome. The muirburn season has already been changed by the Welsh Assembly and DEFRA to adapt to climate change, prevent soil erosion and water pollution. There should be an introduction of even stricter regulations concerning heather muirburn, particularly on blanket bogs, to prevent significant release of carbon through peat erosion.
Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

The proposal is welcome. The forestry plays a key role in addressing climate change both by absorbing carbon dioxide from the atmosphere and storing it in growing vegetation and soil, and as a sustainable source of wood – an alternative and less polluting energy source to fossil fuels, and a low-energy construction material. The planting strategy should aim to achieve a sustainable balance between the planting of exotic conifers for fast carbon uptake and native hardwoods for longer term capture and biodiversity gain.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioral change.

What are your views on this proposal?

It is a very relevant proposal. As the Stern Review indicates, by 2050, energy efficiency has the potential to be the biggest single source of emissions savings in the energy sector. The most cost effective way of reducing emissions is to use energy more efficiently. It can also improve productivity and can contribute to the security of energy supplies by reducing reliance on imported energy and ensuring maximum usage of energy resources.

Education is the key to promote behavioral changes, since these occur when attitudes change and for this to happen, individuals and groups have to be educated about the consequences of their actions to them and others, as well as alternative actions and their advantages.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?

It is a relevant and welcome approach. Non domestic buildings are significant users of energy and producers of greenhouse gases emissions. Action to reduce carbon emissions will be needed in every sector of the economy, but clearly we need to focus first on the areas where we can make the most impact for the least cost. Most measures relating to buildings, such as retro-fitted wall and roof insulation, and use of condensing boilers, will actually save money - as well as saving carbon.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

A significant amount of the final energy consumed in the Scotland is in the form of heat, the generation of which accounts for a great part of the national CO2 emissions.

The investment in renewable sources of heat such as biomass, micro generation and heat from waste will certainly have a positive impact in mitigating against climate change, while preventing fuel poverty.
Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

- Waste prevention and management plans;
- Waste data;
- Deposit of recyclable waste;
- Procurement of recyclate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

What are your views on these proposals?

These proposals are extremely relevant, given that waste is a growing problem, and its appropriate disposal is a central part of the work to reduce the effects of climate change because of the impact it has on the production of Greenhouse gases. Landfill sites are fast filling up, and combined with the resulting greenhouse gases they create, the amount of waste produced and the way it is treated waste needs to be re-evaluated.

However such proposals need to be considered in light of the Scottish Government’s Zero Waste Policy and in the context of the revision of the National Waste Plan, which is due out for consultation in 2009. The Policy and Plan will allow a more formal consideration of the benefits and necessity of these proposed actions.

Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

Adequate.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

No.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

No.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

No.

Q20 Do you have any other comments on the Bill?

No.
Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

We believe the 2050 reduction target should be 90% by 2050 from 1990 levels to meet reduction in CO2 necessary to reduce to possibility of runaway climate change (see Tyndall Centre for Climate Research).

The interim target is a good idea in principle, but we have suggested that the 2030 target would be better set at 2020 as this would tie in with dates set in other international agreements and the UK Act.

In relation to the level of the reduction target, WWF figures state that the original manifesto commitment of 3% annual reduction targets would result in a 45% reduction by 2020 and a 60% reduction by 2030. Therefore, the interim target as it is currently set, would not deliver the required trajectory.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

Only statutory annual reduction targets set so as to achieve 90% reductions by 2050 are acceptable.

We suggest that carbon budgets should be of four years in length to run alongside a Parliamentary term to ensure accountability, and that these budgets should be set two to three years in advance.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

This approach is wholly inadequate. There must be a statutory requirement for equal annual reductions starting from 2010, that are set to achieve 90% reductions by 2050. Likely to be about 4% per annum.

Q.4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?
The objective of this Bill should be firmly fixed on directly reducing the emissions which arise in Scotland. Therefore, there should be a limit on the number of international carbon credits Scotland uses to meet its annual targets. Stop Climate Chaos Scotland suggests the absolute minimum of reductions should be met through the purchase of carbon credits, a figure of 20% has been suggested by the NGOs.

**Q5** The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

Emissions from international aviation and shipping must be included in the definition of ‘Scottish Emissions’. We welcome the shift in the Bill which moved towards their inclusion.

**Q6** The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

Independent, expert advice is essential. In the SGP consultation response we supported the proposal to make use of the UK Committee on Climate Change in the short term. If a Scottish body were to take on this role it should be a new body with a remit explicitly focused on climate change. One problem with the current proposals is that Ministers, not Parliament, would appoint the Members of this new committee, which reduced its independence and credibility. It should be noted that the NGO responses were overwhelmingly in favour of establishing a new Scottish Climate Change Committee.

**Q7** The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

Our main concern with this section lies in the lack of sanctions and accountability. The Bill currently contains no consequences for Ministers who miss their targets. Given that they are responsible for their success or failure, Ministers need to know what will happen if they fail.

**Q8** The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

We believe it is important duties are placed on public bodies in relation to reducing their emissions. Local authorities in particular are key to delivering reductions in emissions. Guidance, support and sufficient finance from central government are crucial if LAs are to play their part.
Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

It will be impossible to ‘adapt’ to many of the predicted global impacts of climate change such as global food shortages or impacts on the Scottish economy such as from a collapse in tourism. This is why efforts must be focused on reducing our emissions and demanding that other countries do the same.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

No submission.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

No submission.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

This requirement is welcome as energy efficiency can be a rapid and cost effective way of reducing emissions. The recent Scottish Government report on Low Carbon Buildings contained much to be welcomed. However significant levels of Government investment will also be required to achieve the potential for energy efficiency in older buildings.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government's thinking in this area.

What are your views on this approach?

These provisions are welcome. The non-domestic sector represents a significant proportion of the built environment and therefore will have to be included to achieve even the 80% reductions currently proposed by government.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?
As a major proportion of energy demand is for heat it is vital that heat be generated from non-fossil fuel, renewable sources and that a scheme, such as ROCs for renewable electricity, to encourage this switch by the energy providers is developed.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

- Waste prevention and management plans;
- Waste data;
- Deposit of recyclable waste;
- Procurement of recyclate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

What are your views on these proposals?

The handling and treatment of waste generates significant emissions. There is an opportunity to reduce this impact through waste minimisation.

Energy from waste is not a sustainable way of generating electricity. As well as generating CO₂ emissions, incineration burns useful resources that could otherwise be conserved or recycled.

Q16 What are your views on the adequacy of the Scottish Government's consultation in advance of publishing the Bill?

No submission.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

No submission.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

No submission.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

If the provisions of the Bill are successful in starting to achieve the required reductions in carbon emissions, this will start us on the road to sustainable development.

Without a shift to non-fossil fuel based sources of energy and a reduction in climate changing emissions, development cannot be regarded as sustainable development. The bill is therefore absolutely key to achieving this aim.

Q20 Do you have any other comments on the Bill?

Climate change threatens the lives of everyone but its impacts can be reduced if greenhouse gas emissions are reduced sufficiently quickly. At present plans to reduce emissions globally are not sufficient to prevent runaway climate change. The UN negotiations in Denmark later this year may be the last chance to secure global agreement on reductions and avert catastrophe. It is therefore imperative that Scotland joins other countries in showing global leadership if there is any possibility of getting the non-industrialised world to cut greenhouse gas emissions sufficiently to avoid runaway climate change. This bill is our flagship climate change policy and is a vital piece of legislation. The Scottish Government must ensure that it is not only the best climate legislation in the world but that it does what it says on the tin. Presently, the lack of early targets is undermines the Bill.
Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050. What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

The Highland Council is satisfied with the proposed end target of 80% reduction by 2050 and the interim target of 50% by 2030. This encourages greater reductions in the first 20 years of the Bill and is in line with the Council's response to the consultation on the Bill.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive. What are your views on the setting of targets in batches from 2010 to 2022?

Setting targets in batches will be helpful and enable authorities to plan emissions reductions projects in line with government targets. Highland Council would urge the Scottish government to produce the secondary legislation and associated targets as soon as possible in order that effective programmes of work can be planned.

Section 2, subsection (2) states only that targets for each year must be lower than the previous year. For example, in 2010 the target set would be for emission levels lower than 2009.

Highland Council welcomes Section 4 of the Bill, especially subsection 4(f) outlining the need to consider the impact of the target on remote and rural communities when setting budgets. Some consideration of preceding weather conditions should be included in this section also. In the north of Scotland, a particularly cold and long winter may result in increased energy demand and associated emissions. This could lead to a target being missed and result in difficulty reaching targets set the subsequent year. Targets set by the 1st of June 2010 outlining annual emissions reduction up until 2022 will need to be flexible to take account of such anomalies.

In the original consultation on the Climate Change Bill, many questions were about budget periods and the banking and borrowing between periods. No reference is made to this in the Bill. Is the period 2010-2022 considered to be one long budget period from which banking and borrowing could take place? If so, it is felt that this timescale is too long to ensure continued downward trends in emissions reductions. Clarification of the process is needed.

Are targets going to be uniform across sectors and within sectors? In terms of local authority areas it is clear that certain areas will be able to capitalise on renewables or the availability of land for carbon storage, making targets easily within reach while other authority areas may struggle. Rural and northern areas may see greater emissions due to transport, geography and prevailing climatic conditions.

From the perspective of a local authority interim budgets set far enough in advance could allow capital programmes containing details of carbon emissions reductions to be prepared. Local Authorities carry out this work through their Carbon Management Plans which tend to run from 3-5 years as opposed to being updated annually. The budget periods proposed in the original consultation are preferable to the current proposed year on year targets included in the Bill.

The Bill contains within it the ability for Ministers to re-set any of the dates set in section 4, subsection 2. In order that early emissions reductions are achieved it is imperative that dates do not slip back, delaying action.
Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

It is difficult to comment on the effectiveness of such an approach without first knowing:

A. The % emissions reduction anticipated through carbon removal
B. The % of carbon offsets or international credits to be allocated
C. The success in achieving emissions reduction at 2020

Due to changing society and technologies and the influencing factors outlined in section 4, subsection 2 of the Bill, it is felt that a similar approach to that leading up to 2020 should continue. Monitoring progress and seeking advice before setting targets would be best.

If targets leading up to 2020 are to be lower than 3% per annum then there is some confusion as to how the 80% reduction by 2050 can be achieved. In order to reduce cumulative emissions, early action is needed and higher targets should be set in the first half of the Bill. This seems to be reflected in the overall interim target of 50% by 2030 however a breakdown of annual targets does not make it clear how it should be achieved.

Q.4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

In the Highland Council response to the initial consultation on the Climate Change Bill it was stated that:

"Including international credits to help achieve the target by 2050 is not felt to convey the correct message; that the Scottish Government is a world leader in driving change. While it is accepted that developing countries need assistance to curb GHG emissions, as a wealthy nation, Scotland should be in a position to enable change within its society, rather than opt to reduce GHG levels by purchasing international credits (at a lower cost to the Scottish economy). There should, however, be scope to assist developing nations within the Bill, yet such assistance should not contribute towards our overall domestic target for 2050".

Highland Council are therefore disappointed to see that international credits will be included towards Scotland’s net emissions. While it is accepted that such credits could enable Scotland to contribute a greater share of global GHG emissions reductions, it is not felt that such an approach adheres to the Sustainable Development Principles outlined in Question 19.

However, as credits are included towards Scotland’s net emissions, Highland Council would urge that a limit is put on the number of such credits purchased and that tight regulation ensures that units purchased result in sustainable carbon emissions savings projects elsewhere with no adverse social, economic or environmental impacts.
Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

The Highland Council welcomes the inclusion of aviation and shipping in the Climate Change Bill. The Highland Council is also pleased to note that land-use and its effect on climate change have been scoped into the Bill. Although Scotland’s net emissions will give a baseline from which to measure change, it should be noted that levels of emissions and removals will not be uniform across the country and vary greatly between Local Authority areas. Care must be taken when reporting removals and emissions on a regional basis. Clarification is sought on the reporting requirements of public bodies in relation to the Bill. (See Question 8). As highlighted in the response to questions 2, care should be given in setting targets to ensure that each region in Scotland is contributing its “fair share” towards emissions reductions. This also adheres to the Sustainable Development Principles (Question 19).

Highland Council believes that in order to achieve a move towards a low-carbon society the greatest emphasis should be on emissions reductions and not removals. Utilising forestry and land-use as potential carbon storage will form a useful role in tackling climate change but is treating only the symptoms of the problem and not the cause. Although future technologies such as Carbon Capture and Storage are not mentioned in the definition of “removals”, section 15, sub-section 2 of the Bill allows Ministers to alter the definition of removals in the future. Highland Council would have concerns should CCS be included and request that any amendments to the definition be consulted upon.

The Highland Council also has concerns over the regulation of such land-use and the effects carbon storage will have on existing land-users.

There is no scope within the Bill to take account of the emissions from the products Scotland consumes or the effects transient populations and tourism may have on Scotland’s emissions. Areas with transient populations will have large fluctuations in GHG’s. This is touched upon further in Question 9.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

To allow comparisons and provide for consistency advice should come from the same body that is advising the UK Government on the UK Climate Change Bill – the UK Committee on Climate Change.

As the UK Government is the first to pass a Climate Change Bill and has a committee in place using world leaders in Climate Change Science from the Met Office and Hadley Centre, it is unclear what added value Scotland could gain from setting up an independent committee. There would inevitably be some cross over where Scotland has no devolved powers. However, the
Highland Council are content with the provision in Scotland’s Climate Change Bill that would allow a Scottish committee to be set up if deemed necessary.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

No submission.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

The Highland Council would welcome such duties as it would ensure that each area in Scotland was contributing its “fair share” towards tackling climate change. However these duties must carry with them the necessary budgets to perform the re-alignments that will be required to deliver GHG reductions. As well as duties, incentives should be provided to promote change.

There is a need for partnership working between local authorities and other public/private bodies, to maximise the overall emissions reductions.

The Highland Council welcomes the powers to issue guidance to public bodies. Clear guidance on measuring techniques, conversion factors and timescales is needed. The government could also produce “Best Practice” guidance on the methods and measures to be used to achieve GHG reductions. This is particularly relevant for those public bodies captured under the Carbon Reduction Commitment.

Methods for measuring footprint data can vary and public bodies currently have large differences in the scope and timescale of their Carbon Management Plans. A uniform methodology could enable public bodies to benchmark progress against one another and monitor collective success.

In terms of reporting, there are concerns at present over the responsibility of local authorities in reporting community emissions and in particular emissions from the basket of green-house gases. Currently data is gathered on CO₂ and Methane only. In terms of monitoring and reporting annually on targets, the preferred option would have been to use CO₂ emissions only, taking into consideration that CO₂ makes up 80% of Scotland’s equivalent emissions, and that the level of uncertainty around figures is lower for CO₂ than for the other greenhouse gases. It is suggested that the producer of the F-gases (Hydrofluorocarbons and perfluorocarbons) monitors emissions rather than the consumer.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?
Firstly, the need to adapt will be greatly reduced (although never eliminated) if the Scottish Government opts for a cumulative measurement and promotes higher emissions budget targets in the early parts of the target period.

Certain aspects of mitigation interlink with climate change impacts and as such should be considered together in the Bill and not segregated in a separate strategy. In addition to adapting to the changing climate, Scotland will have to adapt to a changing society. The effects of changing weather systems may lead to increases in carbon emissions in some regions, both through natural release of carbon storage but also from transient populations as more people migrate away from areas worst affected by Climate Change and head North. This demonstrates why linkages must be made between mitigation and adaptation.

It is understood that work is underway to develop an adaptation framework for Scotland and this is welcomed. However proposals, policies and timescales should be implemented in line with the climate Change Bill and not after.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

No comment.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

The Highland Council have submitted a response to Forestry Commission Scotland with regards to the proposal. This can be found appended.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

No comment

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?

No Comment
Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

No comment

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

- Waste prevention and management plans;
- Waste data;
- Deposit of recyclable waste;
- Procurement of recyclate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

What are your views on these proposals?

The Highland Council welcome the provisions for reduced packaging and the charging for carrier bags.

A full response to the consultation on the Scottish Governments zero waste policy has been produced by the Council and can be found in Appendix 2.

Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

It is felt that local authorities were given adequate timescales to consult on the proposals for the Climate Change bill with opportunity to attend several workshops on the matter.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

Only that at the time of the original consultation the Environmental Report was not ready for comment. Through the Environmental Assessment (Scotland) Act 2005 the environmental report should be released for consultation alongside the draft programme Plan and Strategy. Stakeholders should be made aware when the Environmental Report is available for review but Highland Council were not aware of the Environmental Report until this call for evidence. So the Scottish Government should adhere to the legislation it puts in place and expects others to follow and also could do more to publicise and be transparent about it’s procedures with all stakeholder.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

None

Q19 Do you have any comments on the impact of the Bill on sustainable development?

In general, the Climate Change Bill aims, objectives and targets fulfil one of the key principles of Sustainable Development:

“development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”
The Bill is trying to correct the detrimental impact we have had on our global environment and so aims to make society more sustainable as a result.

However, for sustainable development to be successful it is important that each individual, community, organisation and region takes responsibility for their greenhouse gas emissions and acts to reduce them. Through the use of “removals” and the purchase of international carbon units it is felt that the Bill fails to embed sustainable development principles across all sectors. As it stands it appears that the ability to buy your way out of action remains an option for the wealthy. The Bill also does not address the need for action throughout all regions of Scotland and it could be that some regions are working hard towards tackling climate change but “carrying” poorer performing areas. It will be important to address this in the secondary legislation.

The bill will require a massive shift in society and it should be accepted that, in order to achieve an 80% target by 2050 in a sustainable manner, the rate of economic growth and development will have to slow in the short term. If done correctly however, through careful investment in renewable energy projects, and a move towards sustainable transport, local food networks and more resilient communities, society could be in a better place in 2050 that it is today. Yet the transition to this point is going to be a difficult one.

Finally, climate change is a global issue and as we all share the one Earth, there still appears to be gaps in the Bill as to the role Scotland will play in encouraging and supporting other nations to mitigate and adapt to climate change (other than purchasing carbon units).

Q20 Do you have any other comments on the Bill?
None.

Appendices

Highland Council appendices on Forestry and Waste have been reproduced on the Rural Affairs and Environment part of the Scottish Parliament’s web site.
Dear Sir

Climate Change (Scotland) Bill — Call for Views

The Historic Houses Association for Scotland (HHAS) welcomes the opportunity to respond to this important consultation. The Association represents some 250 independently owned historic castles, houses and gardens in Scotland. We conservatively estimate that approximately two thirds of Scotland’s built architectural heritage is in private ownership overall. Collectively we believe we make a considerable contribution to the Scottish economy and Scottish society in general, and accordingly have considered these proposals carefully.

Having considered the Bill carefully, we believe that the clauses relating to energy efficiency are most relevant to our membership, and accordingly we have confined our detailed comment for matters covered by Questions 12 — 14 in the consultation questionnaire.

In general terms, we are supportive of the Bill’s requirement for the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change. We also note that the Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings.

In this context we would wish to make the point firmly that we believe that historic buildings justify sympathetic and, if necessary, different treatment, from more contemporary structures for the following reasons:

• There may be legal obligations which make certain energy saving measures (such as double glazing) impossible

• Certain measures may destroy the cultural and architectural value of historic buildings which enhance the well being of communities

• Historic buildings are valuable in energy terms, because their maintenance (and restoration) reduces the need for new build, which would be likely to be energy intensive (in terms of disposal of the old building, creation and transport of materials for construction, the construction process itself)

• Historic buildings can act as focuses for desirable regeneration, and that regeneration can be on as energy-efficient lines as possible.

• The materials which are used to reduce carbon emissions may damage and perhaps reduce the lifespan of an historic building.

• The materials used in historic buildings are often a key part of their authenticity.

• An holistic approach to assessment of the energy performance is essential. Embodied energy is an important consideration as is the lifecycle of building materials.

We are clear, therefore, that any such regulations must properly respect these extremely important characteristics of historic buildings and trust that you will support this view.

A further point may be relevant here. Article 4.3 of the EU Directive on the Energy Performance of Buildings (EU Directive 2002/91) provides for member states to decide not to set or apply energy efficient requirements for “buildings and monuments officially protected as part of a designated environment or because of their special architectural or historic merit, where compliance with the requirements would unacceptably alter their character or appearance”. However, we understand that the UK Government is NOT going to do that, but
instead will rely on a requirement that Building Regulations are sympathetic to the needs of historic buildings.

As you will be aware, existing buildings may not fall within the coverage of modern building regulations. It is all the more important, therefore, that the Scottish Government and those who implement its regulatory system will be sympathetic to the needs of historic buildings.

Finally, we note that the Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Association is happy to support this initiative and would only add that many of our member properties have already espoused the cause of renewable energy for heating purposes.

We trust you will find this helpful and relevant. Should you wish a more expansive discussion of any of the issues raised above we would, of course, be delighted to oblige. We should also mention that Historic Scotland has carried out considerable research into the energy efficiency of historic buildings and anticipate their response will support and add to the points we have made here.
WRITTEN SUBMISSION FROM HOLYROOD 350

Holyrood 350 Response to the Proposed Scottish Climate Change Bill

Holyrood 350 applauds the Scottish Government for the world leadership it has shown, not only in establishing this 80% reduction target for 2050, but in establishing other imaginative initiatives -such as the £27 million Climate Challenge Fund -to combat Climate Change.

Holyrood 350 (http://holyrood350.org/) brings together people who are actively working to reduce their communities’ carbon footprint through relocalisation. Many of these initiatives have received funding from the Scottish Government’s innovative Climate Challenge Fund.

This submission focuses only on the most fundamental question, Question 1, and the proposed target of 80% reduction of GHG emissions in Scotland by 2050 and 50% by 2030.

Q 1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

When the Bill was first proposed the target of 80% by 2050 was groundbreaking, however it is now clear that: Scotland needs to achieve a reduction of 100% by 2029 and 10% by 2011 to show the climate change leadership the world needs in order to start the race out of carbon, and to place us in pole position to take advantage of that race.

PART ONE: WHY?

Scotland must achieve a 100% reduction in emissions by 2029 and 10% by June 2011, primarily, but not only, because the Science says ever more emphatically that we must.

Why does the proposed bill ask Scotland to aim for 80% by 2050?

The Scottish Climate Change Bill’s proposed reduction targets reflect Lord Turner’s Climate Change Committee’s calculation that historically high emitting countries like Scotland must cut their emissions by 80% by 2050. This is in order to contribute to a Global reduction of 50% by 2050, in order to stabilise the climate and prevent runaway climate chaos.

Why does the IPCC 2007 Report mean we should aim for 95% [not 80%] by 2050?

The current Scottish Climate Change Bill, the EU, the UK and the IPCC have all accepted the scientific assessment that – in order to prevent runaway climate chaos -warming should not exceed 2°C above pre-industrial levels. The IPCC’s 2007 Fourth Assessment Report states that, in order to limit global temperature rise to 2°C, global emissions must fall by 85% [not 50%] by 2050, a fall which would lead to concentrations of CO2 in the atmosphere of approximately 450ppm. It is acknowledged by all the relevant reports that global emissions cuts can only be achieved through global equity (i.e. through apportioning the same rights to emit to all people in the world), so this Global target of 85% required to keep us below 2°C can clearly only be met by countries such as Scotland making cuts of 95% or more by 2050.

Why does the science now say we must aim for 100% [not 80%] by 2029 [not 2050]?

The 2007 IPCC report was, however, based on scientific findings and modelling from 2006 and earlier. Since then, the range of possible future scenarios on which the IPCC bases its targets, have been left behind by subsequent empirical evidence. What is now clear is that processes such as Arctic melting, methane being released from beneath the melting permafrost, and the weakening of the ability of the oceans, forests and soil to absorb carbon, are all happening far faster than the IPCC predicted. Furthermore, since these processes are both the result of global warming and themselves amplify that warming, it is dangerous to think – as Governments, scientists and campaigners have done up until now -
that a certain level of warming is ‘safe’ and to then aim to restrict the emissions increases and degrees of warming to that level.

Once the ‘positive’ feedback loops start to kick in, it will be extremely hard to stop them simply amplifying themselves in ever-accelerating feedback loops, however much we cut our greenhouse gas [GHG] emissions. For example, where the IPCC predicted an Arctic ocean ice-free in summer by the end of the century, it is now predicted this will happen by 2011-2015, eighty years ahead of IPCC predictions made in 2007 (Wasdell 2008, Climate Safety 2008).

Fig 1 “Summer Arctic sea ice thus appears to be disappearing more than 80 years ahead of the IPCC’s prediction, even though this was made as recently as 2007” Climate Safety (2008: 7) http://climatesafety.org/wp-content/uploads/climatesafety.pdf

Furthermore, the melting Arctic leads to less heat being reflected back into space, which leads to greater warming, which itself leads to more of the Arctic melting, and so on, a process that at some point becomes entirely independent of our level of GHG emissions, and a process that has a huge impact on the melting of the Greenland ice sheets, sea levels, the ocean currents, temperature increases, and so on. The key point is that we have to make a dramatic cut in the bulk of our GHG emissions now. If we are to slow and have a chance of stopping these runaway processes, we must create a zero-carbon, not low-carbon, economy.

In Edinburgh on 9th February 2009, Lord Adair Turner, Chair of the UK Government’s Climate Change Committee, gave one of Friends of the Earth Scotland’s ‘Building a low-carbon economy’ lectures, alongside Professor Jacqueline McGlade, head of the European Environment Agency. Turner argued that meeting the commitment to reduce our emissions by 80% by 2050 would only cost us 1-2% of GDP. In the light of the disturbing scientific findings presented in the lecture given by McGlade straight after Turner spoke, Turner was asked why it would not make more sense to accept a higher cost than 1-2% GDP in return for a better chance of avoiding catastrophic climate change. His answer was that if we followed his committees advice and sought to stabilise at an increase of 2.4°C, then we would avoid catastrophic climate change, and if the science was now saying something different then that would have to be reviewed, probably in a couple of years time.

The science clearly is saying something different. It is saying that current targets will guarantee catastrophe; and not just catastrophe for poor people in poor countries, but catastrophic climate change and possible extinction for us all (Wasdell 2008, PIRC 2008). For example, David Anderson of the Tyndall Centre for Climate Change Research argues that current negotiations for global agreements will guarantee levels of GHG in the atmosphere that will guarantee catastrophe. He concludes that “it is increasingly unlikely any global agreement will deliver the radical reversal in emission trends required for stabilization at 450 ppmv carbon dioxide equivalent (CO2e). Similarly, the current framing of climate change cannot be
reconciled with the rates of mitigation necessary to stabilize at 550 ppmv CO2e and even an optimistic interpretation suggests stabilization much below 650 ppmv CO2e is improbable.

(http://www.tyndall.ac.uk/publications/journal_papers/fulltext.pdf) [Link no longer operates]

At the ‘Building a low-carbon economy’ lectures in Edinburgh earlier this month, it was put to Lord Turner that, under the current recommendations of the Climate Change Committee, and according to their own calculations, he had calculated that our grandchildren will have a greater than evens chance of finding themselves in what Turner calls the "danger zone" of 2°C of warming and a 1 in 100 chance of finding themselves in what he calls the "extreme danger zone" of 4°C of warming. From the report's descriptions of the likely impacts of 4°C, it was pointed out that 4 degrees could quite properly be referred to as the "death zone", and Turner was asked: what percentage of our own, our children's and our grandchildren's income do we think most of us would be prepared to sacrifice to reduce those risks to say 1 in 10 and 1 in 1000 respectively? The questioners guess was that it would be more than 1-2%.

Is the Climate Crisis a greater emergency than a World War?

Where even the IPCC’s 2007 forecasts would require Scotland to aim for GHG reductions of above 95% by 2050, the emerging science calls for us to urgently stop and reverse the drive for forms of economic growth which require us to continually accelerate the extraction of carbon from the ground to pass through our economy and into the atmosphere.

Lord Stern’s and Lord Turner’s idea that one can effectively continue with business as usual, while "stabilising" greenhouse gas emissions and the temperature increase at 550ppm or 450ppm is clearly an approach made outdated by the accumulating scientific findings on the ground and the scientific understanding of the nature of accelerating feedback loops. The recent PIRC Climate Safety (2008) report, for example, demonstrates that 550ppm and 450ppm are points on an avalanche of positive feedbacks, an avalanche that would overwhelm the power of human intervention to stop runaway climate change.
It is for this reason that climate scientists like James Hansen say that a safe level of CO2 in the atmosphere is somewhere below 350ppm and we are already at 387 with global temperature change accelerating as the runaway process starts (Hansen 2008). Others, such as Professor Joachim Schellnhuber, head of the Potsdam Institute and climate adviser to the German Chancellor and the EU, told the Guardian (David Adam, 15 September 2008) that only a return to pre-industrial levels of CO2 would be enough to guarantee a safe future for the planet. He said even a small increase in temperature could trigger one of several climatic tipping points, such as methane released from melting permafrost, and bring much more severe global warming.

That means that to have any hope of averting a massive extinction event we have to take CO2 out of the atmosphere by rapidly reducing our emissions to zero, while protecting and enhancing the resilience of the soils, oceans and forests to act as carbon sinks to – over decades -draw down the CO2 already emitted. This is a far greater global emergency than even a World War, since the very survival of our species is at stake. As Brian Davey points out: entering into a world war (in this case a ‘war against climate change’) involves no guarantee that you will see victory, and it isn’t done on the basis of cost benefit calculations. You enter it because you have no choice, and -pulling together -you try everything possible to succeed (Davey ‘From the Green New Deal to a War on Climate Change’ 26 Feb 2009).

In World War Two Britain managed the huge switch in resource allocation that is required when people acknowledge there is an emergency and start working together. In World War Two military outlays (as per

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Shaun Chamberlin points out that “the pre-industrial concentration of CO2 in our atmosphere was 278ppm and did not vary by more than 7ppm between the years 1000 and 1800 C.E.” (http://www.darkoptimism.org/2008/09/03/the-climate-science-translation-guide/).
cent of UK national income) rose from 15% in 1939 to 53% in 1941 (Davey 2008). This is the scale of resource redirection required, a redirection which would – as in previous world wars -also create full employment and social cohesion, and – if approached through policies such as those recommended below – also create an international level playing field for zero-carbon economies and so support the emergence of resilient communities interacting to build sustainability through equity, since survival for any one is only ensured through ensuring survival for all.

It is important to recognise the absolute centrality of equity to combating climate change. Turner, Stern, McGlade and all who have analysed the situation are clear that controlling climate change requires a globally equitable approach, if people in poorer countries are to participate in solving a problem that has historically been brought about by the actions and economies of the nations which have become wealthy through such action and economies.

Turner writes that “it is difficult to imagine a global deal which allows developed countries to have emissions per capita in 2050 which are significantly above a sustainable global average” (2008: 2), and therefore, “a fair global deal will require the UK to cut emissions by at least 80% below 1990 levels by 2050” (2008: 1). However, he adds that “The good news is that reductions of that size are possible without sacrificing the benefits of economic growth and rising prosperity” (2008: 1, emphasis added). It appears possible to deduce that his Committee calling for only an 80% cut by 2050 (despite the calculations of his own committee and those of the IPCC) may have been more to do with Turner’s perception of the politically possible, rather than a sober estimate of action commensurate with the science. As will be discussed below, the political and economic Global situation has been transformed over the last twelve months, and what may have appeared politically impossible – the regulation and redirection of the financial system – may have become politically inevitable as a result of the ongoing financial meltdown. The fact that what so recently appeared politically impossible may now be politically inevitable can provide us with some hope that we can make it politically possible to take the radical steps needed to combat climate change.

NASA’s James Hansen and his colleagues argue that "Continued growth of greenhouse gas emissions for just another decade practically eliminates the possibility of near term return of atmospheric composition beneath the tipping level for catastrophic effects. If humanity wishes to preserve a planet similar to that on which civilisation developed and to which life on Earth is adapted, paleoclimate evidence and ongoing climate change suggest that CO2 must be reduced from its current 385ppm to at most 350ppm. Remaining fossil reserves should not be exploited without a plan for retrieval and disposal of the resulting atmospheric CO2".


Therefore, as the November 2008 Climate Safety (http://www.climatesafety.org) assessment makes clear, we must aim for 100% reductions in our GHG emissions within 20 years – by 2029 – and we must kick start this process by taking the relatively easy steps which will enable us to reduce our emissions by at least 10% below 1990 levels by June 2011. Relatively easy steps, but accompanied by a complete reorientation from measuring GNP in terms that reflect the throughput of carbon through the economy to ensuring individual, family and community survival and well-being.

PART TWO: HOW?

How can Scotland achieve a 10% reduction by 2011 and 100% by 2029, and so show the leadership the world needs to start the race out of carbon (and can, as a result, prepare us for Peak Oil and revitalise the Economy at the same time)?

Man-made climate change is the consequence of industrial activity, and accelerating climate change emissions are driven by basing our economy on fossil fuel use, and on an approach which measures GNP in terms that reflect the throughput of carbon through the economy. Since even the International Energy Authority (which, up until it’s 2008 report, was denying that Peak Oil was anything other than a distant eventuality) now admits that Peak Oil is fast2 approaching, the action we have to take to stop accelerating climate change is action which can also prepare us for a world in which fossil fuels are no longer cheap

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2 Peak Oil is the point at which we have used half the available oil, after which supply will never be able to meet demand.
and easily available.

We are therefore asking the Scottish Government to act with other governments (or, if other Governments are unwilling, then we are asking the Scottish Government to democratically secure the power) to demonstrate global and pre-emptive leadership, by immediately and rapidly transforming Scotland from an oil-dependent economy driven by growth, to a sustainable and resilient zero-carbon economy guided by the urgent need for sustainability, equity and long-term security.

While international negotiations are focussed on whether we should hit the wall of dangerous climate change at 60mph, 50mph or 40mph, we need instead to stop focusing on future targets and start braking fast so that we don’t hit the wall at all. To rephrase this in terms of David Wasdell’s representation [Fig 2 above]:

(i) If our current emissions are setting up future feedback loops which will take us over the ‘Critical Threshold’ hill, then the ball of consequences will roll downhill towards the Earth’s 6th extinction event with unstoppable acceleration.
(ii) If, however, we devote a war-effort of collective energy to setting up and intensifying current action designed to decarbonise the economy and society now, then we should still (just) have time to set up positive feedback loops whose impact on restraining future temperature rises should cut in just in time to halt our rolling over and down that hill, although the science is now pretty clear that current climate change related weather events will intensify, and we will inevitably be teetering at the top of the hill as a consequence of the cumulative effect of emissions which we have already pumped into the atmosphere.

The longer we leave reducing emissions the greater the cumulative impact, so the question is whether we are able to take action now to dramatically reduce total emissions. The question will not be: whether we have managed to reduce total emissions by 60, 80 or 100% by 2050. The question is: how fast can we create a zero-carbon economy and society now?

Where would this place us in relation to other economies?

The first key move is to recognise what the science is telling us, then to recognise that the steps which are technologically, economically and socially required of us will not only: (i) ensure our technology is at the cutting edge; (ii) place our economy in pole position to benefit from helping other countries to subsequently take the steps that — sooner rather than later — they are all going to have to follow us in taking; but will also (iii) enable us to make our communities resilient and vibrant places to live.

A recent report by experts from Hewlett Packard and Forum for the Future (Climate Futures: Responses to climate change in 2030 -October 2008) examines five sharply different scenarios for a 2030 world. Recognising the gravity of the situation -and that climate change will be the backdrop to all business, political and human decisions over the coming decades they make the business argument for greater climate change regulations now:

"Acting quickly is best for liberal markets. Some of the strongest objections to addressing climate change have been that we will constrain markets, and hence our freedom, at too high a cost. People have feared that climate change was a cover for rolling back the market reforms of the last decades. But in our scenarios, liberal market-based solutions seem much less attractive as time goes on than statist responses. This puts a different light on how to defend freedoms from market reforms. Advocates of liberal markets should act as soon as possible, pushing for a global agreement with teeth, national measures that use financial incentives, and the removal of market distortions that encourage unsustainable and wasteful resource use. The result may be a more constrained market system than today, but the long-term alternative could be a desperate turn to big government and protectionism" (2008: 69)

They go on to argue that “‘the historians of the future will call these the climate change Years”. If we have not acted soon enough “they may look back at us with a complete lack of comprehension or even disgust, rather as we look back on slave-owners. Or if climate change feels solved, or on the way to a solution, they may look back on us as heroes.” (2008: 70). In arguing for taking immediate steps now they add that: “steps taken now could open up previously impossible or unimagined paths of hope for combating climate
change” (2008: 68). The key distinction here is between (i) action which creates hope through not only directly reducing emissions but also inadvertently sets up a range of unanticipated positive knock on effects; and (ii) becoming paralysed either by despair or by hope that someone else will do something (or as Lord Turner remarked, paraphrasing St Augustine on goodness: Lord, make me carbon neutral, but not yet).

Perhaps the most useful – if unexpected – metaphor for the situation we have got ourselves into is that of the plane that took off from New York’s La Guardia airport last month, and lost both engines due to the engines sucking in geese and losing all power. The pilot could have just thrown up his hands in horror, or tried returning to La Guardia in the hope that he could make a more normal landing. Instead he calmly and with complete focus took the plane down where he could: on the Hudson River. The plane was wrecked; but everyone survived. If, metaphorically, the plane is an economy devoted to insatiable growth, and the geese are the intervention of nature, the pilot is each of us who are alive today. To return to metaphors closer to Turner’s paraphrasing of St Augustine, another way of conceptualising this is to consider that such miracles do not just happen; they are made through focused action.

HOW TO REDUCE EMISSIONS BY 100% BY JUNE 2029

1. PRICING CARBON OUT OF THE ECONOMY

The first and most crucial step we are calling on the Scottish Government to take is to price carbon into and out of the economy, in order to dramatically reduce and then stop carbon being extracted from the ground to pass through the economy into the atmosphere.

We call on the Scottish Government to introduce a scheme -by the time of the Copenhagen summit, December 2009 -to ensure that high-carbon products, modes of transport, energy sources and services, are fast replaced by zero-carbon ones. The necessary rapid rise in the cost of high-carbon options would be accompanied by the rapid development and shift to zero-carbon ones.

‘Contraction and Convergence’ is the most widely and globally accepted framework for capping and rapidly reducing carbon emissions to a level compatible with the continuation of human and other mammalian life on the planet. It aims to contract (cap and reduce) emissions in a way which does not penalise those least responsible for emissions (the poor in the Global South and North) but instead enables a convergence in which high emitters dramatically reduce their emissions in a way which supports low emitters to maintain or attain a reasonable quality of life. It is based on

(i) the survival principle: reducing emissions to an ecologically tolerable level; and
(ii) the equity principle: reducing them in a way which is socially tolerable, i.e. acceptable to the majority world, since our leadership will be fruitless unless they are willing to follow our lead in decarbonising society.

‘Cap and Dividend’ [or ‘Cap and Share’] is a politically attractive way for any country to unilaterally implement ‘Contraction and Convergence’: it is a straightforward way to radically reduce our emissions and create a far more energy healthy, socially stable and internationally secure society. It is fiscally neutral, in that all the money raised through oil, gas and coal corporations having to buy the right to bring carbon into the economy will be redistributed – on an equal basis -to the whole population.

‘Cap and Dividend’ is based on the fact that the atmosphere is a global commons which we all equally rely on. It gives each person the right to the same proportion of overall emissions which are reduced year on year, so reducing our collective emissions to zero and (if we ensure the resilience of carbon absorbing oceans, forests and soils) over time allowing emissions already in the atmosphere to be drawn down into the atmosphere.

3 Here we focus on the 4 strategic ways of reducing emissions, but there are a whole host of piecemeal moves which can have a massive cumulative effect. For examples of possible piecemeal changes (as well as strategic approaches) see George Monbiot’s ‘Here’s the plan’ (http://www.monbiot.com/archives/2006/10/31/heres-the-plan/) or Climate Safety’s ‘A few suggestions’ on page 23 of their Climate Safety Report (http://climatesafety.org/wpcontent/uploads/climatesafety.pdf). Ideas range from: electricity tariffs where energy becomes cheaper the less you use, ending domestic flights, a 55mph speed limit, using the £76 million earmarked for replacing Trident to build wind turbines and carry out a national insulation programme, get rid of private courier vans and return post to Royal Mail postmen walking.
these ‘sinks’.

Introducing ‘Cap and Dividend’ to Scotland:

In the ‘Cap and Dividend’ system the vast majority of the population are immediately better off and only those who can afford it (the heavy emitters) are penalised for disproportionately polluting the global commons. Introducing this system to Scotland, would mean that those bringing carbon into the economy (those very few companies importing or producing coal/ oil/ gas/ cement etc) would take part in an annual auction to buy the right to bring carbon into the economy.

The extra price they have then paid is

(i) passed on to manufacturers and other users of the fossil fuel they bring into the economy, which leads to higher prices for all those using those products, services, modes of transportation etc which have carbon embedded in them; but the cash generated from the auction of these carbon emission permits is

(ii) passed on to the population at large (directly into their bank or, preferably, in terms of stability, their post office accounts) so that people can deal with the increase in prices. This means that (a) those using more than their fair share of carbon are penalised because all such prices will have risen, while those using less (the great majority) will benefit with extra cash in their pocket, and (b) producers will be immediately encouraged to develop non-carbon based products/ services/ modes of transport, and avoid producing carbon ones.

After a 3 year settling in period, ‘Cap and Dividend’ (http://www.capanddividend.org/ or http://www.capandshare.org) could – if necessary -then be supplemented by people using Carbon Cards (similar to credit cards) to monitor their purchase of CO2 embedded goods and services (This is drawn from the ‘Tradable Energy Quota’ system -http://www.teqs.net/). Those purchasing more carbon than their fair share would now not only be paying for it through the price of the goods purchased, but would also receive proportionately less cash from the carbon auction dividend. Those purchasing vastly more carbon would start paying into that dividend fund themselves (at an exponentially increasing rate). Meanwhile the great majority (those who bring in less CO2 than their fair share) would receive this extra cash from those bringing in more. As the rapid rise in the cost of high-carbon options takes effect there would be a rapid development and shift to zero-carbon ones. As the amount allowed into the economy is reduced year on year, our collective emissions are reduced to zero.

ADVANTAGES: Political and Practical Advantages of ‘Cap and Dividend’:

1. A vote winner in that

   (i) it immediately puts money in peoples’ pockets and leaves them to choose the lower and zero-carbon options if they wish.

   (ii) it ensures that all the money from the auction (and subsequently from heavy emitters) is passed on directly to the vast majority of families and individuals; and, since none of he money will be kept by Government, there is no way this could be misconstrued as a way of raising Government revenue.4

2. Easy to use -It doesn’t require anyone to have to be involved in selling carbon shares. Its introduction would involve people receiving cash rather than a less attractive carbon ration (as proposed in the ‘Tradable Energy Quota’ scheme http://www.teqs.net/). However, once the system was embedded, it could move beyond the simple ‘Cap and Dividend’ equal allocation of cash, so that dividends reflect carbon use.

3. Market solution – it doesn’t seek a different political or economic game, it simply changes the rules of the game so that the market has to internalise the carbon cost.

4. Transferable potential -this system could easily, if people wished and at a late date, be expanded to include the real costs of non-Fairtrade or non-Organic products in a similar

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4 In order to raise revenue for (i) urgent carbon reduction public schemes of work, and (ii) helping the poor here and in the Global South deal with climate change, the Government could make agreements reached in tax havens carry no weight in our courts. The unpaid tax recovered from tax havens could easily finance such massive projects (The Green New Deal).
way which gave people money.

5. **Technologically innovative** – the certainty of the cap (the permitted level of carbon in the economy) being reduced rapidly year on year, would immediately boost jobs and investment in the development of zero-carbon energy, goods and services.

6. **Creates a level playing field**: Together with the Government (i) reducing energy demand and ensuring 100% renewable energy, and (ii) re-regulating and re-directing finance (see 2 and 3 below), this policy will create a level playing field in which food and energy, goods and services, will be produced closer to home, helping build socially and ecologically healthy communities (see 4 below).

**CHALLENGES: Political and Practical Challenges of ‘Cap and Dividend’**

A. **UK context**: the Holyrood Scottish Government declared a target of 80% CO2 reductions by 2050 prior to London increasing its target from 60% to 80%. Scotland seeking to price carbon out of the economy would create tensions with the Westminster Government (unless they follow suit as rapidly as they did with the change from a 60% to 80% target). UK law would not allow Scotland to unilaterally implement such a system, but if people in Scotland powerfully push to do so, this would put huge pressure on the UK Government to again follow suit or to accept Scottish autonomy in this and related areas.

B. **EU and WTO context**: the EU and WTO could argue against us imposing stringent taxes on carbon embedded imports from countries which do not have a similar scheme. However, such a tax would be necessary to create a level playing field by levelling up international practice, and would put pressure on other EU countries to abandon the discredited ‘Cap and Trade’ scheme which gave away free Carbon Permits to the heavily emitting companies allowing them to increase profits, increase emissions and increase prices for citizens who themselves received no compensation.

C. **Impact of our re-localisation on the Global South**: Cheap products from the Global South would be priced out of our market through the requirement that they internalise their carbon costs at source or, if not, have taxes imposed on entry. However: (i) international trade tends to maintain undemocratic elites in power who impoverish people through taking their land and/or paying little for their labour. Removing this source of such elite’s wealth, diminishes their power, helping democracy; and (ii) since these cheap products externalise social (not just ecological) costs, Fairtrade schemes (point 4 above) could be introduced to address the social issues directly.

**Conclusion - Pricing Carbon into and out of the economy:**

‘Cap and Dividend’ [or ‘Cap and Share’] must be introduced – or in the process of being introduced - by the time of the Copenhagen summit in December 2009 in order to ensure that carbon is rapidly treated as a toxic and addictive substance which we as individuals and as a society need great help to stop being addicted to. This clear, equitable and practical way of rapidly doing this will ensure that all products and services that carry carbon into the economy and out into the atmosphere also carry a punitive financial cost. This would kick start modes of transport, energy and production which are zero-carbon. Any products entering the country (or set of countries) imposing such a tariff on their own carbon-based products and services would, necessarily, have to impose an equivalent tax on any services and products entering the country, in order to ensure a level playing field for all, and in order to begin the process of quickly levelling up international practice from carbon profligate to zero-carbon.

**2. SWITCHING FROM CARBON HUNGRY TO ENERGY HEALTHY INFRASTRUCTURE**

We call on the Scottish Government to, by December 2009, be in a position to implement a policy framework, legislative programme and support to enable a rapid switch from carbon hungry to energy healthy infrastructure.

This would involve an immediate end to the construction of infrastructure which is accelerating our carbon use and accelerating climate change, including the immediate end of motorway building, airport expansion, and out of town shopping centres. A rapid transformation in energy production, construction and in
transport infrastructure, including rolling out effective mass insulation and energy conservation schemes, public and community benefit renewable energy schemes, and exponentially expanding and electrifying (and reducing the fares to low or zero levels on) public transport.

To move to being an energy healthy society by 2028 we need to rapidly ‘Power Down’ and ‘Power Up’:

(i) ‘Powering Down’ from using carbon based and polluting energy sources and from being energy obese, thereby reducing energy use by 50% by 2029; and

(ii) ‘Powering Up’ by rapidly expanding renewables (including tidal, wind, CHP and hydro) to provide for all our remaining energy needs by 2029.

This transition will happen anyway as oil, gas and coal run out, but needs to be done now in order that the carbon from the the remaining fossil fuels are not released into the atmosphere.

However, it has to borne in mind, that global average (mean) temperature have already risen by between 0.75°C and 0.8°C since pre-industrial times, and a minimum additional 0.6°C of warming is still due from emissions to date -the delay in warming being a consequence of the time-lags in the system – so there is only another 0.6°C of warming possible before we hit 2°C. That 2°C increase may be reached as a result of accelerating feedback loops, but we have to consider whether there is still some play in the system, so that we can devote some further emissions, not to building motorways, runways, flying, producing plastic goods and so on, but to helping to build the renewable energy infrastructure we need.

How the energy transformation can technically be carried out by 2029 is outlined in the Centre for Alternative Technology’s widely acclaimed Zero Carbon Report. It is also clear from this, that it would be unnecessary and potentially entirely misguided to pour energy and resources into the expectation that we could develop bountiful, cheap and safe nuclear energy, and continue to use coal (through developing effective carbon capture and storage). The Zero Carbon Report makes clear that renewable solutions are available and can meet our real needs (rather than our manufactured wants) now if we choose to pour our energy into developing them (see: http://www.zerocarbonbritain.com/).

3. ESTABLISHING A RADICAL GREEN NEW DEAL

We call on the Scottish Government to recognise the underlying cause of the ‘triple crunch’ of the credit-fuelled financial crisis, accelerating climate change and the fluctuating but (over the long term) soaring energy prices which will accompany Peak Oil.

We call on the Scottish Government to -by December 2009 – have developed a policy framework and legislative programme to re-regulate the financial sector; and have begun the process of either:

(i) Persuading the Westminster Government to implement such legislation or, if the Westminster Government refuses, then

(ii) Creating this as ‘Shadow legislation’ and consulting the people of Scotland on whether they support the Scottish Government’s leadership in tackling these three connected crises.

Where even a year ago, it would have been seen as electoral suicide to advocate re-regulating the financial sector; there is now a huge popular appetite (amongst both expert analysts and the population at large) for such a move. The rules of the economic system have legally obliged companies to pursue the highest returns for shareholders without thought to how this can destroy the social, economic and environmental fabric. The quickest (even if least long-term) approach to increasing profit has been through externalising the social and ecological costs of producing goods and services (hence the outsourcing or production and service jobs to the Majority world).

As a first step, we call on the Scottish Government to:

(i) Push for transparency in transnational financiers and corporations dealings so that they become accountable for the impacts they are having, and so that we ensure they are accountable through paying tax rather than using tax havens to avoid contributing
their fair share to paying for the transformation we collectively and urgently need to undertake.

(ii) **Push internationally for tax havens and their secretive dealings to be stopped**, and in the meantime push for legislation to make any agreements reached in such jurisdictions lack any legal status here.

**Over the longer term, we call on the Scottish Government to:**

(iii) **Build a new alliance between politicians, environmentalists, industry, agriculture, and the unions.** One which puts the interests of the real economy ahead of those of footloose finance in order to make massive investment in renewable energy and wider environmental transformation, leading to the creation of an employment rich, secure and environmentally healthy society. The programmes and policies required to begin this process are detailed in The Green New Deal (new economics foundation, Larry Elliott, Caroline Lukas et al 21 July 2008. See: [http://www.neweconomics.org/gen/](http://www.neweconomics.org/gen/))

(iv) **Reorientate the money system** so that it exists (at national and local, and ultimately international, levels) in order to protect money as a shared commons which we all need to facilitate exchange, and as such exists to serve the wellbeing of society, rather than is used to increase the profits of the few at the expense of society and the environment (Davey 2008).

4. **SUPPORTING COMMUNITY RE-LOCALISATION:**

We call on the Scottish Government to dramatically increase its excellent support for communities seeking to make the transition from an oil dependent economy to a local one. This movement is evident in the wave of Transition Town, Going Carbon Neutral, etc., initiatives (see, for example, [http://www.transitionscotland.org/](http://www.transitionscotland.org/), [http://pedal-porty.org.uk/](http://pedal-porty.org.uk/), [http://fifiediet.wordpress.com/](http://fifiediet.wordpress.com/), etc).

The Land Reform (Scotland) Act should be expanded to extend support to urban communities to also have the first right (and support) to buy important community land and buildings when they come on the market. This expansion must not be at the expense of existing support for rural communities to do likewise, but can enable urban communities to rebuild themselves, partly through learning from the experience of rural community initiatives (see, for example, [http://www.isleofeigg.org](http://www.isleofeigg.org), [http://www.caledonia.org.uk/](http://www.caledonia.org.uk/)).

As the previous three actions are taken to stop the extraction of carbon, a level playing field will emerge in which food, energy and the things we need and want are produced far closer to home, with decisions increasingly being made at a local level; enabling us to re-establish healthy local economies and communities. In place of large corporations producing cheap and shoddy goods through exploiting cheap labour and engaging in practices (including long distance transportation) which damage the environment, in place of our fuelling those aspects of the economy in China and the rest of the Majority World which enable those with power in such countries to further exploit those pushed off their land and denied their rights, we will come to rely on establishing healthy local economies here, which will enable healthy economies there.

The three previous steps create the grounds for this fourth step which ultimately depends on people being willing to rebuild their communities as sustainable, healthy, resilient and desirable places to be through relocatising their economy. This fourth step involves the transition to viable vibrant interlining communities: where the commons is managed through negotiation and co-operation rather than through the imposition of developments by those who are absent from a locality and therefore never have to deal with the consequences of their decisions, decisions which are driven by how much they can extract from localities, rather than driven by the desire to make those localities sustainable.

The crucial point about this focus on relocalisation is that, according to the Stockholm Institute, without a completely new approach (such as this) even the most radical of their three alternative visions of the future led to well over **2°C** rises. When they ran the three alternative scenarios through the Met Office’s Hadley
Centre’s modelling system\(^5\), the rises were as follows:

(i) **AGREE & IGNORE** – the current approach in which international negotiations lead to weak target setting which countries then effectively ignore – led to rises of **4.85°C**;  
(ii) **KYOTO PLUS** -successful binding international negotiations with targets countries keep to – led to rises of **3.31°C**; and  
(iii) **A radical STEP CHANGE market approach** to severely restrict companies using fossil fuels in the first place – led to rises of **2.89°C**.

So, without a dramatically different pathway – such as this rapidly spreading relocalisation process supported and amplified by the policy framework to make zero-carbon a possibility we cannot stop the devastating extraction of carbon, nor demonstrate to the world how to get back below 350ppm and so stay below the danger threshold of **2°C**.

In summary: there is no way we are going to be able to pull back from the brink and – in the process - develop the localised economies needed for fulfilling zero-carbon lifestyles unless:

(i) There is clear legislation in place to ensure a level playing field for all, so that individuals, companies and public bodies are able to act to reduce emissions  
(ii) There is a clear programme to change energy use, infrastructure, and the materials we use, from carbon-based to carbon-neutral  
(iii) There is swift legislation to curb the ability of finance and the profit motive to exploit and damage, rather than serve society, and unless  
(iv) There is dramatically increased support for communities to make the transition.

**CONCLUSION:**

We call on the Scottish Government to respond to the World Crisis that the science is telling us we are now in, and to demonstrate world leadership by (i) making our target a reduction in emissions of 100% by 2029, and 10% by June 2011, and by (ii) taking the necessary steps to begin that dramatic reduction now.

We call on the Scottish Government to demonstrate clear outstanding leadership in the race out of carbon. This will put us in pole position to take advantage of that race, but, more importantly, it will kick start the race for human survival which so far has consisted of Governments discussing the rules of a race which should have long since begun.

Thank you for the opportunity to give our views on the Climate Change (Scotland) Bill. Living Streets is the national charity that stands up for pedestrians. With our supporters we work to create safe, attractive and enjoyable streets, where people want to walk.

We have been the national voice for pedestrians throughout our 80 year history. In the early years, our campaigning led to the introduction of the driving test, pedestrian crossings and 30mph speed limits. Since then our ambition has grown. Today we influence decision makers nationally and locally, run successful projects to encourage people to walk and provide specialist consultancy services to help reduce congestion and carbon emissions, improve public health and make sure every community can enjoy vibrant streets and public spaces.

Our response to the Climate Change Bill (Scotland) covers seven key points:

- We welcome and support this bill;
- Transport is the key priority area for action to cut emissions;
- To achieve the bill’s aims, the role of walking in cutting emissions must be recognised;
- We believe the bill doesn’t go far enough, in three areas in particular;
- The Bill must set annual emission reduction targets of at least 3% from 2010;
- The Bill must establish a duty on all public bodies to reduce emissions in line with the national targets;
- The Bill must include mechanisms for the enforcement of the emission reduction targets.

We welcome and support this bill

We strongly welcome the principle of Scottish climate change bill and the aspiration to lead the way on reducing climate change emissions.

Transport is key priority for action

In 2006, the Scottish transport sector was responsible for 24.4% of all greenhouse gas emissions. Transport is the main sector where emissions continue to rise: greenhouse gas emissions from the Scottish transport sector rose by 14.3% between 1990 and 2006, whereas all Scottish emissions fell by 12.3% over this same period. If this rise in transport sector emissions cannot be halted in the near future, then consideration should be given to setting specific targets for the sector.

Must recognise role of walking in cutting emissions

The VIBAT study[^1] by the Bartlett School of Planning at University College London set out to explore ways to reduce UK carbon dioxide emissions by 60% by 2030. It concluded that technological change on its own, even with a very strong push on efficient vehicles and alternative fuels, could not provide the necessary reductions in carbon emissions because of the additional car-based travel to be expected in the future.

Walking can contribute to the modal shift required provided specific policies are put in place. Since the end of the 1980s, the average amount of time spent travelling by car increased by 7% whilst the amount of time spent walking decreased by 20% to 67 hours in 2004. People are also less willing to consider walking for short distances compared to driving by car. In 2000 the proportion of people agreeing they could just as easily walk or cycle as take the car for short journeys was 41% compared with 37% in 2002.

To tackle this decline in walking, Living Streets believes we must create an environment in which walking is more pleasant, less obstructed by vehicle traffic and poor street design and where more jobs and services are in walking distance of people’s homes.

[^1]: Visioning and Backcasting for UK Transport Policy (Bartlett School of Planning, University College London and Halcrow Group Ltd. Department for Transport-Horizons Research Programme, 2004-05). Available at: [http://www.ucl.ac.uk/~uctf696/vibat.html](http://www.ucl.ac.uk/~uctf696/vibat.html)
The VIBAT study suggested that measures to enable and increase walking as a mode of transport could directly or indirectly contribute to significant reductions in CO2 emissions. The measures and potential impacts are listed below:

<table>
<thead>
<tr>
<th>Area of focus</th>
<th>Individual measures</th>
<th>Potential reduction in carbon emissions (million tonnes across UK)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liveable Cities</td>
<td>— higher density urban areas with local centres — upgraded public transport — improved urban design — heavy investment in walking and cycling</td>
<td>2.4</td>
</tr>
<tr>
<td>Smarter measures</td>
<td>— workplace travel planning — school travel plans — personalised travel planning — travel awareness</td>
<td>2.4</td>
</tr>
<tr>
<td>Ecological driving</td>
<td>— slower speed limits, including implementing default 20 mph in residential streets</td>
<td>4.6</td>
</tr>
</tbody>
</table>

**The Bill must set annual emission reduction targets of at least 3% from 2010**

The Bill allows the Government the option of setting emission reduction targets for the crucial period up to 2020 that could barely reduce emissions during this period, despite the fact that all the scientific evidence shows that achieving early reductions in emissions is essential. The interim target (50% reduction by 2030) is not challenging enough; it compares unfavourably with the UK Committee on Climate Change’s Intended budget (42% reduction by 2020). We therefore support the Stop Climate Chaos Scotland recommendation of an interim target of 50% reduction by 2020.

It is imperative that the Bill establish annual emission reduction targets of at least 3% from 2010, not just from 2020, and that the interim target be amended accordingly. An early start in delivering emission reduction would also help focus minds in sectors - especially transport - where emissions are currently rising.

**The Bill must establish a duty on all public bodies to reduce emissions in line with the national targets**

The Bill fails to place upon public bodies a duty to reduce climate change emissions, providing only that Ministers “may” choose to do so at a later date. Local Authorities especially and the entire public sector generally have a key role to play in achieving the necessary emissions, especially under the new National Performance Framework. The Bill should be amended to establish a duty upon all public bodies to reduce emissions in line with the national targets.

**The Bill must include mechanisms for enforcement of the emission reduction targets**

The Bill contains no mechanisms for enforcement. As such, we question what will make Scottish Ministers (and public bodies) comply with the emission reduction targets that are set. Waste water and drinking water quality are regulated and enforced by specific bodies. This mechanism has proved a successful model in helping meeting targets for water quality, and the meeting of climate targets will require similar levels of scrutiny and sanctions. The Bill should therefore be amended to include measures for effective enforcement of the targets.
Introduction

The Steering Group came together to support the Members Bill on Energy Efficiency and Micro generation promoted by Sarah Boyack MSP.

The Members Bill was first consulted on in December 2006 and was resubmitted to the Scottish Parliament after the elections in 2007. It was agreed by the Economy, Energy and Tourism Committee that another consultation process was not required and the Members Bill proceeded to be drafted in 2008. In September 2008 the Cabinet Secretary John Swinney announced that he intended to legislate on Energy Efficiency and Micro generation in the Climate Change (Scotland) Bill.

During the Labour Business Debate on Energy Efficiency in the Scottish Parliament in November 2007 the objectives and broad proposals in the Members Bill were supported across the Chamber by members in all parties.

The purpose of the proposals in the Members Bill are to reduce greenhouse gas emissions and reduce fuel poverty by promoting the widespread adoption of energy efficiency measures by householders and businesses and the development of a mass market for micro-generation.

While there have been incremental changes in policy and government action in Scotland since the Members Bill was first proposed there remains no commitment to the principal proposals in the Members Bill namely to;

- Require Scottish Government to set targets for energy efficiency and micro-generation and for local authorities to consider such technology by setting targets and strategies to take this forward.
- Require Scottish Government to report annually on the progress of the implementation of the Members Bill.
- Implement one off discounts in domestic tax for householders who install energy efficiency and micro generation in their properties and similar one off discounts in business rates for small businesses
- Require all new buildings to include renewables or some form of low or zero carbon technology.

The fifth proposal in the initial Members Bill for permitted development rights for microgeneration was dropped from the Members Bill following the commitment given by Scottish Ministers after the 2007 elections that this would be taken forward by the new Scottish Government. The announcement of permitted development rights has taken until 6th February 2009 and while this makes some progress, it still means air source heat pumps and micro wind turbines have to go through the planning system to gain permission.

What organisations have supported development of these proposals?

The Members Bill Steering Group has brought together organisations with interests in the environment, fuel poverty and industry to work for warm, energy efficient homes and workplaces that are good for people and the planet. The Members of the Steering Group for the Energy Efficiency and Microgeneration (Scotland Bill) include:

- WWF
- Friends of the Earth Scotland
- Energy Action Scotland
- Age Concern Scotland
- Barnardo’s
Since the Members Bill was originally launched in December 2005, micro-generation and energy efficiency has shot to the top of the political and social agendas. A website (http://www.microgenscotland.org.uk) has been established by these environmental, fuel poverty and industry groups to push this agenda forward, and keep supporters informed.

**Why are the proposals contained within the Members Bill still needed?**

Since September 2007, the Cabinet Secretary for Finance and Sustainable Growth, John Swinney MSP has informed Sarah Boyack MSP that Scottish Government would not be supporting her Member’s Bill. He has however suggested that the Scottish Government may incorporate some of the provisions within the Energy Efficiency and Microgeneration (Scotland) Bill in the forthcoming Government Bill on Climate Change but to date there has not been any specific commitment made.1

Despite several Scottish Government announcements on energy efficiency and microgeneration, none of these fulfils the proposals set out in the Members Bill or will ensure that energy efficiency improvements and microgeneration measures are mainstreamed across society by requiring or incentivising such measures in homes or businesses. So, at the end of 2007, the Members Bill Steering Group agreed to support Sarah Boyack in moving the Members Bill to the next stage – to get it formally drafted and introduced into Parliament and supports her still in moving these proposals forward.

Since these proposals were set out, all the other political parties in the Scottish Parliament have continued to indicate support for this legislation. This was reaffirmed through cross party support for the Liberal Democrats’ amendment to the motion on Fuel Poverty which was passed by the Scottish Parliament in March 20082 and in the final amended motion following the Labour Business Debate on the 13th November 2008.

**How would these proposals help Scotland fight climate change?**

The Scottish Government has set a target of reducing greenhouse gas emissions by at least 80 per cent by 2050. The burning of fossil fuels to generate electricity or for heat are among the main sources of emissions Research suggests that the widespread installation of microgeneration could provide 30-40 per cent of our electricity needs by 20503, making a substantial contribution to reducing emissions. Microgeneration can also make a significant contribution to Scotland’s heat needs. Microgeneration technologies are now at a stage where they could begin to make a major contribution to the Scottish Governments climate change objectives. However, much of the hardware is expensive, being manufactured only in small quantities. A recent report estimated that there is the potential for 7-9 million installations of microgeneration by 2030, equivalent to 1 million in Scotland.4

Legislation to mainstream energy efficiency and microgeneration measures could kick start the market so volume of production can bring down prices, making the technology accessible to everyone, and encouraging Scottish manufacturers to expand. The sooner we start making progress in this area, the easier it will be to reduce emissions and tackle climate change. The Energy Efficiency and Microgeneration (Scotland) Bill proposals also aim to ensure that all new buildings include some form of micro-generation or low carbon technology as soon as possible to reduce their carbon footprint.

The proposals in the Members Bill would address the need to act swiftly to reduce Scotland’s emissions.

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1 Official Report, Transport, Infrastructure and Climate Change Committee, 2 October 2007; c 178
2 Scottish Parliament: Official report 13th March 2008 c. 6913
How would these proposals help reduce fuel poverty across Scotland?

The most recent estimate from Energy Action Scotland states that there are 850,000 households living in fuel poverty in Scotland. Domestic gas and electricity bills have risen by 128 per cent and 76 per cent in the past five years. These increases equate to a combined average bill in excess of £1,000 meaning affordable energy is beyond the reach of many households. In 2008 alone the six dominant firms increased domestic prices by up to 26 per cent for electricity and 55 per cent for gas. Every 1 per cent rise in price pushes 8,000 more households into fuel poverty.

The proposals in the Members Bill will contribute to the Scottish Government’s target of eradicating fuel poverty, so far as is reasonably practicable, by 2016. Increasing the use of microgeneration – such as ground and air source heat pumps and solar panels - can particularly benefit the 30 per cent of the population who are off the gas network and often reliant on expensive and inefficient oil based systems. Increasing the energy efficiency of the building will help to reduce bills and make energy more affordable for the poorest households throughout Scotland.

Part 1: Emission Reduction Targets

Point in Time Targets

The Climate Change (Scotland) Bill proposes two ‘point in time’ targets relating to emissions. The first target is an 80% reduction in emissions by the year 2050 while the second is a target of 50% reduction by 2030.

The steering group members believe that the 2030 target is too late and inadequately ambitious to meet this rationale, and to fulfil the scientific imperative behind the Bill. We believe that energy efficiency measures and householder renewables have the potential to raise householder awareness and deliver early and significant carbon emission reductions. Home energy efficiency should be the place to start because relatively low cost measures can release substantial technical potential, and financial savings for householders.

Householder scale renewables are also now available but the price will not come down until there is a mass market. Research published by the Energy Savings Trust in May 2008 repeated the findings of previous research that one off discounts from the Council Tax would be an effective measure to promote uptake of energy efficiency measures.

The Steering Group is convinced that significant commitments are still required in the Bill that promote micro generation and energy efficiency as a vehicle to achieve early and significant reductions in greenhouse gas emissions.

Annual Targets

In addition to ‘point in time’ targets, The Climate Change (Scotland) Bill also provides for annual targets. Under the current proposals, the annual target will be rolled out in stages.

- Pre 2020 - Annual reductions need only be greater than the previous year
- Post 2020 - Annual reduction must be at least 3% year on year

The Steering Group believes that action to combat climate change needs to start immediately. The failure to stipulate specific targets starting immediately in the Climate Change Bill means as it now stands only marginal improvements in emission reductions between now and 2020 need to be delivered. This does not fulfil the SNP manifesto commitment or promises made that it would be radical. The proposals in the Members Bill would deliver significant greenhouse gas emission reductions in the short term.

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Parts 3: Reporting Duties

The policy memorandum for The Climate Change (Scotland) Bill states that Ministers should be subject to strong and robust reporting requirements.

The Climate Change (Scotland) Bill imposes a duty to report annually and make a statement to Parliament relating to that report. Such a report would, if required, explain why emission targets are not met. In addition, there would be a duty on the Government to produce a report and statement on proposals and policies designed to meet future annual emission targets. It also requires reporting to include information on electricity generated and used in Scotland. It would be a simple matter to include a mandate to report on progress on efficiency and microgeneration in line with the Members Bill proposals.

The Members Bill proposals would also require the Scottish Government and Local Authorities to set targets to take forward the measures in the Bill and the Scottish Government to report annually to Parliament on progress made. This would be a practical way to deliver early progress on greenhouse gas emission reduction.

Part 4: Duties of Public Bodies

The current draft of the Climate Change (Scotland) Bill employs enabling powers to allow the Government to create secondary legislation to impose public sector duties, perhaps, at some time in the future. However, there is widespread agreement including amongst the Steering Group, that duties on public bodies need to be implemented right from the start and need to be established by the primary legislation, i.e. in the Climate Change (Scotland) Bill.

The public sector has a critical role to play, reducing emissions in line with national reduction targets and being seen to take a leadership role in society and the workplace. Many public bodies, responding to the consultation on the Climate Change Bill, responded positively about duties on public bodies. COSLA, in its response to the Climate Change (Scotland) Bill consultation, stated that it would have no objection to the proposal for enabling powers as long as local authorities were provided with adequate resources to act to enable those duties.

The Bill would be stronger if it required public bodies to be accountable for meeting targets, as those bodies would be more focused on delivering them. Voluntary measures are not enough to ensure delivery, or it would be happening already.

Such duties are common in other legislation such as the Land Reform (Scotland) Act 2003, Nature Conservation (Scotland) Act 2004 and the Water Environment and Water Services (Scotland) Act. Duties on public bodies and reporting requirements were outlined in the proposals for the Members Bill.

Part 5: Other Climate Change Provisions

Chapter 3 - Action Plan

Section 48 of the Climate Change Bill requires Scottish Ministers, within 12 months of the section coming into force, to “prepare and publish a plan for the promotion of energy efficiency in Scotland” and that “the plan must include provision about the promotion of the energy efficiency of living accommodation”. This is welcome, but there is no need to wait until the Bill is enacted to produce the first plan. The first Energy Efficiency Strategy was promised by Scottish Government in December 2003.

The Section will effectively repeal Section 179 of the Housing (Scotland) Act 2006 which stipulates that a strategy for improving the energy efficiency of living accommodation is required. The Scottish Government claim that the proposals in the Climate Change Bill will strengthen the existing statutory duty. However, while it would widen the duty, we would question whether it strengthens it.
While the Housing (Scotland) act required a strategy for ‘improving’ energy efficiency, the new Bill only requires a plan ‘promoting’ it. The connotations of ‘improve’ suggest greater pro-activity of response compared to the weaker ‘promote’. There is concern that as it currently stands, the Bill will be weaker than the existing provisions for the domestic sector.

One thing is clear, in order to be successful in improving energy efficiency, incentives are required to drive change. In England the existing provision of council tax discounts have been used in conjunction with power utilities to promote energy efficiency schemes which enable utilities to meet their CERT obligations. In Northern Ireland, Finance Minister Nigel Dodds announced his intention to introduce a ‘green’ rebates scheme for householders who bring their homes up to modern standards of insulation. Existing householders will qualify for a rebate by making energy efficiency improvements to their homes such as cavity wall and loft insulation. The scheme is being introduced to lower domestic consumption and reduce carbon emissions. This is why the proposals, for domestic incentives such as a reduction in Council tax, have been made in the Member’s bill.

Evidence shows this is the strongest incentive, and without any other proposals that would achieve the same ends, the Steering Group urge the Committee to consider it to bolster the provisions on energy efficiency in the Climate Change (Scotland) Bill.

Miscellaneous

New Build

The Scottish Planning Policy Guidance 6 (SPP6) document published in March ’07 sets out how the planning system should manage the process of encouraging, approving and implementing renewable energy proposals when preparing development plans and determining planning applications.

It includes an ‘expectation’ that all proposed developments over 500m$^2$ should incorporate on-site low or zero carbon equipment delivering an extra 15% reduction in CO$_2$ emissions. Some authorities in England and Wales already expect 20% reductions.

The SPP6 was intended to incentivise energy efficient development as the more energy efficient a building is, the less on-site renewables will be needed to make the 15% reduction. However, this intention is only expressed in Planning Advice Note No.84 (PAN84) that accompanies the SPP6, not the SPP6 directly, and the drafting of the SPP incorrectly defines the baseline as the building standard level, not the designed level of the particular building. The Steering Group understands that this disjuncture risks being overlooked in the Scottish Government’s proposed rationalisation of Scottish Planning Policies.

Surveys of the 32 Scottish local authorities suggest that SPP6 is not being given sufficient priority. A level playing field is required so that all developers are required to incorporate appropriate technologies in every development, thus stimulating the manufacture of renewables products and driving down costs. Without this requirement there is no evidence that these technologies will be routinely incorporated in developments.

The Steering Group therefore believes that the Climate Change (Scotland) Bill should improve upon SPP6 by including a requirement that all new developments should incorporate on-site zero and low carbon equipment contributing to a figure greater than the current 15% reduction in CO$_2$ emissions beyond the 2007 building regulations. This improvement should also have a clear statement regarding any impact an increase in energy efficiency installation would have on the requirement to install micro generation equipment for new developments.

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7 Northern Ireland Executive 23rd December 2008  

Council Tax Incentives

The Scottish Government have remained steadfastly against this proposal. Initially, because they were committed to replacing the Council Tax with Local Income Tax (LIT) and as such the proposal was moot.

Note however, Liam McArthur MSP’s contribution to the debate of November 13th where he stated the need for accepting the principal of incentives, whether through council tax or LIT. In Northern Ireland, the incentive outlined above, relates to rates as the domestic taxation system. Now that LIT has been dropped by the Scottish Government there is now no argument for not enabling discounts from council tax.

As indicated above, research by the Energy Savings Trust suggests that a council tax rebate would be the more visible than other fiscal incentives. This in turn would maximise the potential for uptake. The Climate Change (Scotland) Bill should give local authorities the power to offer council tax rebates to incentivise householders.

Business Rates

Parallel proposals targeted at small businesses would ensure that a similar incentive for businesses would mean that where they operated in modest properties they would be encouraged to install energy efficiency and small scale renewables.

The Steering Group on the Energy Efficiency and Microgeneration Bill supports the Climate Change (Scotland) Bill and hopes that much of the learning around constructive proposals can be accommodated into the Climate Change Bill, as the Cabinet Secretary on Finance and Sustainable Growth has proposed previously.
WRITTEN SUBMISSION FROM NATIONAL LIBRARY OF SCOTLAND

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

The National Library of Scotland (NLS) acknowledges the ambitious targets for reducing greenhouse gas emissions as set out in the Bill. The National Library of Scotland will set its own targets in accordance with our existing Sustainability Policy to help contribute to the Scottish Government’s annual targets.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

The NLS recognises its duties to reduce its carbon emissions and to report as required to the Scottish Ministers on this issue. The NLS will take cognisance of any guidance prepared by the Scottish Ministers.

Q20 Do you have any other comments on the Bill?

The NLS is one of a number of repositories of information in Scotland which can help to facilitate research into environmental management in general and climate change in particular. The Library believes it has an important role to play in providing research support for those working in this area.

Whilst welcoming the overall thrust of the Bill, the Library would like to see a commitment to investing in infrastructure (e.g. public utilities, public transport and digital infrastructure) to ensure that these ambitious targets are met. As an example, the NLS is very conscious of the further potential of new technology for widening access to information, without generating travel. NLS websites receive over 3 million ‘hits’ per year, against some 70,000 reader visits. Further investment in new technology will continue to have environmental benefits, such as increases in home-working, video-conferencing etc.
Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

Both targets will prove to be challenging for NHS bodies. Major Capital expenditure will be required for the achievement of the targets set out in the Bill; however it does present the opportunity to raise the profile of good energy management and carbon reduction strategies. A co-ordinated approach from all public sectors would prove to be the most cost effective and rewarding approach, as long as this was ‘driven’ by a central department with the power to actually influence change.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

The setting of targets in batches may prove to be advantageous as this will aid organisations to plan long term strategies to achieve targets. The targets that are set must be achievable and realistic, and must be able to be reviewed within the ‘batch’ period.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

Annual targets should not penalise organisations for a good performance in the baseline year. Organisations that have already invested in carbon reduction and energy management will be penalised for being proactive, while an organisation that was managed badly will have easy reductions to make due to a poor performance in the baseline year.

Annual targets must also be weighted for weather conditions. Years which see an unusually hard winter may see organisations with mainly space heating energy use fail to achieve targets through no fault of their own.

Q.4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

Power generation in Scotland is already at over capacity for Scotland’s needs and a large proportion is sold in England. Will this mean that the UK government will supply carbon units to the Scottish government?
Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

Would flights passing through Scottish air space produce an ‘attributable emission’ to Scotland? This would be unfair as most transatlantic flights from mainland Europe pass over Scotland.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government's approach to obtaining independent, expert advice on climate change?

No view taken

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland's emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

No view taken

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

Reporting duties should not be onerous or overly bureaucratic. Consistent and clear guidance is required.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

No view taken
Introduction

We welcome the opportunity to contribute to this important proposed legislation and enclose the response from NHS Greater Glasgow and Clyde to the Climate Change (Scotland) Bill consultation.

Within NHSGGC there is recognition that the NHS has a duty to mitigate the impact of climate change by working to reduce our carbon footprint and to act as a truly sustainable organisation across energy use, transport, procurement, waste and building design areas. A recent paper published in the Public Health Journal (P. Cosford/Public Health 123 (2008)e1 – e5) provides a useful commentary on the potential role of the NHS in relation to sustainability and climate change and highlights the role played by the NHS Sustainable Development Unit in supporting change within the NHS in England.

NHS Greater Glasgow and Clyde’s Sustainability Planning and Implementation Group seeks to provide leadership for the organisation in matters relating to the environment and sustainability. Comments on the Climate Change Bill have primarily been drawn from this group that comprises representation from Acute Services, Public Health, Procurement, CH(C)Ps and Corporate Policy. It is our view that future legislation should reflect some recognition of the increasing demands of technology growth and legislative demands on services that in themselves can be contrary to the management of a downward trend in commodity usage and energy uptake. Examples of this can be seen in meeting demands for new scanners and the recent zero tolerance requirements for hand washing. There also needs to be some recognition of the age of the NHS estate and its ability, or not in some cases, to be adapted to accommodate alternative energy technology. There should be a clearer linkage of the sustainability agenda to the wider issues of addressing health inequalities. It would be helpful if related policy areas could provide further support for a sustainability strategy in general terms such as addressing poverty and supporting health improvement efforts so as to impact on the demand for NHS services.

The remainder of our response is structured around the identified issues, recognising that not all areas are relevant for us at present e.g. forestry.

We look forward to the publication of the response to this Bill and to the progression of this legislation as a means of supporting change.

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

We welcome the Scottish Government’s proposals to aim for a significant reduction in greenhouse gas emissions in order to tackle the adverse effects associated with greenhouse gas emissions. The target of an 80% reduction by 2050 is ambitious – exceeding levels previously set, for example, by the Kyoto or the G8 targets – but achievable if there is support to implement and deliver on the necessary measures. We do recognise however that there is a view that more challenging targets in the future would reduce the risk of reaching the climate tipping points and clarity on whether the targets would include emissions arising from the manufacture of goods and services that are imported to Scotland would be helpful.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?
Whilst we recognise that an early reduction in emissions is desirable, consideration should be given to the particular challenges relating to rebuild programmes that will affect the trajectory of the average annual reductions that can be achieved.

Q.4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

In order to achieve the ambitious 80% target it will be necessary to be focused on delivering a range of measures that reduce energy consumption, improve energy efficiency, shift energy production to more renewable sources and reduce waste. In addition, efforts to offset emissions will also be required. As a part of this the concept of a net emissions account may be helpful. However, any scheme for crediting or debiting carbon units and offsetting Scottish emissions has to be operated in a transparent manner that ensures that the Scottish emissions cannot simply be exported without being counted against the Scottish emissions reduction targets. There is a need to reduce the risk of creating a system of double counting and to avoid mitigating against a sense of purpose for Scotland to deal with its own emissions problem. We would therefore welcome a limit on the number of units Scotland can purchase. An uncapped purchasing of carbon units could undermine efforts to achieve the 80% net reduction in Scottish emissions and divert resources and attention towards merely exporting Scotland’s emissions elsewhere.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

We broadly support this definition but we would welcome further clarity on how the Scottish share of emissions from international shipping and aviation is to be determined. If this excludes emissions embodied in imports of goods and services to Scotland (e.g. of steel or fertiliser) there is a risk that it could provide an incentive for deindustrialisation and could prevent a holistic approach to the emissions that Scotland is responsible for.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

No comments.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?
Effective monitoring and reporting arrangements are crucial for achieving the reduction of greenhouse gases as proposed. We therefore welcome the arrangements set out in the Bill. Monitoring arrangements will have to utilise agreed international measurements to ensure they conform to existing standards and deliver comparable results. We would also like to note that any reporting arrangements will need to be operated in an efficient manner so as not to divert resources away from actual tasks of reducing greenhouse gas emissions and adapting to climate change.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

Public bodies are a significant part of the Scottish economy and contribute substantially to Scotland’s greenhouse gas emissions. We also acknowledge that public bodies are in a position to play a lead role in Scotland with regards to reducing emissions and combating climate change. As such we broadly support the provisions made in Part 4 of the proposed Bill, however, we would welcome further information on the nature of the “climate change duties” the Scottish Government is considering. Additionally, imposing any specific climate change duties on public bodies will in all likelihood bring with it cost implications for those organisations. It is unlikely that public bodies will be able to meet any substantial additional costs without further support from the Scottish Government. We therefore welcome the commitment expressed in 36 (6) for Scottish ministers to co-operate with relevant public bodies but we would like further clarity on how public bodies may be funded to deliver on any additional climate change duties.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

Adaptation to climate change is an important element in the overall approach to climate change, alongside efforts to reduce emissions and avoid increases in greenhouse gases in the atmosphere. We therefore welcome that the Bill makes specific provisions for the Scottish Government to take action on adaptation to climate change.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

No comment.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

No comment.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?
Energy efficiency is a key aspect of reducing greenhouse gas emissions and we support the proposal to produce an action plan drawing together existing and proposed measures to improve energy efficiency.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?

We support any efforts to make buildings more efficient and reduce the emissions associated with inefficient building design and maintenance. Whilst we therefore welcome the proposals set out in the Bill they raise some questions over the actions that would follow if buildings are found to fall short of accepted standards for energy efficiency. These questions will need to be addressed. We would also like to point out that any assessment process will have to be carried out in a way that is efficient and does not divert resources away from delivering on the wider climate change agenda.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

As heating accounts for a significant proportion of energy consumption associated with domestic and non-domestic buildings, supporting the generation of heat from renewable sources is an important step. We therefore welcome the proposals to lend further legislative support to efforts that promote and incentivise heat generation from renewable sources.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

Waste prevention and management plans;
Waste data;
Deposit of recyclable waste;
Procurement of recyclate;
Reduction of packaging;
Deposit and return schemes;
Charges for carrier bags.

What are your views on these proposals?

We broadly support the proposal made in the Bill but offer some practical challenges in applying a sustainable approach to this area. The main issue is that whilst the Bill recognises the cost of achieving some of these aims it needs to be balanced against the cost of delivery. e.g. specifying a level of recyclates in products may be suitable for some industries and products but have a significant impact if we apply it broad brush. Within NHSGGC we have looked at changing basic products such as paper and pens. Paper: Switching to a 100% recycled paper product would create a cost pressure of £288k. (extract from recent paper: "If option 2 (recycled paper) is used the cost would increase to £2.28 per ream (total cost £763,800 option 2, a cost pressure of £288,100 = 60.5%).").

Pens: A standard 'Bic' pen is £2.50 per box of 50, 5 pence each. The cheapest pen made from recycled materials (76% recycled) is £7.10 per box of 10, 71p each. This is an increase of 1420%.

These practical examples demonstrate the need to understand the other pressures which may become barriers to achieving climate change if they are not considered and built into the strategy.

Q16 What are your views on the adequacy of the Scottish Government's consultation in advance of publishing the Bill?

No comment.
Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

No comment.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

The measures and actions required to achieve the targets set out in the Bill may be more difficult to implement for those living in poverty, potentially resulting in a widening inequalities gap. This would have implications for a range of other policy areas to take action to address these inequalities.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

We welcome the Bill as a significant step towards greater support for new technologies and behavioural changes in Scotland in relation to sustainable development, for example by encouraging changes in the public and private sector regarding energy use, efficiency and waste.

Q20 Do you have any other comments on the Bill?

See introduction.
Q10  Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

No view taken.

Q11  The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

No view taken.

Q12  The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

Public building already have to achieve BREEAM excellent standards.

EU Directive 2002/91/EC and BRE guidelines have meant that public buildings require EPC’s (Energy Performance Certificates).

Q13  The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government's thinking in this area.

What are your views on this approach?

Considerable costs have already been incurred in producing EPC’s, costs which could have been targeted more beneficially at improving performance in what are generally known as 'poor performance.'

Consideration should be given ensure that any further costs incurred actually improve performance.

Q14  The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

This is a good step forward in sustainable development.
Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas: Waste prevention and management plans;

Waste data;
Deposit of recyclable waste;
Procurement of recyclate;
Reduction of packaging;
Deposit and return schemes;
Charges for carrier bags.

What are your views on these proposals?

New regulations should not be overly bureaucratic and work with existing legislation and regulations. Charging for carrier bags has not been proven to work in the Republic of Ireland and may have led to the production of more plastic.

Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

Consultation has been adequate.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

No view taken.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

None.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

The bill may prove to be a stepping stone toward sustainable development.

Q20 Do you have any other comments on the Bill?

None.
Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

If the starting point for NHSScotland’s 80% reduction on direct building CO₂ emissions, i.e. energy usage, is the NHS actual usage in 1990, then the 50% and the 80% reduction are feasible. However, as much of the existing NHS buildings stock will still be in use in 2050 there will be a need for a substantial portion of the total NHSScotland energy requirement in 2050 to come from renewables, primarily grid electricity. Will there be sufficient green grid electricity to cover the demand from the NHS? Also, will the Scottish CO₂ figure for electricity generation, instead of the UK figure, be used to calculate an organisations emission, and to take advantage as more and more renewables come on line to accurately reflect the carbon emissions?

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

NHSScotland have had an annual target for nearly 25 years and the current 2% of base year target ends in 2010. NHSScotland will probably continue with an annual target designed to achieve 80% reduction on the 1990 base by 2050. NHSScotland would welcome some milestones however, there needs to be recognition of an organisations past performance. It is likely that different organisation will be starting from different points on their 80% reduction of their respective 1990 emissions. Setting targets should be designed to help all organisations converge on the required 80% reduction and not penalise those that have demonstrated substantial reductions since the 1990 base year. Also organisations should be allowed to follow there own published plans if it can be demonstrated to achieve the 2050 target.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

Over the last 22 years the NHS in Scotland has reduced energy usage in Hospitals by over 40% which is slightly more than a 2% year on year saving. However this is NHSScotland as a whole, within this some Boards were better or worse and we would propose that any new target would give this flexibility, i.e. the target would be of the overall organisation and not on its individual components. NHSScotland also recognise that there is a need to achieve an average of 2.6% year on year to achieve its 80% reduction by 2050. However, the level of funding provided for new Hospital/HC etc will be crucial to achieve this. Also the reductions of emissions year on year will depend on the phasing of this capital funding, resulting in some years having an above average reduction and vice versa a below average reduction in other years.
Q.4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

While the best outcome is for the target to be achieved from actual reductions of greenhouse gases there may be years when this is not possible, e.g. delay in commissioning renewables projects, installing new plant, etc; and being able to purchase carbon units from another country would keep Scotland on target for 2050. However this should only be a temporary measure, sooner or later there would still be a need to make the actual reductions rather than a continually purchasing carbon unit’s year on year.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

Direct emission made in Scotland is fine; however there is not a clear calculation for indirect emissions. International aviation and international shipping can be viewed as both direct and indirect, however Scotland’s share of aviation could be viewed as half of each flight that originals in Scotland i.e. aviation is two way traffic and each country could therefore be responsible for ½ the international aviation emission of all flights the land and take off from the airports. Alternatively a simpler method could be to count total aviation fuel supplied to airports within the country. Similarly for shipping it could be the amount of fuel supplied to ports within Scotland. If this is applied worldwide then the chance of double counting would be minimised.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

As it appears that the Scottish Government could be ahead of the rest of the UK in tackling climate change, this would be the natural progression to ensure Scotland can achieve its target. The recent change by the UK Government to set an 80% target following Scotland lead is just one area where Scotland is leading, therefore if there is a chance that Scotland could be held back, having the ability to form a separate group would provide the best of both worlds.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

The reporting arrangements are fine; however a fundamental must be to have a consistent method of collecting and reporting emissions. The Public sector could lead by example by using a common monitoring and reporting system to allow progress to the targets be tracked and reported to ensure consistency and accuracy.
Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

As mentioned in Q7 it is essential that the Public Bodies lead by example and achieve year on year reduction in emissions. Accurate and consistent reporting is essential to help identify early problems in achieving the target thereby identifying where guidance may be required.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

It is reasonable to expect SG to be looking at the various risks from increased risk of flooding and severe weather. Changes to building regulation to design to withstand severe weather etc. These need to be considered fairly urgently, amending where necessary planning regulations, building regulations to help manage these risks. Also to draw up a list of areas likely to regular flooding and produce plans and action to mitigate the risk to people and existing properties.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

The Scottish Government should have this enabling power.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

NHSScotland would support decisions aimed at increasing carbon capture through increasing the size of Scotland’s forests thereby offsetting the amount of carbon dioxide emissions. NHSScotland would also support the increased production of wood chip to ensure economical supplies for Biomass plants for the carbon neutral process of providing local heating and electricity.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

This is essential; however the starting point is to recognise that a substantial part of the current building stock will still be in use in 2050. New buildings will soon need to be carbon neutral, but the current biggest waste of energy is from poorly insulated buildings. Research is needed to identify methods of raising the insulation level to today’s regulations or even better. This needs to be done first before looking to change boilers or install renewables to avoid installing the wrong plant. However, the Public organisations would need financial support to ensure this is done.
Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?

This is consistent with achieving a level playing field; it is required to ensure an organisation does not simply switch to use renewable energy without meeting a required minimum energy efficiency performance. NHSScotland has for almost 10 years monitored the Comparative Performance of Hospitals against a Best Practice base and this is now being rolled out to all the other small sites, i.e.; health centre, clinics etc. This provides a means to determine the best and worst performing sites enabling resources to be directed more effectively. Ultimately this could be done with EPCs if applied to all buildings and a central register was set up to monitor and report on the energy performance across all organisations.

Q14 The Bill places a duty on the Scottish Government to take such steps as it considers appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

This would be acceptable to NHSScotland, however there must be conditions, all schemes should be vetted to ensure that the building/site that they are intended for meets a certain level of insulation performance, see Q12 comments, or will be brought up to at least today’s standard prior to the installation. This will ensure that the size of any equipment installed is minimised and energy performance optimised. Grants or funds provided for renewable heat projects should be sufficient to ensure this is part of the overall project.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:
- Waste prevention and management plans;
- Waste data;
- Deposit of recyclable waste;
- Procurement of recyclate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

What are your views on these proposals?

Help in all these areas would be welcomed by NHSScotland. NHSScotland collects details from all Boards on the quantities of waste being recycled. Slow progress is being made but help is needed to simulate the whole recycling business. It can still be difficult to get companies to collect all the different types of recycled waste. Setting targets on organisations to gradually recycle a greater proportion of their waste would bring in more competition and more importantly innovation on how to manage a collection system through a products life from purchase to disposal.

Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

Fairly comprehensive Bill, although it would have been helpful if there was more details on the carbon emissions of different sectors, and what would be expected of them. For instance, what was is the 1990 level of emissions against each sector that the Bill will use as the baseline?
Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

No comment.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

There is much technical substance to the Bill and this may lead to discrimination with non-technically minded people. Also the provision of grants and subsidies need to be made available to those with limited financial means, or it might run the risk of supporting only those with the financial and technical know-how.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

The Bill should be seen as another step on the route of continual improvement to achieve sustainable development.

Q20 Do you have any other comments on the Bill?

No.
Question 1: What are your views on the 2050 target and a 2939 interim target proposed in this Bill?

The targets seem ambitious. It needs to be supported by incentives as the public sector may not have the resources to achieve the targets by applying technologies such as renewables.

Question 2: What are your views on the setting of targets in batches from 2010 to 2022?

Consider this to be suitable.

Question 3: What are your views on this approach or any possible alternative approaches?

Consider this to be acceptable.

Question 4: What are your views on the proposals in the bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

No strong view.

Question 5: What are your views on this definition of Scottish emissions?

What is included or excluded in the net Scottish emissions account? What about electricity from hydro? If Scotland distributes goods/services elsewhere, is that emissions 100% Scottish or should the end user have proportion of responsibility for that emissions.

Question 6: What are your views on the Scottish Government's approach to obtaining independent expert advice on climate change?

Do not agree - why form another group when there is already one for UK.

Question 7: What are your views on these proposed reporting arrangements?

These are suitable.

Question 8: What are your views about this proposal?

There are already schemes run as CRC and EUETS as well as CCL that "tax" on emissions. Is this yet another of such schemes that will add further financial burden on Public Sector?

Question 9: What are your views on this proposal?

No strong views.

Question 10: What are your views on this proposal?

Consider this appropriate.

Question 11: What are your views on this proposal?

Consider this appropriate.

Question 12: What are your views on this proposal?

Consider this to be a necessary element of any bill.
Question 13: What are your views on this approach?

Happy with the proposal.

Question 14: What are your views on this proposal?

Consider this to be appropriate.

Question 15: What are your views on these proposals?

Business should no longer be allowed to produce packaging and carrier bags, unless they are made from recycled/biodegradable materials. Plastic bags should no longer be in use in City Centres.

Question 16: What are your views on the adequacy of the Scottish Government's consultation in advance of publishing the Bill?

Satisfactory.

Question 17: Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government on the consultation proposals?

No.

Question 18: Does the Bill raise any equalities issue you would wish to highlight?

No.

Question 19: Do you have any comments on the impact of the Bill on sustainable development?

The Bill can only assist the push for sustainable development.

Question 20: Do you have any other comments on the Bill?

None.
Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

The setting of an 80% reduction target is a challenging but necessary target. The setting of an interim target of 50% by 2030 is also welcome as this will help to ensure that actions are undertaken sooner rather than later (although, as the earlier carbon savings can be made the greater the overall savings perhaps a target of more than 50% by 2030 should be adopted). However, setting other additional interim targets for 2020 and 2040 would provide an additional incentive for action to be undertaken and progress to be maintained. There should be scope to raise the targets if scientific evidence required this to happen.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

The setting of targets in batches should support on-going action and reduce the risk of a lack of urgency or complacency. However, the first batch of targets is for a 12 year period, while all other periods to 2050 are for 5 year periods. While appreciating there may be a desire to allow gearing up to meet targets, perhaps 12 years is too long a period for this.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

This approach may be an easier approach to implement but as there are significant benefits to be gained from lowering emissions as quickly as possible thereby significantly reducing total emissions from the implementation date to 2050 perhaps greater encouragement can be given to encouraging faster reductions. If progress is quicker than anticipated it may be unrealistic to expect an annual 3% reduction in the latter years leading up to 2050.

Q4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

If carbon units are to be used at all their use should be limited. The goal should be for Scotland and other countries to reduce their overall emissions from source. Further details are required with regards the provisions to be made for the use of carbon units.
Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

Whilst this approach seems fair in principle how will international aviation and international shipping actually be disaggregated in practice e.g. if a foreign airline carries a full load of Scottish passengers from a Scottish airport to a Spanish airport (and back) what proportion of carbon emissions would be placed against Scotland and what would be placed against Spain? (And, if the airline came from a third country what proportion of carbon emissions, if any, would be placed against the third country?) The issue of carbon emitted in the manufacture and transportation of goods made out with Scotland but consumed in Scotland (and vice-versa) also needs to be addressed. Again, when provisions are made for use of carbon units, it should be made explicit that those sold to outside Scotland will still be included as Scottish emissions and not double counted elsewhere.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

The key objective should be to obtain accurate, relevant and impartial advice on an on-going basis regardless of this advice coming from a UK or a Scottish body. The expertise of the UK Committee on Climate Change should not be ignored nor should the need for sufficient and suitable Scottish information. A UK level organisation may be seen to be more impartial with regards Scotland but the dependence on a body that is appointed by the UK Government may be an issue. It may be advantageous for a body to provide tailored advice for Scotland and serve as a dedicated resource. Options could be to provide additional resources to the UK committee to enable them to provide dedicated advice for Scotland or establish an additional Scottish committee which can work in tandem with the UK committee for UK-level issues.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

Regular reporting is necessary to measure progress, identify issues and help ensure accountability. The suggested reporting timescale (three years after the year ends) seems to be excessively long (and could result in targets being missed due to a lack of early warning). It may also be worthwhile identifying where carbon units have been sold and how/where it is proposed to direct revenue that is generated in the coming year to further reduce emissions.
Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

Whilst the need to place duties on public bodies is recognised there will also need to be recognition of the additional resources that will be required to address these duties effectively. The potential of placing reporting duties on medium and large scale private organisations should also be investigated.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

It is to be welcomed that the need for monitoring and reporting of adaptation to climate change is recognised, however, timescales need to be workable for those involved and relevant in terms of ensuring progress is being made.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

The timing of Muirburn may well need to be altered due to changing climatic conditions and, as such, the enabling power is to be supported.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

The use of the National Forest Estate for renewable energy will help ensure a sustainable, climate friendly, secure energy source that also provides significant local and national economic benefits. Safeguards will, however, be required, with regards biodiversity, land use and water courses and with retaining the primary function of the Forestry Commission i.e. managing and promoting this land.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?
Increasing the energy efficiency of the building stock will make a significant reduction in greenhouse gas emissions as will efforts to change people’s behaviour. The requirements for energy efficiency of buildings should be justifiable in terms of the targets set out for emission reductions for each of the relevant periods identified. The Planning and Building Standards Systems would provide a good mechanism for energy efficiency measures in new buildings and subsequent ramping up of requirements in relevant legislation and guidance for these would be appropriate. For improvements in existing building stock and in terms of enforcement there will be an issue of resources for the enforcing authority and there is also an issue of what enforcement powers will be available. More information on exactly what is proposed is required before more detailed comment can be given.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?

See response to Q12 (above).

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

A significant effort will be required to encourage space heating from renewables and the introduction of measures to bring this about is welcomed. Scotland has a large woodland resource with potential for an even larger resource to be created and managed sustainably. This could be used to provide large amounts of biomass fuel which, as previously stated above, could potentially provide climate friendly, secure energy in a manner that would have significant local and national economic benefits. Steps to encourage renewable heat could help “kick-start” the development of a large scale biomass industry in Scotland and help tackle any issues relating to local wood-fuel supplies. Any Government steps to encourage use of biomass require strong guidance and direction in support as many concerns exist as to legality of fuels within smoke control areas (which may require revisiting the relevant legislation), emissions of particulates, etc. This direction requires to be coupled with appropriate resources being made available to enable this. The requirement for a strong direction and provision of resources is applicable across the range of renewable sources as well as biomass.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas: Waste prevention and management plans;

- Waste data;
- Deposit of recyclable waste;
- Procurement of recyclate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.
- What are your views on these proposals?
The minimisation of waste production combined with mechanisms and incentives to recycle should help develop a “low waste” culture. There will, however, be a need to clearly define responsibilities between all concerned in the waste process including those concerned with monitoring and enforcement. The potential for enforcement authorities to recover reasonable costs through the levying of charges is welcome as this will ensure that regulation and enforcement is adequately funded. Measures to develop a market for recyclate are also welcomed as this will help overcome the lack of end users for recyclate. Support for “deposit and return” schemes and carrier bag recycling are also welcome as this will reduce waste but also encourage a recycling culture both with producers and consumers.

Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

No comment.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

No comment.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

No comment.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

The development of a low carbon economy that seeks to embrace both energy efficiency and renewable energy will significantly assist in enhancing sustainable development within Scotland. With Scotland’s vast but under-utilised renewable energy sources the Bill’s focus on renewables, including renewable heat, should help in the development of these resources and provide greater energy security and sustainable economic growth. The measures that are detailed in relation to waste minimisation and recycling should also assist sustainable development by developing a “low waste” culture and encouraging markets to develop for recyclate. The positive sustainable development benefits should, however, not be taken for granted as sufficient resourcing of various measures will be required to help ensure benefits are maximised.

Q20 Do you have any other comments on the Bill?

No comment.
Executive Summary

- Oxfam Scotland is a member of the Stop Climate Chaos Scotland (SCCS) coalition. This grouping of development, environmental and faith-based NGOs, trade unions and community organisations has the support of over 1.5m million Scottish citizens and is campaigning to try to avert dangerous climate change. Our response compliments that of SCCS, available at [www.stopclimatechaos.org/scotland](http://www.stopclimatechaos.org/scotland) and lists ten key priorities for the Climate Change (Scotland) Bill.

- These priorities include: an 80% reduction in Greenhouse gas emissions by 2050, statutory annual emission targets of at least 3% year-on-year reductions, the inclusion of aviation and shipping emissions in targets and the establishment of a Scottish Climate Change Commission in the primary legislation.

- Oxfam Scotland believes, along with SCCS, that strict limitations on the accounting of international trading of emissions credits must be imposed on Scottish Ministers to ensure a minimum of 80% of mitigation action takes place domestically.

- Internationally Oxfam is calling for a just, honest and urgent global deal to address the climate crisis that is already claiming thousands of lives annually, especially in the poorest areas of the world. If Scotland can produce a truly world leading bill it can be used as a global example - not just as a blueprint for other developed nations but as a signal to developing countries of the commitment of the global north to meet climate responsibilities. With the critical Copenhagen negotiations taking place in December 2009 this is the moment to set that example.

- The current international financial crisis and the global recession should not be used as an excuse to take no action or to push back in the medium to term the transition to a low carbon economy that is required in order to meet long term targets. Indeed, this moment of global change is an opportunity to re-model our economy to meet broader societal needs, combating both climate change and domestic poverty.

Introduction

Oxfam and Oxfam Scotland

Oxfam exists to combat poverty across the world. For nearly 70 years we have operated internationally, now in over 100 countries and with over 3000 partner organisations, to find lasting solutions to poverty and injustice. Oxfam has operated in Scotland for over 60 years. Through our shop network, our development education and youth development programmes, our campaigning and grassroots activism in communities across the country, through our UK Poverty Programme, tackling social exclusion in Scottish towns and cities.
Oxfam and Climate Change

For the most vulnerable in the world, climate change is not a coming crisis; it is already an existential threat. Excessive greenhouse emissions are – with scientific certainty – leading to floods, droughts, hurricanes, sea-level rise and seasonal unpredictability. These impacts are undermining millions of people’s rights to life, security, food, water, health, shelter and culture. The poorest in the world do not have the resources, human or financial, to meet this growing challenge. External shocks impact upon people in developing countries with a ferocity from which they can often never recover. The injustice of climate change is multiplied by the fact that those most affected are those least involved in causing the crisis. It is the rich, developed world that has for two centuries burned ever more fossil fuels bringing us to this critical juncture. Scotland has an undeniable historical role in the genesis of this crisis. As a cradle of the industrial revolution and the birthplace of the enlightenment thought that has spread a model of reckless consumption across the global North, Scotland has a duty to help create a climate for change.

Stop Climate Chaos Scotland

Stop Climate Chaos Scotland is a coalition of more than 30 organisations campaigning together to tackle climate change. The coalition members include environment and development NGOs, faith groups, trade unions, community councils, student societies, women’s organisations, a mental health charity, and many others. In Scotland, the members have a combined supporter base of over 1.5 million people.

The Stop Climate Chaos Coalition Scotland priorities for the Climate Change (Scotland) Bill are that it must:

1. Set out a framework that will achieve at least an 80% reduction in greenhouse gas emissions by 2050.
2. Establish in statute annual emission reductions of at least 3% year-on-year from the start, not just from 2020, compatible with a fair and safe cumulative budget identified by the advisory body (see 4).
3. Include emissions from all sectors in the framework and targets set out in the Bill, including those from international aviation and shipping, from the very start.
4. Establish a Scottish advisory body, a Scottish Climate Change Commission, in the primary legislation to support delivery of the Bill when it is enacted.
5. Ensure that at least 80% of the effort to cut emissions takes place in Scotland.
6. Establish duties on all public bodies to reduce greenhouse gas emissions in line with the national target.
7. Set in place robust, transparent reporting measures so the Scottish Parliament is well informed on progress in meeting targets and Government is held to account on mitigation and adaptation.
8. Ensure that strong enforcement measures are set in place in statute.
9. Ensure Scotland counts all its emissions and reports on those produced by products and services we consume as well as emissions produced domestically.
10. Be explicit that sustainable development is core to the purpose and delivery of the statute in relation to mitigation and adaptation.

Oxfam Scotland’s Response to the Call for Views Questions

Our responses to all questions are in line with the SCCS response. To save duplication, for answers to questions 1, 2, 5-10, 12-17 and 19 please refer to the SCCS document. The following answers are for emphasis and to provide the direct context of Oxfam’s experience.
Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

If dangerous climate change is to be avoided and long-term targets contained within the bill are to have any real meaning, action to reduce climate impact must take place urgently. The window that the bill currently leaves open until 2020 is unacceptable and unwise. It is not just the trajectory towards meeting 2050 commitments that must concern us. We must also look at the amount of greenhouse gases that are being produced on the way. Leaving meaningful change for another decade will result in significantly higher emissions overall. Given that the evolving science of climate analysis is pointing more and more towards the hazard of dangerous tipping points being reached over the coming decade it is grossly irresponsible to leave action until later.

The open window that the bill allows also ignores the human urgency of the situation. As we have stated, people in developing countries are losing their lives today. They do not have a decade to wait.

Scotland must also take account of the global political processes towards a new post-Kyoto deal that must be struck in December in Copenhagen. Scotland has promised world-leading legislation. If the Scottish Parliament succeeds in producing such a bill then it will be a signal to developing countries that the rich North are prepared to take the urgency of the situation seriously. Failure to take urgent action will be equally noted by the developing countries who showed resistance to a deal in Poznan last year in the face of weak commitments and a failure to recognise the urgent nature of the problem from the North. Building this trust is critical and Scotland needs to play a responsible part.

Q4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

The net Scottish emissions account serves as a useful model to account for Scotland’s impact on climate change. But accountancy is not the goal of this bill. The net Scottish emissions account should only be applied if it allows for the urgent incentives for change, in all sectors, required in order to meet urgent and ambitious government targets.

The interaction of devolved climate change legislation with reserved competences in trading systems and internationally agreed trading rules are deeply complex. Oxfam is not opposed to carbon trading either conceptually or, in some cases, in practice. Yet current systems of trading outwith the ETS are becoming increasingly discredited through the exposure of corrupt practices and perverse iniquities between rich beneficiaries and poor losers. It is essential that any trading that the Scottish Government takes account of in meeting targets is of the highest certified standard.
As the bill currently stands there is no limit set on the use of trading whatsoever. Ministers have stated publicly that they wish the bulk of mitigation to take place in Scotland, that Scottish money should be spent in Scotland to make the necessary changes to our economy and means of production domestically. Such assurances are welcome but are in no way binding, whether on this current administration or the next. The bill needs a statutory limit that will ensure a just distribution of responsibility. Oxfam strongly supports the SCCS position that a minimum of 80% of targets must be met domestically. An open door for ministers to meet targets through trading will do nothing to set the certainty of market conditions the private sector craves, will fail to provide the incentives for public sector action that Scotland needs or the honest appraisal of culpability that the developing world demands.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

Oxfam Scotland takes no direct position on the forestry proposals in the bill. We have however been greatly disappointed that such a controversial measure has distracted from the central and crucial thrust of the legislation in terms of political discussion and media attention and are unclear about the value these measures bring to the principle purpose of the bill.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

Oxfam knows that those most likely to live in poverty globally are women and girls. Females in developing countries are most vulnerable to the external shocks of climate change that threaten safety, livelihoods and health. Climate change has a gendered impact in the same way that poverty does.

Q20 Do you have any other comments on the Bill?

The Scottish climate change legislation has emerged at a time of great international turmoil when the economic model so dominant in the global north and so damaging to the global south has begun to be questioned for the first time in many years. There will be those who contend that this is not the time to take action on ‘environmental concerns’, that the re-floating of the economy requires our full attention and the stimulus of all of our financial resources. It is precisely this kind of thinking, the fanciful and wilful divorce of finance and environmental consumption, which has led us to this perilous economic condition. Oxfam Scotland would caution all MSPs from the perversity of this negativity. This legislative agenda and the actions our Government and Parliament must take in implementing it are opportunities to help rebuild a productive economic model that is sensitive to consumption and that serves people first. We are keen to engage any and all politicians in how the now common change of phrases such as ‘green new deal and ‘green collar jobs’ can be made real to help address poverty both in Scotland and abroad.
Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

The 2050 target and 2030 interim targets being proposed for the reduction in greenhouse gas emissions are achievable, but challenging, and will require a strategic plan to achieve this aim.

Strategic changes would include progression with renewable power projects, transportation plans and strategies, low carbon and high energy efficient Buildings, shared use of resources, partnership working, and increasing public general awareness.

To fund the investment needed to achieve the target reductions it is recommended that the Scottish Parliament will need to consider the availability of investment and the resources required to achieve these targets and whilst much investment has been undertaken by the Council in this area already, a higher level of funding will be necessary.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

The setting of achievable annual performance targets in batches between 2010 and 2022 is welcomed and good practice, as is the reporting of progress towards achievement of annual targets, for years 2030 and 2050, but this has resource implications across the Council which will need to be considered. The reporting periods are recommended as bi-annual between 2010 and 2022 to allow sufficient time for measurable progress to be recorded. A number of local Performance Indicators may be necessary to record progress across the Council and it is suggested this information be reported and monitored through the existing Sustainable Development Working Group which is a cross cutting group with individual work tasks assigned to Service Departments.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

The proposed annual emission target reductions of 3% is a positive but challenging target to set and whilst generally supportive of this, it must be progressed as part of a strategic plan. This plan should contain actions which will lead to measurable energy efficiency savings and whilst these actions will lead to improvements there will be additional costs associated with procurement and provision.

Annual targets will need to reflect the baseline year (1990) for each gas type and recognition for improvements already achieved or in progress.

Q.4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

The net amount of Scottish emissions is a useful starting point of reference with which the target for reducing greenhouse gases can be measured. The amount of units that emissions that can be credited or debited can vary, carbon units can be bought or sold however there should be a limit to the extent this can be done, if real progress is to be achieved. Containing demand for increasing energy consumption will be challenging, driven by change and increasing community aspirations in many areas.
Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

Scottish greenhouse gas emissions attributable to Scotland or those which represent the Scottish share of emissions from international aviation and international shipping require further definition by Scottish Ministers to enable an accurate picture for Scotland to be established at the outset, and to define how and whether these elements can be properly included, and the ability to influence external commercial entities in the medium to long term. Further information is being sought regarding how this process would be operated including items such as carbon offsetting measures and measurable targets apportioned to Renfrewshire. Renfrewshire as home to Glasgow International Airport should not be disadvantaged by the airport's location by having additional emissions attributable to Renfrewshire.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government's approach to obtaining independent, expert advice on climate change?

Whilst the use of independent expert advice for Scotland in addition to the advice provided by the UK committee on Climate Change is to be welcomed. Any additional actions from this advice would need to be aligned to UK advice. The impact and measures of this should be that it does not unduly put Scotland at a disadvantage compared to the UK as a whole and any advice should be tailored to Climate Change as it affects Scotland.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

Reporting requirements are fully supported and it is anticipated that all Scottish Local Authorities would follow existing corporate reporting mechanisms on performance. There will also need to be sufficient resources across the council to co-ordinate and undertake this task. It is further anticipated that individual Service Departments across the Council would be allocated tasks and undertake performance reporting, consistent for their area of responsibility.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

The requirement of local authorities to undertake regulatory functions regarding Climate Change duties is supported. It is anticipate these will follow existing corporate requirements. Further implications of this requirement include increased joint working with partners and public bodies.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

Whilst the general proposal for adaptations are welcomed, planning considerations for identified areas of risk due to Climate Change should be subject to regulatory controls and to address the effects of Climate Change.
Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

The proposed controls through the bill are to be supported to enable control and improvement in Climate Change.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

The immediate intent of the legislation is to take forward proposals to allow the Forestry Commission to enter into joint ventures for:

- Renewable energy development and,
- To allow them to let timber cutting rights to fund Climate Change activity.

Both of these proposals could have significant planning and environmental implications. The Council would be supportive of these types of project and could work with the Forestry Commission to reduce the emissions of greenhouse gases.

Recognition should be given, however, to the significant environmental impacts that tree felling and planting can have on biodiversity, landscape, nature conservation and archaeology unless it is carefully managed.

Similarly, realising the untapped potential wind and hydro renewable energy schemes on the forest estate will have to be achieved in a sensitive manner that respects the environment. Public access may also be affected by these types of development.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

The bills proposal for production of an action plan which should be strategic in nature to improve the energy efficiency of buildings is supported. Resource implications for continued progress need to be considered for buildings and the proposed implementation of an action plan should be supported by advice on cases of best practice, and benchmarking to encourage behavioural change.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government's thinking in this area.

What are your views on this approach?

The proposals for the Scottish Ministers to make regulations to the energy performance of buildings is to be welcomed and will be a driver for change.
Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

Whilst the proposals for renewable sources are to be welcomed, a more direct approach is thought necessary to encourage greater use of bio-mass heat sources as it is an efficient method of reducing CO² emissions. There are issues which must be addressed centrally regarding the production of bio-mass crops used to create fuel. The use of locally produced bio-mass crops should be encouraged to reduce the transport CO² emissions.

The additional capital cost of installing a biomass heating plant must be offset against long term competitive biomass fuel prices and it will be important that the costs of biomass fuels are controlled centrally.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

- Waste prevention and management plans;
- Waste data;
- Deposit of recyclable waste;
- Procurement of recyclate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

What are your views on these proposals?

The Council's views are to support these proposals and the undernoted identifies the Council's progress to date regarding these matters.

- **Waste prevention and management plans:**
  “Development of plans for the prevention, reduction, management, recycling and disposal of waste” Management, recycling and disposal of waste are already underway to comply with the Landfill (Scotland) regulations (in response to Landfill directive).
  Scotland’s new National Waste Plan is currently being prepared by the Scottish Government to replace original National Waste Plan and Area Waste Plans. Waste however Wastes Minimisation legislation is unlikely to be enacted in the short term. The European Waste Framework directive (17th June 2008) delays the introduction of this type of legislation until 2014.
  When enacting legislation clarity should be provided on the exact role of the enforcement agency; SEPA, Local Authorities and other agencies.
  Additional resources & training should be provided in relation to the duties imposed.
  If Local Authorities are required to implement local Waste Management Plans resources & training should be provided.

- **Waste data:**
  Information on municipal waste is already provided through SEPA waste data flow to comply with Landfill (Scotland) regulations. Resources and procedures are already in place to comply with European legislation. Comprehensive data is available at present. Any additional information could be provided (dependant on individual local authority management systems.)

- **Deposit of recyclable waste:**
  A comprehensive network of facilities is currently provided and there would be scope for additional facilities but practical considerations such as additional space at Civic Amenity sites or other places to accommodate containers for additional materials. Planning permission would be required at site facilities in high density areas and Town Centres. Ability to engage with other stakeholders (supermarkets, universities, shopping centres, schools, etc) to arrange the provision of containers.
  Facilities for deposits at events: Practical considerations and resource implications (weekends, etc) would require to be considered.
• **Procurement of recylcate:**
  This is relevant to Private Contractors within the waste industry. The Council is supportive to improve markets for materials and use recycled material where practically and economically feasible.

• **Reduction of packaging:**
  This is relevant to manufacturing and retailing sectors. Prioritise and encourage the use of packaging using a single material. Single material packaging has a positive effect on recycling rates. Less contamination (higher quality) and easier to manage through the recycling process.

• **Deposit & return schemes:**
  It is suggested that channelling this activity should be channelled through Retailers & Manufacturers as done in other countries (i.e. Sweden).

• **Charge for Supply of Carrier Bags:**
  Although no significant waste reduction would be expected, the benefits of this are that this initiative will raise the profile of recycling. (A simple positive action). This may ultimately have a positive effect on participation rates and may help to tackle the “through-away” culture. All Supermarkets should be required to provide take back schemes as it would discourage the public from requesting the Council to collect plastic bags for recycling. A very costly initiative with very little effect on tonnage/ targets.

Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

It would have been useful to have a number of workshops to support the consultation process to further understand the requirements of the application of this consultation. Some example and models of best practice may also be useful to aid and support practical implementation of the bill.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

As per Q16 it would have been useful to have a number of workshops to support the consultation process to further understand the requirements of the application of this consultation. Some example and models of best practice may also be useful to aid and support practical implementation of the bill.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

The general issues are that Sustainable Development may have impacts on future new buildings developments and its planning requirements to meet Planning and building standards. Energy efficiency of buildings will be an ongoing requirement for asset management and greater demand for energy e.g. use of technology within schools need to be better understood regarding longer term implications.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

No comment.

Q20 Do you have any other comments on the Bill?

No comment.

**Implications of this report**

1. **Financial Implications**
   No immediate or direct implications, but the adoption of courses of action arising from the Climate Change Bill may have implications with regards to investment and resources. Prudential borrowing in the nature of spending to save projects will need to be considered.

2. **Personnel Implications**
   Any implications will be in the medium to longer term. A change in working practices is seen more likely than seeking additional resources.
3. **Community Plan/Council Plan Implications**
   Healthier - Reductions in greenhouse gas emissions will bring beneficial health effect to the community.

   Safer and Stronger – Greenhouse gas reductions will support safer and stronger communities.

   Greener – Reductions in greenhouse gas emissions will bring beneficial health effects to the community.

   Developing our Organisation – Greenhouse gas reductions will enable improved ways of working and facilitate development of our organisation in areas of asset management and corporate working.

4. **Legal Implications**
   Legal requirement for the Council when the Bill is approved.

5. **Property Implications**
   Property requirements regarding energy efficiency will be an on going requirement and have an effect on working practises e.g. mobile/home working.

6. **Information Technology Implications**
   Current systems will be utilised to support new ways of working.

7. **Equal Opportunity Implications**
   None.

8. **Health and Safety Implications**
   Reduction on Greenhouse gas emissions will improve health of the community.

9. **Procurement Implications**
   None.

10. **Risk Implications**
    Risk of compliance with Climate Change Bill if resources are not aligned to areas for improvement.
The RSC welcomes the opportunity to submit formal written evidence to the consultation on the Climate Change (Scotland) Bill.

The RSC is the UK Professional Body for chemical scientists and an international Learned Society for advancing the chemical sciences. Supported by a network of over 46,000 members worldwide and an internationally acclaimed publishing business, our activities span education and training, conferences and science policy, and the promotion of the chemical sciences to the public.

The document has been written from the perspective of the Royal Society of Chemistry. The RSC’s Royal Charter obliges it to serve the public interest by acting in an independent advisory capacity, and we would therefore be very happy for this submission to be put into the public domain.

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

The RSC believes that the Scottish Government is right to set a long-term legal target for reducing greenhouse gas (GHG) emissions through domestic and international action by at least 80% by 2050.

The RSC believes that the target to reduce GHG emissions by 80% below 1990 baseline levels by 2050 can be achieved but requires immediate action towards the following key goals:

- A strong and joined-up national and international leadership and policy that aims to massively reduce GHG emissions;
- A public consensus to save energy through both lifestyle changes and minimising heat loss from buildings;
- Energy efficient products and processes that minimise energy use in both manufacture and product use;
- Decarbonised transport achieved by developing highly efficient biofuels, lightweight construction materials, hybrid and electric vehicles, battery technology and further research into the potential of hydrogen as a fuel. Additionally there is a need to maximise the efficiency of conventional vehicles and fuels;
- Electricity produced from renewable energy sources such as wind, wave, solar and biomass resources;
- Development of carbon capture and storage technology so that the vast coal reserves of the Earth that will be exploited are done so with minimal GHG emissions; and
- Investment in skilled people and research and development so that future sustainable energy technologies will be developed.

However, it is important to recognise that reducing global emissions of GHGs by 80% by 2050 still commits the Earth to significant global warming for hundreds of years. This highlights the importance of an adaptation strategy alongside measures to reduce emissions.

The RSC believes that the Scottish Government should retain the ability to adjust the 2050 target in light of scientific advice, particularly that from the Committee on Climate Change. The science of climate change is evolving rapidly and it is vital that flexibility remains to account for the latest developments. For example, if an authoritative body, such as the Committee on Climate Change, concludes that there is a need for the GHG emission reduction target of 80% to be amended then this should be possible within this proposed system.

The RSC believes that setting of an interim target of 50% is sensible. The RSC also believes that an earlier interim target for the year 2020 would be appropriate so that Scotland’s reductions are inline with the UK, which has an interim 26% reduction target by 2020. However the RSC believes that the Committee on Climate Change should be free to advise Scottish Government on a pathway that will achieve the 2050 target without constraint; if the Committee on Climate Change were to believe that the optimal pathway would be one that delivered a reduction in GHG emissions greater than 50% by 2030 then this should not be hindered.

Scotland accounts for around 0.2% of global GHG emissions; therefore if Scotland’s emission
reductions are not matched by concerted global efforts then the Scottish economy will suffer and the world will continue to warm. To this end the RSC applauds the intention of Scotland to continue the argument for a global effort on climate change.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

The RSC believes the rationale behind setting targets in batches is sensible; however the Scottish Government must be careful that setting the targets in batches does not hinder Scotland from reducing its emissions more quickly.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

The RSC believes this is sensible. However, it is important that the Scottish Government listens to advice from the Committee on Climate Change and that the annual targets, both before and after 2020, build towards delivering the 2050 80% reduction target. The RSC therefore recommends that the annual targets should be at least 3% lower than the preceding year from the point that the Bill is enacted. This would result in a steeper decrease in emissions and over the 40 year period result in lower total emissions; the Bill must not be a limiting factor in tackling climate change.

Q4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

The RSC believes that the concept a “net Scottish emissions account” is well conceived. However, the facility to purchase carbon units from outside Scotland to meet domestic targets, in terms of their overall quantity and sources should be used as a last resort. If carbon units are required to be purchased then the Scottish Government should be asked to explain why domestic measures failed to deliver the required GHG emission reduction. The RSC is also concerned about how the performance of international schemes will be monitored and policed to ensure they are delivering the expected GHG reductions. The RSC believes that it is critically important that monitoring and early warning systems are in place to ensure achievement of targets is on track. The Committee on Climate Change has a vital role to play here. It is important that during the Committee’s annual review of progress towards targets that where progress is unsatisfactory that the Scottish Government is obliged to put in place measures that will rectify the situation.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

The RSC believes that on the whole the definition of “Scottish emissions” is sensible; it is essential that a share of emissions from international aviation and shipping are included. However, the RSC believes that whether carbon intensive products which are imported into Scotland should be included into the definition of “Scottish emissions” is an issue that needs further debate.
Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

The RSC believes that any advice received by the Scottish Government needs to be truly independent and based on quality scientific fact; the need for an independent advisory Committee is essential if the objectives of the Climate Change (Scotland) Bill are to be met.

The UK Committee on Climate Change is an appropriate independent body to inform the Scottish Government on a pathway towards the 2050 target and to monitor progress en route. However, since some circumstances may differ between the UK and Scotland, the RSC believes it is sensible to allow provision for a Scottish Committee on Climate Change.

If the Scottish Government does decide to appoint a separate Scottish Climate Change Committee then it is important that careful consideration is given to the make up of the committee. RSC believes the committee should be made up of not only identified expert positions but also associated shadow advisory groups of: technology development, energy production, climate science and adaptation to climate change. It is necessary for the individual experts in each of these fields to be supported by advisory groups since individual experts cannot cover the vast range of developments that each of these fields represents. Of foremost concern is the possibility that the chosen expert may be biased towards a particular viewpoint or technology. This could have massive and detrimental knock on effects if biased and ill-advised decisions were taken. As an extreme example, on the advice of a Committee member the Scottish Government takes a decision to invest in a particular technology, at the detriment of other technologies, that ultimately proves not to deliver GHG emission reductions promised and Scotland fails to achieve its statutory GHG emission reduction target.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

The RSC agrees that the Committee on Climate Change should report to the Scottish Parliament annually on Scotland’s progress towards both its budgets and targets. It is vital that progress is subjected to scrutiny and that where necessary the Scottish Government must justify its performance and indicate remedial actions.

The RSC also agrees that the report should state whether or not the budget was met. In this statement the RSC recommends that the data be presented transparently so that it is obvious what progress has been made and through which mechanisms carbon emissions have been reduced and also where mechanisms have failed. The RSC also agrees that should the annual target not be met, Scottish Ministers should lay before Parliament a report setting out proposals and policies to compensate in future years for the excess emissions.
Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

No comment.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

The RSC is aware that the natural environment will change because of climate change and therefore it is essential that we have the correct tools to monitor this and base any intervention measures on sound scientific evidence.

Carbon dioxide persists in the atmosphere for around 100 years, so even if levels of CO2 emitted are dramatically reduced in the coming decades, atmospheric concentrations of CO2 will take a long time to respond. This means that the GHGs already emitted since preindustrialised times have committed us to global warming for at least the next century, and the possibility of stabilising temperatures will take decades longer and then only if action is taken now. Therefore the effects of climate change over the period from the present day to 2100 or longer should be considered, as any adaptation and mitigation of climate change will need to occur over at least this time frame.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

Burning vegetation should be avoided wherever possible; if possible it should be collected and used as a feedstock for biomass-based products or fuels.

Most biomass for energy production is currently derived from industries such as forestry and from wood processing waste. Instead of burning vegetation it could be used to produce electricity, heat, biofuels or as a feedstock for the chemical industry in dedicated facilities. The potential for increased exploitation of biomass resources is very large.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

The RSC believes that although growing more trees will remove CO2 from the air, the benefits of this will be negated if the wood is exported and burnt elsewhere. It is Scotland’s responsibility to ensure that full life-cycle analysis applied to the new woodland.
The RSC believes that any proposals that support the use of new renewable energy should be supported. In spite of the apparent high land requirement for the production of significant quantities of biofuel using current technology, it is estimated that the total solid biomass potential is about 25% of total projected energy demand in 2050. Additionally local energy generation and use should help to reduce GHG emissions. However, if the intention of the Scottish Government is to use biomass, life-cycle analysis should be used to make sure it is truly carbon neutral.

Full life-cycle analysis should assess the implications of energy generation, including extraction, construction, transformation, transmission, usage and end-of-life. Only through a comprehensive and transparent process will the environmental impact be known and only then can energy options be compared on an equal basis. This will only be achieved with an intimate knowledge of the chemistry and thermodynamics of energy generation. This process will identify major opportunities for new chemistry such as methodology for highly efficient and low energy in situ extraction. The major challenge here is to develop life cycle assessment methodology that is globally accepted, robust and transparent.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

The efficient use of energy in buildings is a fundamental sustainability issue; more than 40% of Scotland’s CO2 emissions, a major cause of climate change, come from the energy used to heat, light and run its buildings. It is essential that this is tackled through energy efficient measures and behavioural change.

The RSC is a partner in the European platform for sustainable chemistry (SusChem); one of the initiatives of this project is the smart energy home1 (see Figure 1), which is a good model of an energy efficient building. In this project ground-breaking technologies and smart materials will make this vision possible by reducing heat loss, improving energy efficiency and absorbing and transforming energy into electricity. This project aims to demonstrate a mixture of present and future energy technologies and has an interactive control system that provides real-time information on the status of the property. By a combination of smart windows and insulation materials, micro-energy generating technologies and intelligent control systems this project will demonstrate that a house can actually generate electricity for sale to the national grid.

It is also import to stress that this technology can be retrofitted to the existing housing stock and that energy efficiency measures should not just apply to new build. The RSC believes that the Scottish Government should set out its own action plan for ensuring energy efficiency in existing housing especially since much of Scotland’s housing stock is under council control.

1 www.suschem.org
Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?

It is important that the energy performance of non-domestic buildings and the GHG emissions from these buildings is assessed. However, since it is estimated that the domestic sector in Scotland accounts for approximately 30% of CO2 emissions; the RSC believes that in addition the Bill should confer powers on the Scottish Ministers to make regulations providing for the assessment of the energy performance of domestic buildings, coupled to a grant scheme to encourage people to improve the energy efficiency of their homes. The domestic sector offers a huge opportunity and a challenge for reducing GHG emissions and domestic energy efficiency measures can play a significant part in meeting Scotland’s GHG reduction targets. 40% of domestic energy consumption is used to heat homes, and in turn, 30% of this energy is lost through windows. Smart coatings on glass and highly efficient insulation materials could dramatically reduce heat loss in all buildings saving money and reduce GHG emissions. With sufficient support, scientists and engineers will continue to develop products and services that are energy efficient.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?
The RSC believes the promotion of the use of heat from renewable sources is good and agrees it will help to meet the EU 2020 target of 20% final energy consumption from renewable sources. However, since this target is made up of individual targets for electricity, heat and transport, the RSC does not understand why the Bill limits the incentives to the production of heat. Scotland is well placed to generate both heat and electricity from renewable sources due to the excellent wind and coastal resources and hydro already generates approximately 10% of Scotland’s current total energy generation.

The RSC believes that the Scottish government should continue to support hydro projects to ensure that hydro will continue to play its part in Scotland's renewable energy generation of both heat and electricity.

The use of wind energy has grown rapidly over the past decade, with current capacity providing nearly 0.5% of the world’s electricity supply. Most forecasts show the capacity of wind energy continuing to grow. Scotland can and should be a part of this since its location means it has an excellent wind resource and Scotland possesses potential for offshore wind development. Developing and providing coatings for the protection of wind turbines is already a strongly competitive and growing business and the Scottish Government should encourage and support Scottish material scientists in this area. The RSC approves that the Scottish Government is already helping to fund the development of a demonstrator project of an offshore wind development in deep water in the Moray Firth.

Scotland possesses a huge wave and tidal energy resource; the potential exists to generate far more electricity than currently needed, from wave and tidal energy sources in the waters around the Scottish coast. There are several devices currently on test around the world ranging from tidal current turbines to large pistons that cause rising waves to force a column of air through a turbine. Scotland is surrounded by the North Sea and Atlantic Ocean; it is in a prime location to make use of these technologies to generate electricity. The RSC approves of the funding given to the construction of the European Marine Energy Centre from the Scottish Government.

In order to reduce GHG emissions from transport it will be necessary to use electric cars which run on electricity generated from renewable sources. In order for this to become a reality the RSC believes that the Scottish Government must also invest in scientific research into viable means of energy storage such as batteries, supercapacitors etc.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

- Waste prevention and management plans;
- Waste data;
- Deposit of recyclable waste;
- Procurement of recyclate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

What are your views on these proposals?

The RSC supports any moves to become a more sustainable society. Recycling should take place wherever possible. The RSC believes the Scottish Government should make regulations in all these areas now.

The RSC is concerned that the policy memorandum indicates that the Scottish Government will initially rely on voluntary action to achieve the goal of improving waste and recycling and only intends to introduce legislative action, sanctioned by the Bill, if voluntary action does not achieve these goals.

The RSC suggests that timescales for the impact of global warming are perceived as too far in the future and that people cannot associate today’s individual actions with their impact on future climate change scenarios. This is a huge challenge to overcome as action is required now in order to reduce the impact of climate change.
To encourage individuals to “do their bit” towards minimising the impact of climate change will require a framework of incentives, regulation, education and demonstration and all of these must be at an appropriate level to inspire action.

The RSC recognises that regulation forcing the public towards a change in lifestyle is unlikely to be a vote winner. The RSC suggests that such legislation and regulation be brought in on the back of a cross-party agreement that demonstrates consensus of all major parties to the measures in the long-term. Equally such measures should be backed with an incentive, education and demonstration scheme at the appropriate level that clearly demonstrates the benefits and assistance of the measures.

In the public sector the Scottish Government must show leadership and demonstrate significant carbon emission reduction in both its buildings and its vehicle fleet. Such a scheme would increase stakeholder confidence in carbon emission measures and provide valuable data on high impact programmes and technologies.

Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

No comment

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

No comment.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

No comment.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

It is important that there are sufficient trained and committed scientists and engineers to carry out the research, development, demonstration and deployment of renewable energy-generating technologies. It is also important that the Research Councils and DIUS ensure that there are collaborative funding mechanisms throughout the technology development pathway that allow scientists, engineers and technologists to work together to bring basic research through to developed products.

Q20 Do you have any other comments on the Bill?

No comment.
Summary
The Royal Society of Edinburgh welcomes the series of well-conceived and appropriate processes proposed in the Climate Change (Scotland) Bill. However, there are several approaches embedded in the Bill that the Society believes seriously undermine its potential to achieve its objectives and which the Scottish Parliament’s Transport, Infrastructure and Climate Change Committee is encouraged to consider for amendment.

- The endpoint target of an 80% reduction by 2050 is an irrelevance unless there are appropriate intervening milestones. The key target must be to minimise the aggregate emissions between now and 2050; to minimise the area under the emissions curve.

- The Bill implicitly assumes, as do many other approaches to this issue, that early emissions reductions will be small and later ones large. We believe that it would be more appropriate to reverse these relationships by targeting early, strong reductions that start as early as possible.

- We strongly advocate that an interim strategy target should be defined for 2020. It should be a challenging target that encourages early action, and one that, because of its imminence, perennially impinges on Government perspectives no matter which party is in power.

- Periods of recession tend to produce a reduction in emissions, which could create an unjustified sense of optimism about the ease with which targets could be achieved without the need for challenging emissions reduction strategies, only to find that emissions rise dramatically as we climb out of recession. It is important therefore that strategies are put in place now to ensure that re-establishment of growth does not create a strong increase in emissions.

- We are strongly of the view that short-term targets set by Government, should be based on the definition of a longer term trajectory. This should be done by an independent body that is advisory to Government that is able to draw upon the best available scientific and technical capabilities in climate science, energy technology, economics, business and social science. There is a place for a Scottish body since it may be the case that the appropriate policy in Scotland will need to vary from the more general policy across the UK.

- The effectiveness of an emissions reduction regime that depends on achieving frequent, clearly-defined targets will depend fundamentally on the rapid availability of accurate estimates of net emissions. In practise Scottish data typically arrives twenty months after the year in question. Unless this can be improved, annual setting of targets will be flawed and the assessment of the trajectory of change will be uncertain. We suggest that an independent monitoring and audit function should be set up that is robust and rigorous, and which will not only need to call on routine measurements but also on experimentally and computationally verified estimates.

- The purpose of the Bill is to establish the legal framework within which Scotland can take the path of reduction in its greenhouse gas emissions. This framework alone will not achieve that end. It must be clearly associated with powerful and credible strategies that stimulate change, and with the political leadership needed to persuade citizens of the need for action. We advocate the approach taken in the Nature Conservation (Scotland) Act 2004, in which a specific duty is placed on Scottish Ministers to designate a strategy for the conservation of biodiversity. We suggest that the Bill should place an analogous duty on Ministers to create a strategy designed to achieve the targets as set out in the Bill.
It is important that a suitable array of Action Plans is developed by the Scottish Government on a sector-by-sector basis for strategy implementation and that this is done in an integrated fashion to ensure convergence of purpose.

There are early gains to be made in reducing emissions and it would be sensible and natural to pick off the “low hanging fruit” first. There should be increased focus on those immediate and cost-effective ways of reducing emissions, such as energy efficiency. Major energy efficiency measures for buildings must be the major priority if we are to maximise our chances of reducing carbon emissions rapidly.

As the trends of climate change and its actual and imminent impacts become clearer, the imperative to move towards a low carbon economy is becoming stronger. It is recognised that those countries able to develop and implement low carbon technologies and limit the use of carbon-derived energy will be well positioned economically to exploit a developing global trend. The Scottish Government should consider developing an overarching low carbon strategy that also includes demand reduction.

1. The Royal Society of Edinburgh (RSE), Scotland’s National Academy, considers the Climate Change (Scotland) Bill to be of the utmost importance in creating the framework for efforts to reduce Scotland’s greenhouse gas emissions and achieve the targets agreed by the Scottish Parliament. Through the unrivalled technical expertise of its multi-disciplinary fellowship, the RSE has already provided input into the Scottish Government’s proposals for a Scottish Climate Change Bill, the precursor to the current Bill, and to the initial outline of Scotland’s climate change adaptation framework.

Global context

2. Human intervention in the natural systems of the Earth, including our impact on the climate system, has created massive problems for the sustainability of many aspects of human activity. Correcting such damaging impacts presents unprecedented political challenges because of the need for a global response. Although there is much uncertainty about the precise magnitude of future climate change, the direction of change is well established and the recent rate of change has been faster than scientifically anticipated. However, notwithstanding much debate and many good intentions, the rate of emissions of greenhouse gases from human sources has almost doubled since the year 2000, worse than the most pessimistic scenario of the Inter-Governmental Panel on Climate Change (IPCC). This makes it almost certain that the CO₂ equivalent greenhouse gas concentration in the atmosphere will rise above the 450ppm level regarded as a threshold for “dangerous climate change”.

Why should Scotland act?

3. The first reason is ethical. Although we recognise that greenhouse gas emissions directly produced in Scotland are a relatively small part of the total, our consumerist lifestyle means that we are responsible for a much greater share of global emissions. Because we import many of our manufactured goods rather than creating our own, we effectively export our emissions to others. Even without this however, we emit far larger quantities of carbon in comparison with the inhabitants of, say, Botswana, where the immediate impacts of climate change will be much greater. The fact that Scotland’s direct emissions are a small part of the global total is beside the point. The ethical imperative is for the burden of change to be borne according to the extent that we individually pollute the global atmospheric resource. It is the per capita consumption of that resource, measured by the impact of emissions on the atmosphere, that is the central ethical issue.

4. Secondly, self interest demands that we should want to see direct, local, damaging impacts minimised. To do this requires concerted global action and the prospects for this will be maximised when all states agree to act on the imperative. We make a contribution towards this trend by creating the legal and policy framework represented by this Bill, by associated policies and through leading by example.
5. Thirdly, as global trends move towards reducing environmental impacts of economic activity, and developing carbon-neutral systems of energy generation and use, there will be an economic, and possibly an international legal imperative for us to change. The relevant part of the science base in Scotland is very strong by international standards, renewable resources of wind and wave are plentiful and there still remains considerable investment potential in the financial services sector of the Scottish economy. If properly encouraged, there is great potential for Scotland to be a leader in developing and exploiting processes that will be the bedrock of a lower carbon, greener economy. At a time when there is a significant downturn in the economy there are both environmental and economic benefits to be gained from shifting patterns of consumption and changes in lifestyle.

Major issues for the current Bill

6. The RSE very much welcomes the seriousness with which the Scottish Government takes this issue and its commitment to ambitious and challenging targets for reducing greenhouse gas emissions by 80% by 2050 compared with emissions in 1990. Most of the processes proposed in the Bill seem to us to be highly appropriate and well-conceived. However, there are several approaches embedded in the Bill that the Society believes seriously undermine its potential to achieve its objectives and which the Scottish Parliament’s Transport, Infrastructure and Climate Change Committee is encouraged to consider for amendment. Rather therefore than responding to all the individual questions posed in the call for evidence, we have concentrated on the clauses in the Bill that we strongly advocate should be amended. We also comment on a number of omissions from the Bill that we regard as lost opportunities.

“The area under the curve”

7. The endpoint target of an 80% reduction by 2050 is an irrelevance unless there are appropriate intervening milestones. The key target must be to minimise the aggregate emissions between now and 2050; in other words, to minimise the area under the emissions curve. We therefore approve of the approach taken by the Bill, particularly for the period 2020-2050, which specifically requires emissions reduction of at least three percent per year compared to the target of the previous year. However, we suggest that the real political decision which the Committee would wish to consider is whether such targets could be introduced earlier e.g. from 2011, to put Scotland on the pathway to achieving its emissions reduction targets and reducing its aggregate emissions.

8. With this in mind the Committee may find it useful to examine the illustrative scenarios which we have compiled in an appendix. From this the Committee will note that neither scenario 1 nor scenario 2 delivers the 80% emissions reduction target in 2050 (which is 14.02 Mt CO\textsubscript{2}e based on the current 1990 baseline - 2006 Emissions Inventory). In other words, even if Scotland achieved 3% per year reduction in greenhouse gas emissions from 2010 the 80% reduction target would not be achieved by 2050. They also show the aggregate emissions for different reduction trajectory scenarios.

9. The Bill implicitly assumes, as do many other approaches to this issue, that early emissions reductions will be small and later ones large. We believe that it would be more appropriate to reverse these assumptions by targeting early, strong reductions that start as early as possible. Not only will the area under the curve be minimised if early reductions are substantial, but we believe that there is “low hanging fruit” to be taken provided that robust policies are introduced to encourage it (see also paragraph 21). We suspect that in practise, it will be most difficult to wring out the late stage reductions in emissions that bring us to the 80% target. We suspect that an S-shape curve of emissions reduction is most likely. The first part, of slow change, represents the time taken for policy instruments to come on-stream. The second part, of the fastest rate of emissions reduction, as one where we pick the “low hanging fruit”, with the final stage being one of relatively slow rate of reduction.
Major milestones

10. If Scotland is to develop the early trajectory of emissions reduction for which we argue, and even if it is to achieve its 2050 target, it is important that targets are set in such a way as to encourage early reductions. The Society is sceptical that the interim statutory milestone of 2030 is early enough. It does not convey the necessary urgency, nor give the issue sufficient prominence in a political environment that is not short of distracting issues. We strongly advocate that an interim strategy target should be defined for 2020. It should be a challenging target that encourages early action, and one that, because of its imminence, perennially impinges on Government perspectives no matter which party is in power.

11. The challenging target is not the interim target per se but the three percent or more per year emissions reduction from 2020 to 2050. A recent paper examined the impact of government emissions reduction programmes and it noted that no advanced economy has achieved more than a one percent year-on-year emissions reduction except as a consequence of economic recession. The current recession, of unpredictable length and depth, may well lead to such a reduction. It could create an unjustified sense of optimism about the ease with which targets could be achieved without the need for challenging emissions reduction strategies, only to find that emissions rise dramatically as we climb out of recession. It is important therefore that strategies are put in place now to ensure that re-establishment of growth does not create a strong increase in emissions. Further comments about linking recession to emissions reduction are found in paragraph 25.

Setting targets

12. The approach to target-setting in the Bill could prove to be flawed. The Bill proposes that Scottish Ministers can modify annual targets for Scottish emissions from 2010 to 2050. The risk is that this will focus debate on what short term targets should be, and not whether Scotland is achieving its long term objectives. The temptation for Government will be to set targets that can be met, and met without strong reactions from one special interest group or another that will perennially argue for a relaxation of targets. It could obscure the much more taxing imperative to meet long-term targets, and the concomitant pressures that will stimulate technological responses.

13. Although Government and Parliament are crucial parts of the process of achieving carbon targets through their design of legal and administrative frameworks and providing leadership, the license for Ministers to modify annual targets could become a highly party political matter rather than being determined by technical imperatives. It is crucial that policy is determined with reference to the technical nature of targets rather than to political considerations. As far as possible climate change issues should be considered apolitical given the seriousness of possible impacts. Ultimately, all of us, as citizens, rather than simply governments will be held accountable.

14. We are strongly of the view that short-term targets set by Government, should be based on the definition of a longer term trajectory. This should be done by an independent body that is advisory to Government, that is able to draw upon the best available scientific and technical capabilities with a range of expertise in climate science, energy technology, economics, business and social science. It would require carbon economics expertise as carbon markets develop and become increasingly important. There are number of models that would permit disinterested external advice to mesh with the ultimate responsibility of Government and Parliament. For example, such an advisory body could propose, and Parliament could debate adoption of, say, a 5-10 year trajectory so that progress could be monitored by Government, Parliament and citizens. Ideally, the failure in any one year to hit the desired trajectory should not be regarded as a failure by Government, but as an index of the efforts that would need to be made to get back on track, for ultimately, the challenge is not merely for Government, but for the whole of society.

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1 Kerr, A.; Serendipity is not a strategy: the impact of national climate programmes on greenhouse-gas emissions, Area Vol.39 No.4 pp 418-430, Royal Geographical Society (with the Institute of British Geographers) 2007
15. There is a place for a Scottish body since it may well be that the appropriate policy in Scotland will need to vary in detail from the more general policy across the UK. It would be important however that such a body is formally linked to the UK Committee on Climate Change. There are arguments for and against the different models that have been put forward for Scotland – and in some cases Ministers will already receive advice from existing public bodies. For example, SNH already advises on the impact on wildlife, SEPA advises on flooding etc. However, there is a case for advice that genuinely emanates from an entirely independent source.

Monitoring progress: priorities and institutions
16. The effectiveness of an emissions reduction regime that depends on achieving frequent, clearly-defined targets will depend fundamentally on the rapid availability of accurate estimates of net emissions. International requirements are that emissions data is delivered fifteen months after the end of the year in question. Disaggregated data for Scotland is likely to follow after this international data since it draws on UK-wide data sets. In practise Scottish data typically arrives twenty months after the year in question. Unless this can be improved, annual setting of targets will be flawed and the assessment of the trajectory of change will be uncertain. We suggest that an independent monitoring and audit function should be set up that is robust and rigorous, and which will not only need to call on routine measurements but also on experimentally and computationally verified estimates, for example of the rate of forest sequestration of carbon, that will require input from basic research located in the universities and research institutes. The University of Edinburgh is a core partner in taking forward ICOS, a new European Research Infrastructure programme for quantifying and understanding the greenhouse balance of the European continent and adjacent regions.

17. In its response to the Scottish Parliament’s Economy, Energy and Tourism Committee Inquiry into Energy, the RSE strongly advocated the creation of an independent, authoritative audit body responsible for collecting and publishing reliable statistics. We also suggested that the two audit functions, of energy and emissions, should be well integrated, preferably by the same independent body. It is important that we agree about the facts and then debate what should be done, rather than arguing about the facts.

18. There is much to be said for smoothing the assessment of emissions trends by making running mean estimates of emissions rather than using the last year’s data as the gauge of progress. Our principal concern should be to see trends rather than be over-influenced by strong annual fluctuations likely to be produced by unusually cold or warm winters or by generation reduction from aging nuclear stations that are compensated for by increased generation from coal–fired stations that cause increases in carbon emissions in that year. A 3-year running mean might be most appropriate, which also argues for the timely release of emissions data.

Linking the Bill to emissions reduction strategies
19. The purpose of the Bill is to establish the legal framework within which Scotland can take the path of reduction in its greenhouse gas emissions. This framework alone will not achieve that end. It must be clearly associated with powerful and credible strategies that stimulate change, and with the political leadership needed to persuade citizens of the need for action. It is crucial therefore, in parallel with the legal framework, that a strategy, grounded in the practical realities and able to stimulate achievement of targets is forthcoming. A framework without an accompanying strategy would be futile. We advocate the approach taken in the Nature Conservation (Scotland) Act 2004, in which a specific duty is placed on Scottish Ministers to designate a strategy for the conservation of biodiversity. We suggest that the Bill should place an analogous duty on Ministers to create a strategy designed to achieve the targets as set out in the Bill. We suggest below, issues that could be the basis of such a strategy.
A duty on Ministers to create an emissions reduction strategy

20. It is important to consider as context for the Bill, some of the strategic issues and opportunities for emissions reduction, which are also relevant to the case we present above for sharper, earlier reductions and earlier, statutory milestones. Scottish emission targets cannot be viewed in isolation. A strategy for emissions targets must be intimately related at least to an energy strategy that is realistic about the market impacts of policy and its socio-economic consequence. Whilst we recognise the Scottish Government has been actively taking forward an adaptation framework in addition to the current Bill, mitigation and adaptation aspects need to be better integrated. The Bill is strong on appropriate mitigation measures, but weak on adaptation and societal engagement at the individual and community levels.

Energy strategy

21. There are early gains to be made in reducing emissions and it would be sensible and natural to pick off the “low hanging fruit” first. There should be increased focus on those immediate and cost-effective ways of reducing emissions, such as energy efficiency and demand reduction. Major energy efficiency measures for buildings must be the major priority if we are to maximise our chances of reducing carbon emissions rapidly. There are multiple government-led energy efficiency schemes and measures, with low take-up, being managed by a range of organisations, which are in need of better coordination. Behavioural change is inextricably tied up with energy efficiency, to ensure for example that ‘savings’ in one area do not lead to increased consumption in another. Promotional campaigns are however unlikely to achieve rapid, significant changes in habitual patterns of domestic consumption. (This is evident from long experience of public investment in health promotion, which has failed to tackle increasing obesity amongst other health problems.) In order to improve their effectiveness, promotional campaigns should be focussed on single issues, they should avoid trying to convey too many messages at once and should be linked to regulations that limit energy-wasteful designs, technologies and building practices. The success of the Scottish Parliament’s bold decision to ban smoking in public buildings shows that well-considered, decisive action coupled with political leadership on a major issue of public concern can be highly effective.

22. Given the current focus on the development of low carbon technologies across the energy spectrum, in Scotland and elsewhere, we reaffirm the recommendation from the RSE’s Report into Energy Issues for Scotland that due to the lack of robust procedures for assessing energy technologies and a lack of objectivity in assessments that are undertaken that a common methodology should be developed to assess the relative merits of energy technologies; this should include full lifetime costs and a full carbon audit.

Public engagement

23. There is every likelihood that strategies to achieve tight emissions targets such as that suggested above could arouse considerable popular antagonism, with the potential to split any political consensus on emissions or undermine Government policies. Success will only come about if there is a greater awareness of the threats posed by climate change and a willingness, both individually and collectively, to engage in appropriate measures to address those threats. Central and local government are crucial in providing leadership and setting the terms of that engagement, but non-governmental and voluntary bodies will need to energise civic society and promote individual and collective responsibility (for example, the Royal Society of Edinburgh is shortly to launch a major inquiry on adapting to climate change, which will contain a major public engagement element). The target of a low carbon economy by mid century will not be achieved without radical and costly changes in our use of energy and patterns of consumption. Strategies and policies to promote this paradigm shift are notably absent from the Bill.
A decisive initiative for the low carbon economy

24. As the trends of climate change and its actual and imminent impacts become clearer, the imperative to move towards a low carbon economy is becoming stronger. It is recognised that those countries able to develop and implement low carbon technologies and limit the use of carbon-derived energy will be well positioned economically to exploit a developing global trend. The new US administration has announced policies that reflect a decisive shift in this direction, with the intention to capture a powerful economic and technological position. The Scottish Government should consider a similar approach, by going beyond its encouragement of low carbon renewable energy technologies to develop an overarching low carbon strategy that also includes demand reduction.

25. Given the precarious nature of the current economic climate, new employment opportunities could also be created and maintained by the shift to a lower carbon economy. The public sector should position itself to take a clear and crucial leadership role and identify areas where investment could pay dividends particularly in terms of emissions reductions and energy savings in the near term as well as creating employment opportunities. We applaud the Scottish Government for its efforts in the renewable energy domain and this effort should be replicated in other areas where Scotland can command competitive advantage.

A cross-cutting strategy

26. Climate change represents a hugely complex cross-cutting issue over many areas of government and society. The practical immediate consequences are the intertwined issues of climate, energy, food, and the challenge of sustainable economic and social development. However, the administrative boundaries by which government manages its business can result in a lack of policy connectivity and policy contradiction. Moreover, many government decisions have emissions implications (e.g. abolishing bridge tolls) and as such, decision-makers need to be acutely aware that a decision in one area may have a contradictory and unintended consequence for mitigation and adaptation to climate change. It is important therefore that a suitable array of Action Plans is developed by the Scottish Government on a sector-by-sector basis for strategy implementation and that this is done in an integrated fashion to ensure convergence of purpose.

The importance of large scale policy integration

27. Whilst the Bill should focus on matters that the Scottish Government can control and lead on, it important that it ensures optimal linkages with policies and processes outwith Scotland. In terms of emissions, energy systems and cost, it is important to recognise that the linkages into the UK energy transmission system and the European market can be used to optimise efficiency. In principle, the most efficient low carbon system of energy transmission and supply for Scotland would be an integrated European system that was able to take generation from anywhere in Europe so as to optimise on low emissions, low cost and high security. An a priori concept of energy self-sufficiency with a failure to utilise efficiencies of scale could be damaging to the Scottish energy system, to its achievement of emissions targets and to its economy. It is vital therefore that UK and European level cooperation is exploited as part of the policy for emissions and energy security.
Maximising the impact of Scotland’s carbon sinks

28. The search for international agreement on greenhouse gas reduction will inevitably not only consider sources but also sinks, so that a national net budget is recognised and audited. Without it, there will be no incentive to preserve the planet’s great forest and peatland sinks for carbon. The woodland resource in Scotland will have a clear role in offsetting the country’s carbon emissions. The contribution that tree planting can make to removing CO₂ from the atmosphere is becoming increasingly clear. In 2005 the land use, land use change and forestry sector provided a net sink for greenhouse gases equivalent to 8% of Scotland’s total emissions. Within this overall figure, forest plantations, together with land converted to grassland, provided a sink equivalent to 20% of Scotland’s total emissions². There are also clear benefits for climate change moderation by increasing the use of wood and wood products as biofuels if they substitute for fossil fuels; and in the use of timber in construction as a substitute for more carbon intensive materials, such as steel and concrete.

29. Although there is considerable potential to increase the sequestration of carbon by forest planting, the rate of new planting has dropped to between 4,000 and 6,500 ha per year, at least partly as a result of rising land prices and uncertainty over CAP reform. The Scottish Government’s Forestry Strategy sets a target for increasing the woodland cover of Scotland from 17 per cent to 25 per cent by the second half of this century, justified by the contribution that forests can make to carbon management and the mitigation of climate change if sited on suitable soils. This reflects a shift in priority over the last 30 years from the creation of a strategic timber reserve through environmental and amenity priorities to one of combating climate change. In its Report on the Future of Scotland’s Hills and Islands the RSE Committee of Inquiry supported the increase in woodland cover but saw no possibility of achieving it unless measures were introduced to attract land out of other uses. It is not clear where this land will be found without impacting on either agricultural production or on biodiversity and landscape conservation. Without an effective framework for making decisions to resolve conflict, and identifying where there is potential synergy of use, important decisions will be delayed, or reached on an ad hoc basis.

30. The Bill proposes mechanisms to increase the rate of planting with the proposals for long-term leasing of cutting rights in forests currently managed by the Forestry Commission to private interests. This has provoked debate about the adequacy of the economic instruments to incentivise private interests to increase forestry planting without detriment to the sustained management of Scotland’s forests and the other benefits they provide.

In conclusion

31. The Framework proposed by the Bill presents Scotland with a real opportunity to make significant contributions to a vital global challenge and build upon the expertise it already has in a number of fields, such as in energy, particularly in relation to carbon capture and storage and renewables, whilst also reaping tangible benefits. There is also an opportunity to promote the excellence and technical expertise available in Scotland by establishing an independent group which can play a crucial role in setting the trajectory of targets for Scotland as we have suggested. To realise such opportunities it is critical that the Scottish Government adopts both a leadership role and an over-arching strategy, and that it acts as an enabler for more localised and individual actions. Timescale is a major factor and government will clearly need to stress the urgency of the situation with early statements of intent.

² Greenhouse gas emissions from land use, land use change and forestry, SPICe briefing, 1 July 2008
Additional Information and References

In responding to this consultation the Society would like to draw attention to the following Royal Society of Edinburgh responses which are of relevance to this subject:

- The Royal Society of Edinburgh’s Inquiry into the *Future of Scotland’s Hills and Islands* (September 2008)
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**Scenario 4**
- Reduction to 2020: 4.30%
- Target: 3% per year after 2020
- Assumes in line with the rate of reduction between 1990 and 2006

**Scenario 3**
- Reduction to 2020: 3.96%
- Target: 4% per year after 2020
- Assumes in line with the rate of reduction between 1990 and 2006

**Scenario 2**
- Reduction to 2020: 3.60%
- Target: 5% per year after 2020
- Assumes in line with the rate of reduction between 1990 and 2006

**Scenario 1**
- Reduction to 2020: 3.24%
- Target: 6% per year after 2020
- Assumes in line with the rate of reduction between 1990 and 2006

**Note:**
- CO2e: Carbon Dioxide Equivalent
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**Sources:** TECHNICAL NOTE: Climate Change (Scotland) Bill: Greenhouse Gas Emissions, Annual Reductions and Targets
Summary

RSPB Scotland is supported by over 79,000 members and employs around 200 staff to promote the conservation of birds and biodiversity. Our work covers a wide range of issues including planning, climate change, energy, marine issues, water, trade and agriculture. In combination with RSPB staff across the UK, and our international partners in Birdlife International, we have cross-cutting expertise and experience of land use and sustainability issues within Scotland, the UK and internationally.

Climate Change is the greatest long-term threat to our environment and humankind. RSPB Scotland believes that it is vitally important that Scotland sets an example to the world in helping tackle climate change by making deep and sustained cuts in greenhouse gas emissions. RSPB Scotland recognises the scale and urgency of the climate change problem, and are mobilising our own resources as an organisation, and the talents, energy and efforts of our membership, to help address it. We are taking steps to reduce emissions from our own use of energy in our properties and in our work travel as well as promoting energy saving and renewables to the wider public. We have long been a keen supporter of renewable energy and work closely with the Scottish Government and industry to encourage developments in the right places, which avoid environmental harm. (See Scotland’s Renewable Future).

With others in the Stop Climate Chaos Scotland coalition, we have developed a shared view on the key issues for a Scottish Climate Change Bill including the following top line asks:

1. Set out a framework that will achieve at least an 80% reduction in greenhouse gas emissions by 2050.
2. Establish in statute annual emission reductions of at least 3% year-on-year from the start, not just from 2020, compatible with a fair and safe cumulative budget identified by the advisory body (see 4).
3. Include emissions from all sectors in the framework and targets set out in the Bill, including those from international aviation and shipping, from the very start.
4. Establish a Scottish advisory body, a Scottish Climate Change Commission, in the primary legislation to support delivery of the Bill when it is enacted.
5. Ensure that at least 80% of the effort to cut emissions takes place in Scotland.
6. Establish duties on all public bodies to reduce greenhouse gas emissions in line with the national target.
7. Set in place robust, transparent reporting measures so the Scottish Parliament is well informed on progress in meeting targets and Government is held to account on mitigation and adaptation.
8. Ensure that strong enforcement measures are set in place in statute.
9. Ensure Scotland counts all its emissions and reports on those produced by products and services we consume as well as emissions produced domestically.
10. Be explicit that sustainable development is core to the purpose and delivery of the statute in relation to mitigation and adaptation.

RSPB Scotland’s evidence provides additional detail concerning environmental issues, to complement the general positions given in the SCCS and Scottish Environment LINK evidence, to which we are signatories.

1 http://www.rspb.org.uk/ourwork/conservation/sites/scotland/responsiblerenewables/index.asp [Link no longer operates]
2 www.stopclimatechaos.org/scotland
The climate change threat to our natural environment

Climate change is having a staggering impact on our environment – a third or more land based plant and animal species could be driven to extinction by the 2050s if we take no action to limit global warming. To avoid these catastrophic impacts, we have to act in a sustainable manner to rapidly cut greenhouse gas emissions and plan adaptation to the inevitable changes that will occur. **We therefore urge the Scottish Government to provide a Scottish Climate Change bill with annual emissions reduction targets of at least 3% from the outset to deliver at least an 80% reduction in greenhouse gas emissions by 2050.**

Through RSPB Scotland’s research, land management on our reserves, and our network of volunteers we are well aware that the natural world is already being affected by climate change. This work provides warnings of the threats to species, habitats and ecosystems if we do not take urgent steps to address climate change. Wildlife in Scotland is responding to the unprecedented rate of temperature change with some bird species arriving earlier in migration, earlier blooming dates for plants, and earlier appearance of insects as spring creeps forward and autumn recedes. These changes are not occurring uniformly and discrepancies are leading to disruption of the food chain for some species.

Climate change may be having a dramatic damaging effect on Britain’s coastal wildlife, through undermining the food supply of seabirds on the North Sea coast. The spectacular seabird colonies on Shetland and Orkney have suffered catastrophic breeding failure, with poor management of the marine environment now being exacerbated by climate change. Due to rising sea temperatures, the plankton mix at the base of the food chain has altered radically, reducing the survival of sandeels – the staple diet of many seabirds, and commercial fish species.

Birds found in our uplands such as golden plover, are facing a serious reduction in breeding success as climate change affects their invertebrate food supply. These changes threaten an important part of our biodiversity as well as key tourist attractions with significant economic value.

A sustainable approach to tackling climate change

RSPB Scotland would like to see a strong commitment in the Bill to ensure climate change is tackled in a sustainable way that works within environmental limits. How we tackle climate change is important. There is no point saving the planet if we have destroyed our natural environment in the process. A healthy environment, where wildlife thrives can help in tackling some of the causes of climate change and provide natural solutions for dealing with impacts from changing weather and sea level rise. Much of Scotland’s economy and our international identity depend on the rich array of species and habitats that make up our biodiversity. There are many win-win solutions available where wildlife conservation can be delivered alongside action to address climate change. Examples are provided in an RSPB Scotland leaflet (Helping Nature to Help Us) and include:

- Peatbog restoration. Our peatland soils hold more than 40 times as much carbon as all the vegetation above ground. The living layer of mosses on a healthy bog contains as much carbon per hectare as a forest. Despite this importance, the majority of Scotland’s peatlands are left in a damaged state from past agriculture and forestry management, as well as peat extraction resulting in carbon losses with minimal funding available to address this and help restore them.
- Managing natural wetlands to provide flooding solutions as well as habitat for threatened species.
- Restoring and expanding native woodland habitat to conserve declining species and offer sustainable sources of fuel to meet local energy needs.

To achieve this sustainable approach, RSPB Scotland would like to see an over-arching sustainability included in the Climate Change (Scotland) Bill, and the long title amended to reflect this commitment to a sustainable approach.

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Adapting to the impacts of Climate Change (s45)

We believe Scottish Ministers should be required to produce a Scottish impact assessment and to report regularly to the Scottish Parliament on programmes of sustainable adaptation action. Without cutting our greenhouse gas emissions, the climate change impacts will be so great that dealing with the consequences will be come impossible. We must therefore make emissions reduction a priority but also recognise that urgent and important work is required to adapt to the inevitable impacts of climate change from historic and present emissions, which remain in the atmosphere for many years.

Scotland has its own special environmental challenges when it comes to adaptation, including providing natural solutions to coastal and inland flooding and restoring large areas of peatland habitat and native woodlands as well as providing greater support for wildlife in our farmed landscapes. Much of our natural environment has been damaged by past activity and the resilience of many of our important species and habitats has been compromised. We believe that urgent action is required to take forward ambitious programmes of large, landscape-scale habitat enhancement to provide climate change adaptation benefits for wildlife and communities threatened by the impacts of climate change.

On our own nature reserves, we have undertaken habitat restoration which we believe can help demonstrate adaptation benefits. These include managed realignment at Skinflats near Grangemouth on the Forth Estuary and Nigg Bay on the Cromarty Firth where saltmarsh and mudflat habitat will be reinstated, providing vital feeding and nesting sites for internationally important bird populations as well as flood management benefits. To date there have been few examples elsewhere of such activity and we believe that strong leadership and coordination is required across public bodies to deliver such benefits at a large enough scale to provide resilience for wildlife and people, in the face of climate change.

Currently the Climate Change (Scotland) Bill relies on the UK risk assessment (section 56 of the Climate Change Act 2008) rather than requiring a specific report assessing the risks for Scotland. RSPB Scotland believes Scotland’s unique environment and population distribution demand an accurate assessment of the risks for Scotland. At the very least we would seek to ensure that SNH and SEPA play an active role in the UK risk assessment process.

The Climate Change (Scotland) Bill proposes that once Scottish Ministers have produced a programme of proposals and policies to meet the objectives of adapting to climate change, the only subsequent assessment of the progress made towards meeting the objectives is to be made by Ministers themselves. The Climate Change Act 2008 (s59) requires the Committee on Climate Change to assess the progress being made by the UK proposals and policies and we would expect a similar level of independent assessment of Scottish Ministers’ progress.

Land use

Land use in Scotland is responsible for 25% of our emissions, due largely to our organic carbon rich (peaty) soils and much of the responsibility for land use decisions is devolved to the Scottish Parliament. It makes sense therefore to ensure that the Scottish Climate Change bill addresses this sector. Farmers and other land managers need advice to better manage our soils to reduce carbon emissions and the research capacity of appropriate land use research institutes needs to be harnessed to this effect. Further support from the Scottish Rural Development Programme (SRDP) for appropriate management action will also be required to drive the necessary changes. RSPB Scotland believes that the Bill needs to address the contribution Scotland’s land uses make to climate change, and to facilitate environmentally sustainable mitigation and adaptation action. We would welcome an indication in the Bill that the Scottish Government’s forthcoming Land Use Review would set out a strategic approach for managing Scotland’s land use in relation to climate change mitigation and wildlife adaptation.

Forestry

We do not welcome the additional broad powers being proposed in Section 47 (1, 2 & 4) to over-ride the Forestry Commissioners’ duties under the Forestry Act 1967, and to delegate their functions. If enacted, these provisions could result in environmentally unsustainable forestry that would harm, not enhance biodiversity. The RSPB would expect full and proper consultation and public debate on any fundamental changes to the primary legislative framework of forestry in Scotland. This should be done separately from the Climate Change (Scotland) Bill.
We strongly support the idea of Forestry Commission Scotland being able to participate in environmentally appropriate joint ventures to address climate change under Section 47 (3).

Full written evidence on Section 47 of the Bill has been provided to the Rural Affairs and Environment Committee and is appended here. [CLICK LINK]

**Muirburn**

RSPB Scotland believes that introducing the flexibility to allow Scottish Ministers to make any required changes to muirburn dates in the future, based on sound and growing scientific evidence about management measures that can be taken to help climate change adaptation, as provided for by Section 46 of the draft Climate Change (Scotland) Bill is a sensible approach.

We would add that we also support the idea of making provision through a licensing system for out of season burning, to allow flexibility of approach. To provide the necessary safeguards for the natural heritage from out-of-season burning, we consider that a licensing system should be put in place and it seems to us most appropriate that such a system is administered by Scottish Natural Heritage as the Scottish Government's advisors on nature conservation.

Such a licensing system would, as mentioned, enable a flexible approach whilst a change in the unlicensed dates would reflect the needs of a changing climate and bring Scotland into line with England and Wales. We would welcome amendments to the draft Climate Change (Scotland) Bill to enable such a licensing system to be established at the same time as any changes in the permitted times for making muirburn.

Again, full written evidence on Section 46 of the Bill has been provided to the Rural Affairs and the Environment Committee and is appended here. [CLICK LINK]
WRITTEN SUBMISSION FROM SALVATION ARMY

Introduction

1. The Salvation Army welcomes the Climate Change (Scotland) Bill and endorses the proposal to cut emissions of greenhouse gases by 80% by 2050.

2. For The Salvation Army, climate change is a social justice issue. Our interest in the bill is in its overall impact and its implementation rather than in the technical detail. This submission is therefore confined to those questions that deal with broader issues. These are primarily questions 1-3, question 6, 7-9, 12, 13, and 20.

The Moral Imperative

3. The Salvation Army’s general approach is summarised by the following statement.

   The Salvation Army is concerned that climate change poses a serious and immediate threat to people everywhere, especially to the poor; and that climate change represents a failure in our stewardship of God’s creation. We accept the need to reduce the emissions of greenhouse gases urgently to avoid dangerous and irreversible climate change; and to promote a more equitable and sustainable use of energy and resources.

4. For these reasons we strongly support the Bill and the contribution it can make to reducing greenhouse gas emissions.

Public Involvement, Engagement and Commitment

5. Our main concern is that many people in Scotland do not feel involved, engaged and committed to the legislation.

6. We therefore believe that if it is to be effective the Bill should include provisions to require the Scottish Government to promote public awareness about the legislation and its targets; and to promote public involvement and engagement in meeting those targets. The broad Third Sector also has a vital role in raising concern about climate change and taking action to reduce negative impacts.

Overall targets (Questions 1-3)

7. The Salvation Army strongly supports the target of an 80% reduction in greenhouse gases by 2050. However this target may be too large and too remote for most people to understand. Faced with such a distant and such a demanding target people tend to set aside the challenge. To aid understanding and engagement short term targets are essential. We agree with the Church of Scotland’s proposal that an annual target of 5% a year is helpful and generally welcomed by congregations as a realistic target.

Scottish Committee on Climate Change (Question 6)

8. The Salvation Army supports the view of Stop Climate Chaos that a Scottish advisory body, a Scottish Climate Change Commission, should be established when the Bill is enacted.

Reporting duties (Question 7)

9. In our opinion, the clauses on reporting duties need to be stronger to require the Scottish Government to set out how it has provided advice and information to the public, how effective that advice and information has been; and how it has promoted engagement and involvement in the delivery of targets. If the Government is not effective in this regard the Bill is likely to fail in its purpose.
Duties of public bodies relating to climate change (Question 8)

10. Duties on public involvement and engagement could usefully be extended to all relevant public bodies (including subcontractors and the wider Third Sector). Local authorities and community planning partnerships in particular have a duty under best value to promote public engagement in their policy planning process and have now developed substantial experience in the field. Churches, congregations and other voluntary organisations could also play an important role and the legislation could helpfully embody a recommendation for public bodies to engage with voluntary organisations in the delivery of this duty.

Adaptation (Question 9)

11. As with mitigation, communities should be at the centre of strategies to promote adaptation. We suggest that the Bill could include more specific reference to the need to engage with communities in developing programmes for adaptation.

Energy efficiency (Questions 12-13)

12. The promotion of energy efficiency is a crucial response to climate change and the clauses are welcomed. However it may be appropriate to relate these duties to the need to tackle fuel poverty as the two issues are closely related. It might be appropriate for the bill to require the Government to take on a more specific duty to promote energy efficiency and tackle fuel poverty by including targets that will lead to a systematic improvement of the housing stock and to reduce the proportion of the population living in fuel poverty.

General issues

13. In conclusion, The Salvation Army reasserts the importance of the legislation and its impact on people across Scotland. The Bill must seek to involve and engage people and communities and set out clearly how the Government will be expected to do this.
Scotch Whisky Association evidence on Climate Change (Scotland) Bill

Scottish Parliament Transport, Infrastructure and Climate Change Committee

Introduction

The Scotch Whisky industry takes the threat of climate change seriously. Scotland’s distilleries are inextricably linked to the environment, relying on high quality water and cereals supplies, and available land to make and mature our products.

The Scotch Whisky Association\(^1\) therefore welcomes the opportunity to provide the Committee with its views on the Scottish Government’s Climate Change (Scotland) Bill. We welcome the overall direction of the Bill and applaud the Scottish Government for its Leadership.

Distillers have a long and proud history of taking active steps to protect the environment, improving energy efficiency and reducing emissions of greenhouse gases (GHG). Through participation in the Climate Change Agreement (CCA) of the Spirits Energy Efficiency Company\(^2\) (SEEC), Scotch Whisky distillers have improved their energy efficiency by 18% (based on provisional results from Milestone 4) on 1999 levels. In meeting their CCA targets, distillers have saved over 170,000 tonnes CO since 2001/02.

These improvements have been achieved through extensive capital investments in energy efficient/emission reduction technologies. That is not to say that the industry is resting on its laurels; member companies are now investigating alternative (low/zero carbon) energy forms to produce this iconic Scottish product, with published plans for three sites to switch to biomass as an energy source in the near future.

The Association is currently working with members to develop a wide-reaching environment strategy for the industry. Energy, greenhouse gas emissions, sustainable resource use and waste arisings are among the priority areas which have been identified. The industry is focusing on what further action can be taken to reduce impacts in these areas.

Scotch Whisky operates in a highly competitive and international market. Over 90% of Scotch Whisky sales are abroad - exports of Scotch Whisky in 2007 generated over £2.8bn, representing 19% of Scottish manufactured exports and 80% of Scottish food and drink exports. Care is required to ensure that regulation to tackle climate change does not place growing and successful industries, such as Scotch Whisky, at a competitive disadvantage.

We understand that the Bill is largely an enabling Bill and that, given the long timeframe over which the Bill’s aims intend to reach, it will be necessary to develop a framework for revisiting existing legislation to achieve the aims of the Bill, and potentially introducing new legislation where no existing powers exist. We would urge the Scottish Government wherever possible to ensure that existing powers are used before developing additional powers, schemes or requirements on already well regulated Scottish businesses.

The Bill presently hints at the potential for a new Scottish Emissions Trading Scheme and additional legislation aimed at reducing packaging. We would oppose the progression of such thinking at this point given the existing powers already available to the Scottish Government (via IPPC, EUETS, Climate Change Levy and Agreements, and the UK’s Carbon Reduction Commitment when it enters force in 2010).

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\(^1\) The Scotch Whisky Association (SWA) is the trade association representing the scotch Whisky industry around the world. SWA members are distillers, blenders, bottlers and those engaged in the wholesale and export trade in Scotch Whisky.

\(^2\) SEEC is a joint venture between the SWA and Gin & Vodka Association. SEEC’s cc includes 55 of the 100 malt distilleries in Scotland and all 7 grain distilleries.
Distillers will be covered by all four overlapping schemes. Any further measures should focus on the, at present, non-traded/regulated sector, and even then careful consideration must be given to identify any potential knock-on effects such new measures might have on existing schemes.

Association Response to Specific Questions

1. The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

Scientific evidence suggests that it will be necessary to make significant cuts in greenhouse gas emissions if the consequences of global climate change are to be reduced. The greenhouse gas reduction targets proposed in the Bill clearly state Scotland’s determination to be part of a global solution to the threat of climate change, although setting targets does not guarantee success. It will be necessary for Government to put aside resources and introduce initiatives (including simplifying existing regulatory burdens) to help all sectors to play their part in meeting the ambitious targets.

Whilst industry will play its part in helping Scotland meet the targets, we would be concerned if the Bill were to introduce additional targets on sectors whose greenhouse gas emissions are already targeted under the UK’s comprehensive energy/climate change policy mix.

Scotch Whisky is already subject to the EU Emissions Trading Scheme, Climate Change Levy and Agreements, and some sites are likely to be included in the UK’s Carbon Reduction Commitment when it enters force in 2010. In addition, grain whisky distilleries are covered by the Integrated Pollution Prevention and Control regime; with one grain distillery also covered by the Large Combustion Plant Directive.

The SWA would have significant concern if an additional set of targets/emissions reduction scheme was proposed for Scotland for already highly regulated sectors. We would not wish to see the Bill introduce additional sector targets as this would only serve to add an extra layer of bureaucracy to an already complex policy area. Any further measures should focus on the non traded/regulated sector, and even then careful consideration must be given to identify any potential knock-on effects such new measures might have on existing schemes.

2. The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

It is disappointing that the Bill contains provisions to set annual targets which we believe will be burdensome to monitor and enforce. Whilst it is proposed that annual targets are set in batches, we believe that “emissions budgeting”, whereby targets are set for, say, a five-year period, offers greater flexibility.

Annual targets within each budget period may be set, although emissions budgeting (as proposed in the Scottish Government’s consultation Proposals for a Scottish Climate Change Bill (January 2008)) would allow emissions from each year of the budget period to be balanced out ultimately, the target to meet would be that for the entire budget period and not for each year within the period. Emissions budgeting allows for any marked differences in emissions between each 12-month period to be balanced out. This is a much more realistic way of target setting, recognising that investments made may offer step-changes in emissions performance rather than a smooth performance curve.
We would also support the ability for the Scottish Government to bank and borrow between budget periods, allowing improvements to be staged within natural financial investment cycles rather than by arbitrary annual/budget period deadlines.

3. The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

As our response to question 2 advises, we are concerned about the introduction of annual targets. Instead we advocate the introduction of emissions budgeting.

4. The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

The concept of a “net Scottish account” appears to be appropriate. Action to meet the greenhouse gas reduction targets should take place within Scotland first and foremost. The Bill should not encourage industry to relocate outside of Scotland in order to reduce “Scottish” emissions.

The use of international carbon credits through, for example the Clean Development Mechanism (CDM) or Joint Implementation (JI), are a form of offsetting and whilst CDM/JI projects may lead to reductions in global greenhouse gas emissions, we believe that offsetting should be used but as a “last resort”. It might be appropriate to introduce limits on the quantity of carbon units which may be credited to the Scottish account annually.

5. The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

We support the Bill’s approach in defining Scottish emissions (“source” emissions). It is much more straight-forward to calculate Scottish source emissions than those based on, for example an end-user inventory.

Whilst in the case of Scotch Whisky, which is export-focused, the end-user inventory approach would have the effect of reducing Scotland’s emissions as the consumption takes place overseas, to a large extent, the geographical source of greenhouse gas emissions is not the issue as their combined impact is the same wherever they are emitted.

6. The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.
What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

It would appear appropriate for the Scottish Government to utilise the expertise of the UK Committee on Climate Change, not least to avoid unnecessary duplication of work/cost. One would anticipate that the UK Committee would have sufficient knowledge and understanding of any Scotland-specific factors, although we agree that the Bill should make provision for this to be reviewed and if appropriate for a Scottish Committee to be set up. It might also be appropriate to use the knowledge and expertise of other established UK resources such as the Met Office.

7. The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

On the whole, the proposed reporting arrangements are appropriate, although it will be necessary to collate detailed information from a wide range of sources to establish if the target has been met. We would have concerns if that reporting created an additional burden on industry which already is required to report energy/climate change data for other policy areas.

8. The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

We believe that it will be necessary for the Scottish Government to task certain public bodies to perform additional duties under the Climate Change Bill. As a key customer of regulators (e.g. SEPA,) we would wish that the Scottish Government consult stakeholders if and when making decisions on additional duties and who will be responsible for their implementation. Where additional duties on regulators or other public bodies are imposed, we would be keen to ensure that those duties should not detract from their existing responsibilities and that the Scottish Government provides adequate resource where necessary.

Where additional responsibilities are related to climate change matters important to the whole of Scotland and not just specific sectors, Grant in Aid rather than cost recovery must be the mechanism used to fund those additional responsibilities. As our introductory comments suggest, we believe that climate change measures should be targeted at the public and domestic as well as private sectors.

9. The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

We welcome this proposal that will assist Scottish companies better understand their own objectives in relation to adaptation. We would be keen that the Scottish Government takes cognisance of the expected European White Paper on climate change adaptation and ensure that Scottish requirements are in line with European requirements in this area as far as possible.
10. & 11. MUIRBURN AND FORESTRY

We have no comments to make on these aspects of the Bill.

12. The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

Whilst improving the energy-efficiency of buildings might help Scotland meet its climate change targets, we believe that commercial buildings already covered by climate change legislation (e.g. EU Emissions Trading Scheme, Climate Change Agreements, Integrated Pollution, Prevention E Control, or the forthcoming Carbon Reduction Commitment) should be exempt from further legislative measures to improve energy-efficiency to avoid duplication and administrative burden.

13. The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government's thinking in this area.

What are your views on this approach?

As our response to question 12 advises, we believe that non-domestic buildings should be exempt from further energy-efficiency policy measures if they are already covered by climate change legislation.

Furthermore, building use should be considered when assessing whether energy-efficiency/performance measures are necessary in non-domestic buildings not already covered by climate change mitigation legislation. For example, it would be inappropriate to require distillers to conduct a survey and then to implement energy-efficiency improvements (e.g. insulation) at their maturation warehouses, dry goods stores, or cask disgorging facilities as they do not require heating.

Often the only energy inputs in those buildings are related to lighting during operations. Indeed, for some spirit handling operations, natural ventilation is preferred to help reduce the build up of flammable atmospheres.

14. The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

It is encouraging that the Bill focuses on renewable heat - over 90% of a typical distillery’s energy consumption is related to the generation of heat. To help further reduce greenhouse gas emissions, distillers are exploring innovative opportunities to utilise distilling co-products (cereal residues that remain alter distillation) as alternative fuels; this is in-line with the European Commission’s aim to maximize resource substitution.

Co-products are commonly converted into highly nutritious animal feeds and are valued by users, such as the Livestock sector, within the wider Scottish agricultural supply chain. It is a sustainable and Long-standing practice, with a number of animal feeds plants co-located with distilleries.
Distillers believe there is also an exciting opportunity to convert co-products into alternative fuels. A number of SWA member companies are, for example, investing significant resource in bio-energy technology; others are investigating its potential. Major projects include Diageo’s £65m bio-energy investment at the Cameronbridge Distillery Fife, and its new malt distillery at Roseisle Morayshire, a £24m bio-energy development by the Combination of Rothes Distillers and a new £7.2m anaerobic digestion biogas installation at Wm Grant & Sons’ Girvan Distillery.

Whilst projects such as these have the potential to deliver significant environmental benefits, we are concerned that industry ambitions are not thwarted by a bureaucratic definition of what constitutes a “waste”. It is vital that we achieve a pragmatic definition of how the feedstock material for such bio-energy plant is defined.

Scotland’s (and the UK’S) broad interpretation of what constitutes a “waste” would require distillers to comply with a raft of waste legislation, adding significantly to the regulatory burden faced. As a result, an opportunity will be missed, with companies compelled to use traditional and less sustainable fuel sources. Should distillery co-products used for energy purposes be classified as “wastes”, an opportunity to invest in innovation and alternative fuel will be lost.

The Association is in active discussion with SEPA to develop a technical solution to the issue in the shape of “product protocols” for our industry’s products. We are hopeful that this approach will allow a pragmatic decision to be taken on the definition of a range of distillery products in line with the non-waste status they have enjoyed to date.

15. The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

- Waste prevention and management plans;
- Waste data;
- Deposit of recyclable waste;
- Procurement of recyclate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

What are your views on these proposals?

As a responsible industry, we are supportive of well thought out legislation which can deliver significant environmental improvements, proportionately and effectively. We welcome the overall direction on waste and support its aims of reducing the use of raw materials where possible, sustainable product design, waste prevention and recovering value from used materials.

We strongly believe that the existing legislative framework allows for a large number of the Bill’s proposed measures to be implemented through better implementation of current legislation and enforcement of existing laws. Equally, we are not convinced that the evidence base is currently available to understand if the powers proposed would deliver the desired outcomes. Before any firm plans for additional Legislation are developed, we would wish to see the Scottish Government better understand and articulate specific needs and concerns on which to justify new legislation.

Furthermore Scotland’s geography is extremely varied, the services and infrastructure supporting the local communities will be bespoke to their requirements and therefore the option of one approach fits all will not always be possible. Any future legislation agreed will need a degree of flexibility to ensure the individual and specific requirements throughout Scotland can be catered for.

We have the following comments to make with regards to the Bill’s specific proposals:

**Waste prevention and management plans**

We support this proposal in principle. A ‘strategy for waste’ makes good business sense and is a sensible approach for any responsible business. Any company which has an Environmental Management System or is operating under an IPPC Licence (the majority of SWA members will have one or both of these) will have a strategy in place to identify and control the waste streams. Indeed, contrary to the statement in the Bill’s policy memorandum, companies operating under an IPPC permit have a legal obligation to minimise waste arisings.

It is difficult to comment much further on this proposal as the proposals are yet to be developed. We would ask the Scottish Government to ensure that, as and when proposals are developed in this area, sectors/businesses which will be covered by such proposals are identified clearly from the outset in order to allow companies to plan adequately for potential changes in the way that they plan and manage waste activities. We would strongly recommend that a pilot of any new scheme is undertaken before plans are implemented or additional legislation is developed.

**Waste data**

We support this proposal in principle and agree that some of the data necessary to better understand waste management priorities is already collected by SEPA via Waste Transfer Notes. It should be relatively straightforward for the Scottish Government to obtain such data directly from its environmental regulator or from the waste management industry. We would not wish that waste producers be burdened with the additional bureaucracy of making additional data returns for CC Act purposes.

Currently SEPA obtain additional data at an individual operating site level via voluntary surveys to regulated businesses. Distillers’ experience with such surveys is that they are problematic for larger multi-site companies as the data which companies hold, provided by the Waste Companies, is amalgamated for the business and does not specify individual site volumes. If the waste data information is required for individual sites, rather than on a company basis, then our members will have to spend time and resources unbundling their data.

We believe the Explanatory Memorandum underestimates the cost of additional data collection (at £25k for all businesses). This is based on the point made above that companies across Scotland may well not be able to supply data at a site level. Should the information required for the purposes of the Bill were to be supplied by the Waste Management Industry directly, the figure of £25k may be closer to what we would anticipate.

**Deposit of recyclable waste**

We support this proposal in principle. The majority of our members’ production sites already have recycling infrastructure in place. We believe a Code of Practice for businesses would be sufficient to deliver the desired outcome rather than developing further legislation.

A significant number of our distilleries are sited in remote and island locations. These sites will produce minimum volumes of recyclable waste and we therefore believe a community approach should be taken rather than individual businesses being expected to develop facilities in isolation. In these remote locations demonstration of compliance will be an issue and a tailored approach will be required.

**Procurement of recyclate**


We are not convinced that additional legislation is required to deliver the desired outcome of ensuring that a minimum percentage of recyclate is used in products. We prefer a voluntary route to achieving the Government’s (laudable) aims.

An example of where a voluntary initiative is showing real potential for one of our key packaging materials is the WRAP (Waste a Resources Action Programme) recyclate protocol for glass.

The Association is actively participating in this WRAP supply chain initiative. Most glass manufacturers work in a global market. Requiring companies to negotiate levels of recyclate individually could create a business risk. Indeed, it may even risk the future security of supply, where supplies come from sources outside of Europe and our influence on our suppliers is limited. We believe that the most effective and efficient way to improve the level of glass recyclate in bottles would be through partnership working with glass manufacturers to set industry standards rather than leaving it to the customers to influence via their procurement policy.

**Targets for reduction of packaging**

The SWA is supportive of the principle of optimising packaging. Packaging allows products from the manufacturer, sold via the retailer, to reach the consumer in a condition which the consumer expects. It also extends shelf life, minimises breakages, safeguards public health, provides product information to consumers and for some luxury goods provides a gifting element.

We have concerns, however, over the suggestion that Scotland might adopt binding targets for overall reductions in packaging different to those set in Europe. Such an outcome creates an unlevel playing field and could provide a strong disincentive for manufacturers to supply to a Scottish market. We are also unconvinced that additional legislation is necessary. Instead we believe that better enforcement of the existing regulations together with voluntary measures such as some of those commented upon in the Policy Memorandum would be sufficient.

An example where voluntary initiatives have been successful in this area is in “light-weighting” of glass in the Scotch Whisky industry. The industry has invested significantly over a number of years in light-weight glass’ technology, requiring fewer raw materials and less energy to make and transport our product.

There are technical barriers to further lightweighting, however, and distillers would find it a real challenge to take the weight down further, if at all. Moreover, there is a need to remember consumer expectations in relation to the packaging of high quality, luxury brands. Such brands may well feature embossing and unique bottle shapes which generate physical limitations and dictate the wall thickness of the glass.

The most effective and efficient way to reduce packaging weights is through partnership working within the supply chain. For example, industry sectors working with the glass manufacturers to set industry standards rather than leaving it to customers to influence via their procurement policy.

The Bill’s Policy memorandum acknowledges that alternative means of meeting the policy objective of packaging reduction is possible. Voluntary measures such as the ones outlined above should be given every chance to succeed before new legislation is considered. We would wish to see the Scottish Government further supporting these types of initiative before it considers the introduction of blunt regulatory drivers and would be interested in participating in any government/stakeholder discussions on how such voluntary schemes might be further developed to achieve the Scottish Government’s policy aims.
Deposit and return schemes

The Scotch Whisky industry does not support a 'Deposit and Return' scheme for its containers. It would create significant additional business costs but more importantly it is highly likely (if bottles were required to be refitted) to have major impacts on the quality and branding of our products. The benefit to the environment of the proposal for Scotch Whisky is questionable. The business impacts can be summarised as follows:

- Glass weight: Spirits bottles are designed for single use and would require an increase in weight to make them sufficiently robust enough to withstand multiple-use. This would increase the use of raw materials;

- Presentation: Bottles would become scuffed and chipped during use. This is undesirable in a premium product and would fail to meet consumer expectations. It is likely to discourage purchase if the Government’s intention is to require refilling;

- Closures: Our industry uses tamper proof aluminium caps for a number of products which remain on the bottle once opened. There is currently no technology available to remove this article and a complete re-design of the spirit cap would be necessary to allow re-use;

- Bottle return logistics: Spirit bottles are in most cases branded items and would cause considerable difficulty in terms of sorting and returning to the correct bottler or company, if that is the intention;

- Investment: No spirit bottlers are equipped with bottle washing or electronic bottle inspection equipment of the type required to inspect re-use bottles. Both these pieces of equipment are substantial and would require investments of £0.5m - £0.75m on each line. Bottle washers are very large machines and would not physically fit into most bottling halls;

- Environmental consequences: To remove labels, residual spirit and foreign matter requires an aggressive cleaning in a caustic solution at 60 - 70°C, the environmental implication of this must be considered against any savings made not having to re-manufacture the bottle.

- Transportation: The UK market is less than 10% of total Scotch Whisky sales and the transportation of these glass bottles for refill over large distances is not environmentally desirable;

- Level of deposit: If this is set too high it could lead to an increase of counterfeits bottles and fraudulent collections of the deposit. If it is set too low then there will be no incentive for consumers to return the bottle.

We believe prior to any new legislation being scoped in this area, a pilot project should be undertaken to quantify the level of uptake by consumers and assess the costs against a more traditional education programme to change recycling behaviours. Any initiative or pilot should ensure it is clearly communicated that the bottles would be recycled rather than returned for re-fill

Charges for the supply of carrier bags

SWA has no specific comments on this proposal as only our visitor centres provide carrier bags for shop customers. Our industry would be happy to support and implement the final agreed approach for this proposal.

16. What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?
The Scottish Government’s consultation prior to the publication of the Bill was appropriate. In addition to submitting a formal response to the consultation, the Association attended a consultation discussion workshop and met with the Bill team to discuss proposals for the Bill prior to the launch of the consultation.

The Association has also contributed to various climate change related consultations including those looking at renewables and the energy performance of non-domestic buildings.

The Scotch Whisky Association
February 2009
Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

To take account of the recommendation in the First Report (Dec., 2008) of the UK Independent Committee on Climate Change for steeper cuts in greenhouse gas emissions by 2020, the Bill should be amended to include a target of 40% cuts on 1990 by 2020 (equivalent to 30% cuts on 2005) exclusive of international movement rising to an 80% target by 2050 inclusive of international movement.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

The Association queries the concept of annual targets since general economic fluctuations produce year to year changes in emissions separable from policy actions. It suggests that secondary legislation should specify targets for the five years 2011-15 and 2016-20 compatible with the aim of 40% cuts by 2020.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

Bill should replace annual percentage cuts with a requirement for government to set percentage cuts for each following decade five years before the start of the decade. To meet the aim of an 80% cut by 2050 extended to include attributions related to movement to and from Scotland, there should be a further indicative cut of one-third between 2020 and 2030 with similar cuts in each of the two following decades.

Q4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

The Association, in common with the UK Committee on Climate Change, has strong reservations about procedures allowing Scotland to count as savings any significant amount of savings made outwith Scotland. There is a risk that political factors and low prices for carbon will dilute the incentives for the steeper cuts in greenhouse gas emissions required in all countries. Direct taxation of fossil fuels (less allowances for effective carbon capture and storage) is likely to be a more effective policy instrument as part of a package requiring the proceeds of such taxation to be used to reduce other taxation and provide investment incentives for shifts to greater energy efficiency, energy conservation and greater reliance on alternative fuels (The Association has already raised this issue in evidence to the Calman Commission).
Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

Emissions should include all emissions from Scottish sources plus, as proposed, amounts attributable to Scotland from international aviation and shipping. There should also be consideration of whether the following attributions should be added:-

a) emissions arising from manufactured imports consumed in Scotland (with corresponding cuts in the emissions of exporting countries);
b) emissions related to movement of passengers and goods between Scotland and other parts of the UK e.g. UK domestic aviation and other UK goods and passenger movement (with corresponding cuts in emissions otherwise entirely attributed to other parts of the UK) [in practice, UK domestic aviation may be the only area of internal UK movement to merit early attribution].

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

The Bill should include powers for such a Committee but, in practice, this function could be handled by arrangements within the existing UK Committee at least for the next ten years.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland's emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

Expand to include means to enforce recommendations.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

No added comment.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?
Should be altered to make clear that Mitigation is included - see also comment on Q20.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

No added comment.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

No added comment.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

As Q 14.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?

As Q 14.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

Welcome reference to Action Plan and to - Behavioural Change – see also comment on Q20.
Q15  The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas: Waste prevention and management plans;
Waste data;
Deposit of recyclable waste;
Procurement of recycylate;
Reduction of packaging;
Deposit and return schemes;
Charges for carrier bags.

What are your views on these proposals?

No added comment.

Q16  What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

As Q17.

Q17  Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

The effort to consult was commendable but the nature of the topic and the background information available early in 2008 made it difficult to provide meaningful comment and clear conclusions on the broad options considered as part of the SEA. It is worth noting that the broad brush SEA evaluation of options did consider that both the economy and the environment would gain from faster and sustained cuts in greenhouse gas emissions, a conclusion strengthened in the First Report of the UK Committee on Climate Change.

Q18  Does the Bill raise any equalities issues you would wish to highlight?

These arise both in relation to individuals and to different parts of Scotland but can be handled as part of Budgetary and Mitigation Strategies – see also comment on Q20.

Q19  Do you have any comments on the impact of the Bill on sustainable development?

This will depend on the Action Programmes and Monitoring adopted but Bill should reflect the UK Climate Change Committee view that progress on greenhouse gas reduction will make the economy stronger and more secure while also giving social gains and local as well as global environmental benefits.

Q20  Do you have any other comments on the Bill?

The main omission from the Bill is a requirement to indicate the proportion of greenhouse gas cuts likely to come from the action within the powers of the Scottish Government and action mainly dependent on UK, EU and international decisions. This should be made clear in the sections dealing with targets and percentage cuts.

Neither the Scottish nor UK Bills can set out detailed action programmes and related monitoring but the Scottish Bill should be modified to require the Scottish Government to produce rolling five-year action programmes and to indicate expectations of the outcome of UK, EU and international action. These programmes should include appropriate budgetary strategy and the treatment of adaptation, mitigation and equality issues. Review of such programmes should be the principal feature of the regular reports monitoring progress and recommending the further action required to meet, or modify, targets.
The Association sees significant opportunities for accelerating greenhouse gas cuts within the powers of the Scottish Government in relation to transport, planning and access. Scope for action in this area could be further enhanced through greater elements of fiscal, financial and energy devolution see our submissions to the Calman Commission, the Strategic Transport Projects Review and the summary comments on the First Report of the UK Climate Change Committee and the two reports on Energy and Carbon Dioxide made by AEA to the Scottish Government in October, 2008 (appendix).
APPENDIX

Extracts from SAPT Response to First Report of Calman Commission

Both the Scottish and UK Governments are now committed to 80% cuts in greenhouse gas emissions by 2050 together with intermediate targets but differing conditions and preferences within Scotland suggest that fuller devolution of energy powers could assist progress towards targets.

As part of the drive for greater energy efficiency and shifts in energy sources, the case for the Scottish Government having power to tax energy requires consideration provided that this is in a framework including the use of new income arising to reduce other taxes and to promote both energy efficiency and shifts to alternative fuels. With tax levied at the source of production (or import into Scotland), administrative costs would be low and it would be an important instrument aiding delivery of Scottish targets for emission cuts.

With respect to transport, more emphasis is required on an investment and pricing strategy which reduces the need for fossil-fuel intensive and environmentally disruptive movement. Stronger links are required between energy and transport strategies. To develop synergy in governance, two reforms are proposed:-

- Incorporation of the Transport Directorate in a Scottish Government Department also covering energy, climate change and planning issues
- A possible merger of Transport Scotland and Network Rail (Scotland) but with close links with both a Rail Agency in England and with a DfT merger with the Energy and Climate Change Department established by the Prime Minister in 2008

Transport Finance Unlike present arrangements, charging for both road and rail infrastructure use should be a devolved power. Such charging would provide an income stream, along with some of the proceeds of fossil fuel taxation, to underwrite future borrowing for major transport projects compatible with energy and climate change strategies. The final Calman Report should recommend a new agreement between the UK and Scottish Governments on the proportion and nature of motorised road taxation to be regarded as road charging payable direct to Scotland with a related cut in the present level of block grant from UK taxes and borrowing.

There should be power to the Scottish Government to vary the level of road and rail charging in line with better delivery of policy aims for the economy, energy, climate change and transport. This should embrace power to borrow against selective increases in charges related to reduced congestion and major projects OR to use such increases to finance PPP/PFI agreements.

Extracts from SAPT Response to Strategic Transport Projects Review (STPR)

Strategic Environmental Assessments (SEA) and Scottish Transport Appraisal Guidance (STAG) procedures should be revised to reflect the integrated economic and environmental benefits arising from the steepened cuts in greenhouse gases by 2020 and beyond as recommended in the First Report of the UK Independent Committee on Climate Change (December, 2008). The aim should be meaningful integration of environmental, economic and social objectives in a series of Five Year Action Programmes, including both fiscal and regulatory measures.
Movement Forecasts  The STPR, and ongoing revisions, need to reflect the impact of changes in policy and in fossil fuel prices on future levels of movement and modal share both within Scotland and on external links. It is important to take account of a downward revision of aviation growth forecasts in the context of the view of the UK Climate Change Committee that recent rates of growth (now much affected by cyclical downturn) are not sustainable over the years to 2050. In particular, both the UK and Scottish Governments have recognised that there are increasing prospects for rail, not only to handle more freight (with much lower emissions and less disturbance for local environments than movement by HGV), but also to attract a substantial share of short-haul (250 to 500 mile) passenger trips presently made by air.

STPR and emission predictions require adjustment to give explicit recognition to the economic benefits of continuation of the near stabilisation of road vehicle miles (already evident for car use as shown in Scottish Transport Statistics, December 2008) and a substantial slowing of aviation growth. Conversely, the new policy and forecasting context is likely to maintain recent high levels of rail growth and add momentum to increases in active travel (walking & cycling) and in tram, bus and demand responsive transport for many of the shorter trips which, if made by car, contribute to emissions, traffic delays and other adverse impacts on local environments. Similar changes need to be reflected in the finalised National Planning Framework (NPF).

Transport Technology, Regulation and Investment

The UK Climate Change Committee takes the view that changing technology and related regulatory/fiscal measures to encourage more energy efficient vehicles and alternative fuels will have a substantial role in reducing emissions but the absolute impact will be lessened if high growth in movement continues. The need for more investigation of this area is admitted and the Climate Change Committee is now urging faster moves towards the use of electric power in transport if targets for steepened cuts in emissions by 2020 are to be met. The Committee also desires a review of aviation growth in an international context.

What also requires examination as part of Action Programmes and an evolving STPR are the increasing prospects for net economic and emission gains from a stabilisation of overall vehicle miles (reductions in some areas) in Britain by 2022 with air travel in Britain (and to the nearer continent) also being cut.

Given limitations on public finance and current problems with private sector investment, it is of special importance that both STAG and SEA procedures should take account of the need to compare the costs and benefits of major transport projects with the costs and benefits of alternative uses for similar, or reduced, levels of funding. On the evidence of the Eddington and Stern Reports as developed by the UK Climate Change Committee, there is a distinct possibility that structural change in funding strategy (backed by regulatory and fiscal change) could offer higher and earlier benefits for the economy, climate change and society than the programme outlined in STPR as published in December, 2008.

Finalised STPR and related Economic and Environmental Reports

The Association urges adoption of the following changes:-

- A diversion of funding from major road projects to lesser rail, road and other public transport schemes offering greater corridor and area benefits in phased packages
- A funding shift to promote energy efficiency, energy conservation and alternative fuels
- Enlarged funding for rail electrification in Scotland and Anglo-Scottish route development both to, and beyond, 2016
- Enlarged funding for Regional Transport Partnerships (RTPs) and local councils earmarked for local public transport, travel plans, access and active travel
- Introduction of borrowing for major transport schemes against specified income streams (allowing higher investment in sustainable transport than might otherwise be the case)
SUMMARY : UK Climate Change Report & AEA Reports to Scottish Government

Global Economic, Energy & Climate Change Issues

Major financial problems are deepening a global recession likely to last beyond 2010. A few contract-ready schemes in the transport capital programme are being accelerated but at the cost of slowing later spend. It is not feasible to accelerate major projects not yet ready for contract but the UK Committee on Climate Change has also questioned the concept of scheme acceleration unless they support steeper cuts in fossil fuel use by, and beyond, 2020. In December 2008, the First Annual Report of the Committee concluded that a strong economy requires faster action to develop energy conservation and to move away from fossil fuels. Continuing on a ‘business as usual’ basis would worsen economic prospects. In Scotland, the AEA Reports to the Scottish Government in October 2008 examined energy requirements in total, and by sector, to 2020 and evaluated longer-term options for emissions cuts to 2050. The reports concluded that, as part of an improving economy, energy consumption in Scotland would fall by some 5% between 2005 and 2020 with emissions down some 15%. Looking to 2050, absolute cuts in emissions of between 63% and 75% were expected depending on actual prices and policies adopted. This was seen as close to the 80% target with further work required on the best reduction trajectory.

The UK Committee concluded that the large majority of 80% cuts should come from action within the UK (rather than by emissions trading facilitating cuts in other countries). It called for a steepened target (excluding international transport) of 42% on 1990 levels by 2020 (equal to 31% cuts on 2005 levels – a much larger cut than the 15% in the AEA Scottish Report). Transport is seen as the sector where it is hardest to deliver cuts. The Scottish reports expect a 15% rise in energy use in transport between 2005 and 2020. Growth in movement would be higher but higher efficiency in energy use and shifts to alternative fuels would help to reduce the rise in emissions from transport. Beyond 2020, AEA considers that absolute cuts in transport emissions may prove possible due to greater shifts to alternative energy sources and further advances in the efficient use of energy.

Aided by stronger EU regulations to cut vehicle emissions and more rapid shifts to electric power, the UK Committee recommends deeper cuts in surface transport emissions by 2020 as part of steeper overall UK cuts by 2020. The Committee recognises that their 2020 targets exclude international aviation and shipping but stresses the urgency for international agreement on action affecting these sectors, especially aviation.

None of the Reports claim special expertise in transport. The AEA reports take the view that rising car ownership will lead to significant further growth in road traffic but this is at odds with the evidence of structural change in movement patterns showing stable car use, but strong growth in rail, over the past five years. The UK Report also ignores the evidence that soft and smarter measures can cut car use by 10% to 20%. Further research and shifts in behaviour may indicate greater and earlier scope for emissions reductions in the transport sector. Without such changes, targets will be harder to hit and the economy less strong.

The AEA Reports see a decoupling of energy use from economic growth. Improved efficiency in energy use, notably in housing and other buildings, is a major feature – which also moderates the challenge of meeting the Scottish target of generating 50% of Scottish electricity from renewables by 2020. AEA also point to prospects for life-extension at Scotland’s two nuclear power stations plus future use of carbon capture and storage at fossil fuel generating plants. The revised National Planning Framework favours a major coal-fired power station at Hunterston with provision for future carbon capture technology. In contrast UK policy contains reservations on any early viability for carbon capture and explicitly favours an expansion of nuclear build to increase the power and heat available while also aiding targets for emission reduction.
On behalf of the Scottish Building Federation (SBF), I welcome the opportunity to respond to the Scottish Parliament Transport, Infrastructure and Climate Change Committee’s call for views concerning the proposed Climate Change (Scotland) Bill.

Background

Scotland’s construction industry is crucial to the health of the Scottish economy both as a driver of economic growth and a provider of well paid skilled jobs. Recent statistics show that construction contributes over £13 billion to the Scottish economy, more than tourism and whisky combined.

A recent SBF survey of the sector revealed that, as a result of the current economic downturn, around 20,000 Scottish construction jobs were lost in 2008, representing a significant loss in capacity and skills form the industry. SBF’s expectation is that 2009 will be a similarly challenging year for the construction sector.

Our Response

The Scottish construction industry is fully aware that it has a major part to play in ensuring that the built environment makes a significant contribution in combating the effects of climate change. Overall, building use is responsible for around 50% of total CO2 emissions in the UK, with around 30% coming from homes, and 20% from commercial buildings. We also recognize that measures to reduce construction waste and increase recycling require to be maintained and increased.

With respect to the construction of new buildings, SBF were part of the expert panel that considered the issue of building standards and produced the Report “A Low Carbon Building Standards Strategy For Scotland” (Published December 2007), which recommended measures to improve energy performance of houses and buildings, with a view to reducing carbon dioxide and other emissions. The work streams identified within this report require to be progressed in close consultation with the construction industry to ensure the outcomes are realistic and ultimately positive in terms of climate change. We repeat our offer of assistance and a willingness to be involved in this process.

In considering the current economic environment, and the importance to the wider Scottish economy of retaining an active and dynamic construction industry, SBF strongly believes that the Climate Change (Scotland) Bill offers important opportunities to improve significantly the energy performance of our existing building stock. Our view is that a detailed policy focused on achieving this goal could also assist in retaining industry capacity, as well as equipping workers in the building sector with valuable green construction skills.

An important prerequisite for achieving these goals will be to ensure that all buildings are properly assessed in order to determine their existing energy performance, thereby ensuring that any future retrofit programme is targeted in the most cost-effective way possible.

SBF believe that in order to meet the targets set by the Scottish Government an assessment of energy performance will be required for all types of building to ensure that priorities can be set, which recognize the funding constraints, whether these be in the public or private sector. Failure to carry out a comprehensive assessment of energy performance and establish a priority plan may result in the headline objectives of the Bill being difficult, if not impossible, to meet.

Other Matters That Require Consideration:

- Realistic and achievable stepped targets to ensure progressive improvements to achieve the ultimate objectives.
- Consideration of other factors, i.e. the economic climate.
- Sufficient advance warning of changes in regulations.
- Clear and easily accessed grant funding, potentially for both householders and the construction sector.
In summary, we would therefore urge Members of the Scottish Parliament to consider how the Bill might be reformulated in a way that recognises the vital contribution improvements to the existing built environment can make towards meeting the dual objectives of ensuring a significant reduction in CO2 from Scottish buildings and helping the Scottish construction industry to retain capacity and further enhance skills.
SCIAF welcomes the presentation of the Climate Change (Scotland) Bill before the Scottish Parliament and is pleased to submit written evidence to the Transport Infrastructure and Climate Change Committee. SCIAF supports local communities in over 20 countries in Africa, Asia and Latin America, helping thousands of families to combat the negative effects that climate change is already having on their day to day lives. SCIAF has also undertaken policy and campaigns work on climate change in Scotland and at an international level since 2007; independently, as a member of Stop Climate Chaos Scotland, and as part of extensive international networks. Consequently we are well-placed to bring the voice of poor and vulnerable communities overseas to a legislative process that will not only affect those living in Scotland but communities worldwide.

As a member of Stop Climate Chaos Scotland (SCCS) we endorse its priorities (see below) and its full submission. Where appropriate, we will ask you to refer to its submission which reflects SCIAF’s views on particular topics. The Stop Climate Chaos Coalition Scotland priorities for the Climate Change (Scotland) Bill are that it must:

1. Set out a framework that will achieve at least an 80% reduction in greenhouse gas emissions by 2050.
2. Establish in statute annual emission reductions of at least 3% year-on-year from the start, not just from 2020, compatible with a fair and safe cumulative budget identified by the advisory body (see 4).
3. Include all emissions in the framework and targets set out in the Bill, including those from international aviation and shipping, from the very start.
4. Establish a Scottish advisory body, a Scottish Climate Change Commission, in the primary legislation to support delivery of the Bill when it is enacted.
5. Ensure that at least 80% of the effort to cut emissions takes place in Scotland.
6. Establish duties on all public bodies to reduce greenhouse gas emissions in line with the national target.
7. Set in place robust, transparent reporting measures so the Scottish Parliament is well informed on progress in meeting targets and Government is held to account.
8. Ensure that strong enforcement measures are set in place in statute.
9. Ensure Scotland counts all its emissions and reports on those produced by products and services we consume as well as emissions produced domestically.
10. Be explicit that sustainable development is core to the purpose and delivery of the statute in relation to mitigation and adaptation.

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

For a full response, please also refer to the SCCS submission.

SCIAF welcomes the long-term greenhouse gas emissions reduction target of at least 80% by 2050 based on 1990 levels outlined in the Bill, which we feel represents a strong commitment to doing Scotland’s fair share to tackle climate change.

However, further to the evidence submitted by SCCS, we must stress the importance of committing Scotland to a greenhouse gas emissions reduction trajectory that ensures early action and makes a fair contribution to the global effort needed to prevent dangerous climate change.
Early action is essential because people living in developing countries are already feeling the effects of climate change. The UN estimates that between 2000 and 2004, 262 million people were affected by climate related disasters each year. 98% of these people were from developing countries. Should global temperatures continue to rise, many more will be affected. Indeed it is crucial for poor and vulnerable communities worldwide that the global surface temperature is not permitted to rise beyond what the UN has called a ‘tipping point’ — the temperature at which ‘the risk of large-scale human development setbacks and irreversible ecological catastrophes will increase sharply’. The IPCC has identified this potential tipping point as a rise of 2°C above pre-industrial levels, however at the most recent UNFCCC Conference of Parties in Poznan in December 2008, the Alliance of Small Island States (AOSIS), pointing to new scientific evidence, stated that their future survival depended on rises in global surface temperatures staying below 1.5°C.

It is therefore essential that Scotland commit itself to early action and retain the ability (and be willing) to revise the current commitment to a reduction in greenhouse gas emissions of at least 80% by 2050 upwards in line with changing climate science. Ensuring early action also means committing to annual targets of at least 3% greenhouse gas emissions reductions per annum from 2010 onwards and amending the interim target from 50% reduction in greenhouse gas emissions by 2030 to 50% reduction in greenhouse gas emissions reduction by 2020 (based on 1990 levels).

By setting the interim target for 50% by 2020, we would not only be committing ourselves to early action but setting a leading example which would be immediately comparable with UK and EU targets, both of which have 2020 rather than 2030 targets.

Further, by setting the interim target at 50% by 2020, we would automatically meet the UK’s share of the EU’s 2020 target should it be revised upwards in light of a global deal on climate change being reached at the UNFCCC Conference of Parties in Copenhagen in December 2009. The current EU deal commits member states to a collective reduction in greenhouse gas emissions of 20% by 2020 and if a global deal is reached this figure will be increased to 30% by 2020 (based on 1990 levels). Because the EU greenhouse gas emissions reductions commitment is based on the principle of effort sharing, economies with a high GDP per capita such as the UK are expected to reduce their greenhouse gas emissions by more than those member states with a lower GDP per capita. The UK Committee on Climate Change has therefore recommended that the UK as a whole should commit to reducing its greenhouse gas emissions by 34% by 2020, or 42% by 2020 (based on 1990 levels) should a global deal be reached. It is widely recognised that Scotland is well-placed to cut its greenhouse gas emissions by more than the UK average. Consequently, by setting the interim target at 50% by 2020, Scottish legislation is likely to be consistent with the UK’s share of any revised EU target.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

For a full response, please refer to the SCCS submission.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?
SCIAF recommends the adoption of annual emissions reductions targets of at least 3% year on year from 2010, to ensure that Scotland commits itself to early action on climate change. This is also in keeping with current scientific evidence and would keep us on track for the 2050 target.

A study for the IPPR by Paul Baer and Michael Mastrandrea which looked at global emissions reductions found that, in order to have a 74-91% chance of keeping the temperature increase to 2°C, global emissions must contract by 5% each year from 2010 onwards. A 2006 report by the Tyndall centre looked at the UK and found that, if it was to do its fair share of stabilising atmospheric carbon emissions at 450ppmv by 2050—a level which still carries a 50% chance of exceeding 2 degrees—this would require decarbonisation of 9-13% per annum.

When the science is suggesting annual cuts of 5-13%, 3% must be seen as a bare minimum. Annual targets of at least 3% are also in keeping with the SNP’s manifesto promise of ‘mandatory carbon reduction targets of 3% per annum’.

Annual targets of at least 3% commencing from 2010 onwards must be included in primary legislation for the Climate Change (Scotland) Bill to ensure it is a truly world leading piece of legislation that commits Scotland to doing its fair share to tackle climate change.

Q.4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

SCIAF, like SCCS, believes that the vast majority of greenhouse gas emissions reductions should come from Scottish sources, and not be ‘bought in’ from other countries. In addition to the reasons outlined in the SCCS submission, SCIAF believes that the majority of greenhouse gas emissions reductions should come from Scotland because:

- The use of carbon credits might detract from domestic reduction effort. The unrestricted availability of international credits may create an incentive for administrations to emphasise short term, quick and easy fixes abroad, instead of focusing on the longer term changes that are necessary in Scotland. Whilst this may reduce emissions in the short term the danger is that, by putting off difficult decisions, it stores up problems for the longer term.

- Overuse of international credits would risk sending mixed messages and engendering cynicism amongst the general public as the government could be perceived as ‘buying its way out’ of its responsibilities. This could be damaging domestically, whilst also putting Scotland’s international leadership credentials on this issue to the test.
One of the major obstacles to securing a global deal at the UNFCCC Conference of Parties in Copenhagen this year is the lack of trust present between developed and developing countries. Failure to make firm emissions reduction pledges and the over-reliance on international credits and trading schemes by developed countries has engendered scepticism amongst developing countries. A Bill that limited the proportion of emissions reductions bought in from elsewhere would make Scotland amongst the first industrialised nations to demonstrate its commitment to make deep cuts at home. In doing so Scotland would be at the forefront of generating greater trust and confidence among developing nations, which is desperately need to ensure we have any chance of securing a sufficiently ambitious global deal at Copenhagen.

Our historical responsibility for climate change. The UK has a particular responsibility for climate change being, in 1830, the first country to emit more CO2 a year than the current sustainable level – something we have continued to do till today. In 2005, just one of Scotland’s power stations, Longannet on the River Forth, emitted ten times more CO2 than Malawi produces in a year, and more CO2 than ten sub-Saharan African countries combined. Scotland must address this historical responsibility for climate change by ensuring that the majority of greenhouse gas emissions reductions come from domestic sources.

SCIAF does not wish to rule out the use of international carbon credits altogether, however a limit must be placed on the amount of international credits that can be used to prevent Scotland from becoming over-reliant on international credits as a means of making up for annual shortfalls in domestic greenhouse gas emissions reductions.

Further, should international credits be used by the Scottish Government, they should adhere to international best practice. The following principles must apply to international credits used by the Scottish Government:

- Full transparency: annual reports on emissions reductions must show actual emissions from Scotland and net emissions after credits are taken into account.
- Ownership by developing countries and affected peoples: the methods by which international credits are generated must have the free, prior and informed consent of the host country government and of local communities affected by the project.
- Genuine social and environmental benefits: international credits must promote sustainable development and be additional to existing mitigation efforts.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

For a full response, please refer to the SCCS submission.
Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

For a full response, please refer to the SCCS submission.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

For a full response, please refer to the SCCS submission.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

For a full response, please refer to the SCCS submission.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

For a full response, please refer to the SCCS submission.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

For a full response, please refer to the SCCS submission.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?
Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

For a full response, please refer to the SCCS submission.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?

For a full response, please refer to the SCCS submission.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

For a full response, please refer to the SCCS submission.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

- Waste prevention and management plans;
- Waste data;
- Deposit of recyclable waste;
- Procurement of recyclate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

What are your views on these proposals?

For a full response, please refer to the SCCS submission.

Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

For a full response, please refer to the SCCS submission.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

For a full response, please refer to the SCCS submission.
Q18 Does the Bill raise any equalities issues you would wish to highlight?

For a full response, please also refer to the SCCS submission.

Climate change is fundamentally a matter of international equity. Climate change has a disproportionate effect on poor and vulnerable communities, those who have done the least to cause it. It is also very likely that climate change will widen inequalities between the developed and the developing world further as well as compounding existing social inequalities within developing countries.

Indeed, we are already witnessing the disproportionate effect climate change is having on women living in developing countries, particularly those living in rural areas. Women are responsible for up to 75% of household food production in developing countries. Increased droughts and water scarcity stand to make this role even more time-consuming. This not only makes their day-to-day lives more difficult, it risks reducing the amount of time they have to spend on other activities, such as paid employment or education. Consequently, climate change is contributing to the further entrenchment of gender-based inequalities in the developing world.

Further, poor and vulnerable people are less able to adapt to and manage the impacts of climate change that have occurred and will continue to occur over the coming decades. There is consensus from international bodies (from the IPCC to the UNDP) and from people on the ground that adaptation is essential, and that insufficient adaptation has consequences for social justice, respect of human rights and global inequalities. However, the countries where adaptation is most urgently needed are least able to provide it. They lack the necessary finance, the necessary infrastructure and often the relevant information. In countries with extremely tight budgets, finding money for adaptation may mean taking money away from basic social services such as health and education.

By contrast, developed nations—including Scotland—have the financial means to fund adaptation and have the moral responsibility to do so. Given Scotland’s historical responsibility for greenhouse gas emissions, we should provide compensation to those most vulnerable to the impacts of climate change. Indeed, the Climate Change (Scotland) Bill provides a unique opportunity here for the Scottish Government to redress these inequalities by playing a role in providing resources to fund adaptation in developing countries.

Even relatively modest sums of funding provided could have a real impact in practical terms on the ground – as has already been proved by the impact that Scottish Government development aid has had.

It would also have a symbolic importance that would far outweigh its practical benefits. Obtaining sufficient, secure, additional and accessible financing for mitigation, adaptation and technology transfer is key to obtaining a global deal on Climate change at the UNFCCC Conference of Parties in Copenhagen in December 2009. The current lack of financing has become an important excuse for inaction at the negotiations. Scotland, by providing some funding for adaptation, could play an important role in breaking this deadlock.
Consequently, the Scottish Government should make some funding available that will allow communities in developing countries to adapt and respond to the climate change that is already impacting upon their lives. As a matter of principle this funding must be in addition to, and not be drawn from, the development aid budget, with a fixed, predictable amount made available year-on-year. Across the world we are seeing increasing levels of funding for developing countries to adapt to the effects of climate change, but this often comes from existing aid budgets. Since developed industrialised countries have, by and large, caused climate change, the ‘polluter pays’ principle means they should be obligated to pay for such adaptation measures as a matter of course. This must not ‘eat into’ existing development aid budgets which were set up before climate change and its effects became apparent.

The provision of secure, accessible and additional funding for adaptation is essential to ensure that Scotland does its fair share to address the inequalities that have already resulted from climate change.

(For more detailed answer on how to include funding for adaptation please see the response to question 20)

Q19 Do you have any comments on the impact of the Bill on sustainable development?

For a full response, please also refer to the SCCS submission.

We agree with SCCS that sustainable development should be an underpinning principle of the bill, and we would therefore like to see a sustainable development duty included in the Bill in Part 6 and also see ‘sustainable development’ referenced in the Bill’s long title. This would ensure that the bill remains focused throughout on promoting positive and sustainable development both in Scotland and in the developing world. It would also acknowledge the truly global nature of climate change and recognise the impact that the Climate Change (Scotland) Bill could have on communities across the globe.

Further we also believe that it is essential that the Climate Change (Scotland) Bill should place a duty on the Scottish Government to ensure that any mitigation and adaptation efforts contribute to the furthering of sustainable development; and ensure the avoidance of negative social and environmental impacts on poor and vulnerable communities worldwide. This, for example, would guard against a reliance on first-generation biofuels to meet annual greenhouse gas emissions reductions commitments in the transport sector because of the damaging effects they can have on rural communities and food security in the developing world.

Q20 Do you have any other comments on the Bill?

For a full response, please also refer to the SCCS submission.

(Please also see SCIAF’s response to Question 18)

In recognition of the urgent need for adaptation funding in the developed world, we propose that the Scottish government make a relatively modest sum of money available to help developing countries adapt to climate change that is already happening. As a matter of principle this must be in addition to, and not be drawn from, the development aid budget, with a fixed, predictable amount made available year-on-year from direct government funding.
In addition to its predictable core funding, such a fund could be topped up from innovative sources. One such suggestion is a ‘climate fund’ mechanism, replenished in part through fines (or missed incentive payments) levied against Government Departments and publicly-funded bodies that have failed to meet relevant climate emissions targets. Such a fund, if designed well, could incentivise public bodies to meet their emissions reductions targets, mobilise additional investment to meet emissions reductions targets and adaptation projects within Scotland, and result in additional funds being available for adaptation overseas.


iii Scientific evidence referred to can be found in Hawkins et al. (2008) Climate Safety: In Case of Emergency… (Public Interest Research Centre, United Kingdom)

iv UK Committee on Climate Change (2008) Building a Low Carbon Economy – the UK’s Contribution to Tackling Climate Change

v Baer and Mastrandrea (2006) High Stakes, Institute of Public Policy Research,


vii Tyndall Centre (2006) Living within a Carbon Budget: Report for Friends of the Earth and the Co-operative Bank

viii WDM (2007) Climate Calendar: The UK’s unjust contribution to global climate change p4


x Action Aid (2007) We Know What We Need: South Asian Women speak out on climate change adaption
WRITTEN SUBMISSION FROM SCOTTISH ENVIRONMENT LINK

The Scottish Environment LINK (LINK) Climate Change Task Force welcomes the opportunity to provide written evidence on the Climate Change (Scotland) Bill. Established in 1987, LINK is the forum for Scotland’s voluntary environment organisations - 32 member bodies representing a broad spectrum of environmental interests with the common goal of contributing to a more environmentally sustainable society. LINK provides a forum and network for its member organisations, enabling informed debate, and assisting co-operation within the voluntary environmental sector. LINK assists communication between member bodies, government and its agencies and other sectors within civic society. Acting at local, national and international levels, LINK aims to ensure that the environment is fully recognised in the development of policy and legislation affecting Scotland.

The LINK Climate Change Task Force works closely with the Stop Climate Chaos Coalition (SCCS) and supports the top ten priorities for the Bill identified by SCCS. The coalition members include environment and development NGOs, faith groups, trade unions, community councils, student societies, women’s organisations, a mental health charity, and many others. In Scotland, the members have a combined supporter base of over 1.5 million people.

The LINK Climate Change Task Force supports the following ten Stop Climate Chaos Coalition Scotland priorities for the Climate Change (Scotland) Bill. The Bill must:

1. Set out a framework that will achieve at least an 80% reduction in greenhouse gas emissions by 2050.
2. Establish in statute annual emission reductions of at least 3% year-on-year from the start, not just from 2020, compatible with a fair and safe cumulative budget identified by the advisory body (see 4).
3. Include emissions from all sectors in the framework and targets set out in the Bill, including those from international aviation and shipping, from the very start.
4. Establish a Scottish advisory body, a Scottish Climate Change Commission, in the primary legislation to support delivery of the Bill when it is enacted.
5. Ensure that at least 80% of the effort to cut emissions takes place in Scotland.
6. Establish duties on all public bodies to reduce greenhouse gas emissions in line with the national target.
7. Set in place robust, transparent reporting measures so the Scottish Parliament is well informed on progress in meeting targets and Government is held to account on mitigation and adaptation.
8. Ensure that strong enforcement measures are set in place in statute.
9. Ensure Scotland counts all its emissions and reports on those produced by products and services we consume as well as emissions produced domestically.
10. Be explicit that sustainable development is core to the purpose and delivery of the statute in relation to mitigation and adaptation.

LINK member bodies believe that Scotland needs urgent action on climate change and have been calling for greenhouse gas reductions to be delivered in a sustainable manner and for adaptation measures to be put in place to help secure our natural and cultural heritage. We are using our environmental experience and strong membership base in helping to address climate change, but we need the Government to provide the lead to ensure policies and decision-making go in the right direction to reduce greenhouse gas emissions.

Further information outlining LINK’s view on climate change is available in the document - Time to Act on Climate Change

1 world.cotlink.org
2 http://www.stopclimatechaos.org/scotland
3 http://www.scotlink.org/pdf/LINKClimateStatementSept08.pdf
1. Reducing greenhouse gas emissions

Climate change is the greatest threat facing our environment and humankind and it requires immediate and sustained reductions in greenhouse gas emissions to avoid disastrous consequences. Research predicts that without urgent action, climate change could cause the extinction of up to one million species worldwide by 2050, which is more than a third of land-based species. Numerous devastating climate change impacts on biodiversity and ecosystems are identified in the various reports from the IPCC.

The Millennium Ecosystem Assessment\(^4\) states that, if significant global adverse changes to ecosystems are to be avoided, efforts should be made to limit the increase in global mean surface temperature to less than 2°C above pre-industrial levels and to limit the rate of change to less than 0.2°C per decade.

Currently, the best scientific advice points to the need for greenhouse gas reductions in developed countries of at least 80% by 2050. This would give us a reasonable likelihood of staying below a 2°C increase in global temperature, which is considered the maximum manageable level if we are to avert the worst effects of climate change.

**We consider that early emissions reduction of at least 3% per annum is necessary and achievable in a sustainable manner.** To delay makes the cuts required in future so great and rapid that it may be too difficult to achieve without severe social, economic and environmental consequences.

We want to see this reflected in the Scottish Climate Change Bill with strong statutory long-term and annual targets to deliver the necessary greenhouse gas reductions in order to avoid dangerous levels of climate change.

2. A sustainable approach

**LINK considers it essential that a strong sustainability duty is included in the Bill.** Sustainable development means recognising environmental limits while considering the environment, social issues and the economy together. This is the only way to really tackle climate change and ensure our actions do not add to the challenges brought about by climate change. Our use of energy for homes and businesses, travel, our consumption of goods and food and our use of the land and sea are all major sources of greenhouse gas emissions. Reducing these emissions needs to be set within a legislative framework that encourages a sustainable approach. This means delivering energy demand reduction and efficiency, along with renewables without environmental harm; reducing waste and encouraging recycling. It means greater support for walking, cycling and public transport rather than expanding airports and roads. It also means finding ways to manage our land to provide multiple public benefits, including attractive landscapes and natural habitats, improved local economies and quality of life.

A sustainable approach will also avoid environmental conflict when considering the most appropriate ways to reduce greenhouse gas emissions or adapting to climate change. Present and future generations depend on a healthy environment and there is no point seeking opportunistic ways of addressing climate change which threaten biodiversity, landscapes or our cultural heritage. Indeed, our natural environment if managed sustainably can often help in cutting emissions and providing the means to deal with a changing climate.

The Ministerial Foreword to the consultation document recognises the need for sustainability to be at the heart of all policies, including climate change but this is not reflected in the legislative proposals. We think that it is vital that such a strong legislative framework document should include a clear steer that climate change should be tackled in a sustainable manner.

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3. Adaptation

LINK welcomes the Bill’s proposals for Government to produce reports on Adaptation. We are already seeing changes in our natural environment on land and at sea, with many of Scotland’s most iconic species and habitats showing particular vulnerability. The right adaptation measures are vital to ensure the conservation of Scotland’s biodiversity, and to address the threats to ecosystem structure and function. In our built heritage, our historic buildings are facing extremes of weather not previously experienced in their lifetimes. Coordinated action across all sectors is required to help make our environment resilient, bearing in mind that much of it is already in a damaged and deteriorating state.

In order to deliver the right response in Scotland it is important that decision-makers have the right information on the impacts of climate change relevant to the particular Scottish circumstances. We therefore would like to see the Bill require the Scottish Government to produce their own climate change impact assessment with support from the relevant advisory body, rather than rely entirely on a UK impacts report.

It is also important that the Bill provides for independent public scrutiny of the Scottish Government’s progress in implementing its adaptation policies and programmes. We therefore recommend that the Scottish Climate Change Bill should require the production of a Scottish adaptation programme at least every three years, which includes:

- an assessment of the current and future predicted impact of climate change in Scotland
- the objectives of the Scottish Government in relation to adaptation to climate change
- the Scottish Government’s proposals, policies and timescales for meeting those objectives

and should provide for:

- an independent assessment, at least every two years, of progress towards implementing the objectives, proposals and policies set out in the adaptation strategy
- annual reporting to the Scottish Parliament of achievements and revisions to the strategy

4. Muirburn

LINK supports the Bill’s enabling powers for Ministers to vary muirburn times. This is a measure which is required as part of our adaptation response to the impacts of a changing climate. Many moorland ground-nesting birds have already shown a response to climate change by breeding earlier in the season and it is important therefore for Ministers to be able to adjust the times at which muirburn is permitted in order to avoid harming wildlife. Key stakeholders of the Moorland Forum, a consortium of organisations with an interest in moorland management issues have responded to a Scottish Government request for an agreed position and provided a statement in support of the Bill’s proposals.

5. Forestry

In principle, LINK welcomes the fresh look at how the Forestry Commission Scotland (FCS) can deliver for climate change but we are particularly concerned that the plans proposed in the Bill are controversial, not fully explained or costed and as such, they represent a distraction from the important climate change priorities in the Bill.

Creating new woodlands contributes to carbon sequestration as does restoring damaged woodlands, but the benefits of this are relatively small and scientifically challenging to confirm compared to carbon mitigation from reductions in our use of fossil fuels. The National Forest Estate whilst having a role to play in carbon sequestration also has a vital role in adaptation yet this was not considered in the FCS proposals. Much of the public concern voiced over the Bill’s forestry proposals was a reflection of support for the multiple benefits of our forests including environmental and recreational values which could be undermined if carbon became the primary driver for the National Forest Estate.

Please see http://www.scotlink.org/pdf/LINKWTFWrittenEvidenceRAECommitteeForestryProposalsCCScotBill3Feb2009.pdf for detailed LINK evidence to the Rural Affairs and Environment Committee on the Forestry provisions in the Claimed Change (Scotland) Bill.
It is LINK’s view that these proposals require more considered thought and discussion. As a result, we are unhappy with the wide reaching enabling powers in Section 47, sub sections 1, 2 and 4 being included in the Bill. Rather we would like to see any specific powers that may be identified, legislated for in future, after they have been properly explored and consulted upon. We do however welcome the inclusion of Subsection 3,a), b), c) and d) (i) which allows the FCS to enter into joint ventures which could include renewable energy projects, because these proposals are specific and directly relevant to the Bill’s aims.

LINK also considers it important to recognise that land use as a whole, including agriculture, forestry, and nature conservation are all important for climate change mitigation and adaptation. We believe that Scotland should have a sustainable land use strategy to deliver a holistic, integrated approach to land use which addresses climate change and delivers multiple public benefits.

6. Energy Efficiency

LINK welcomes the recognition the Bill gives to the role energy efficiency will play in driving down emissions and closing a future energy gap. However, there are a number of key areas where this section could be improved. Firstly, the Bill should refer to ‘improving’ rather than ‘promoting’ energy efficiency wherever possible. This language is used in the Housing (Scotland) Act 2006, section 179 (duty of Scottish Ministers to prepare strategy for improving the energy efficiency of living accommodation) and should be adopted in defining the aims of this Bill with regard to energy efficiency.

There has been considerable delay (some six years) in the provision of a long promised Energy Efficiency Action Plan and the Bill should not prevent its earliest possible publication. The Plan should include targets on energy efficiency, and progress should be reported in terms of reduced energy demand, reduced emissions, and increase in microrenewables as part of the Annual Report set out in Part 3 – Reporting Duties.

The following member organisations have agreed this statement:

Friends of the Earth Scotland
The John Muir Trust
National Trust for Scotland
Plantlife Scotland
Ramblers’ Association Scotland
RSPB Scotland

Scottish Environment LINK is the forum for Scotland’s voluntary environment organisations - 32 member bodies representing a spectrum of environmental and associated cultural heritage interests with the common goal of contributing to a more environmentally sustainable society. LINK provides a forum and network for its members; and assists communication between members, government and civic society. Further information on LINK is available at www.scotlink.org

Scottish Environment LINK is a Scottish Company limited by guarantee without a share capital under Company No. SC250899 and a Scottish Charity No. SC000296.
WRITTEN SUBMISSION FROM SCOTTISH ENVIRONMENT PROTECTION AGENCY

Introduction

SEPA’s main role is to protect the environment and human health. We do this by controlling activities that can cause harmful pollution and by monitoring the quality of Scotland’s air, land and water working to enable those we regulate to comply with the legislation as well as delivering a number of services such as flood warning and environmental business advice.

SEPA welcomes the Climate Change (Scotland) Bill and the strong framework it contains to address climate change in Scotland. SEPA feels that there are areas where further provisions are necessary to help Scotland achieve its targets. On balance, SEPA believes putting in place provisions for these measures now would further assist us on the pathway of reducing emissions towards the 80% target as well as protect Scotland’s environment and communities.

Flooding and floods management is clearly a key issue, and a major part of SEPA’s activity. However given the parallel development of the Floods Risk Management (Scotland) Bill, we have not commented further in this evidence.

Key messages

We need early action where possible and a Bill to support this.

To set a clear pathway for reductions of Scottish emissions and the move towards a low carbon economy, international credits must be a purely supplementary measure to firm domestic action.

Parallel reporting on consumption emissions and communication activity on end user demand is needed to provide an overall picture of our climate change impacts.

We need to measure and monitor Scottish emissions closely- existing systems are unlikely to be sufficient to meet changing demands.

We need statutory duties on local authorities, government departments and the wider public sector to consider the carbon impact of their decision making and procurement activities. We need provisions for regulators and planning authorities to take account of carbon impacts.

We need to greatly improve our utilisation of waste heat and underpin renewable heat and waste heat policy with firm and supportive action.

The Climate Change Bill should recognise the importance of Scotland’s carbon rich soils, and the need for their effective management. Scotland is in a unique position with a large amount of carbon in peatlands that need to be protected and managed sustainably.

Response to Call for Views

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

SEPA welcomes the 2050 target of 80% emissions reduction and the setting of an interim target of 50% by 2030. SEPA feels that an interim target sends clear signals to business and will set us on the pathway to the 2050 targets.
There has been discussion since the Bill’s publication on the need for an earlier target, possibly for 2020, in order to strengthen these signals. SEPA notes that Scotland will be part of the UK 2020 target of at least 26%. This target is achievable based on the UK Committee on Climate Change’s recommendations set out in its recent report. The report further recommends a 34% interim target (and 42% intended target if international agreement on a global treaty is reached) going beyond the commitment in the UK Climate Change Act of at least 26% in 2020. SEPA understands that the UK government, after having consulted with devolved administrations, will respond to the UK Committee’s advice shortly.

Scottish Government’s technical note on Climate Change Scotland Bill: Greenhouse Gas (GHG) Emissions, Annual Reduction and Targets notes that Scottish Ministers will be informed by the advice of the UK Committee on Climate Change before setting the levels of annual targets.

In addition to this, if Scotland reduces its share of emissions in line with the UK target and then continues on an annual 3% reduction to 2030, SEPA believes we would be well on the way to performing beyond the current interim target of 50%.

In summary, the picture on target setting continues to develop, and SEPA is not in a position to comment on the detailed trajectories at this stage, other than to re-iterate that a balance must be struck between early, sustained action, and economic and feasibility considerations.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

SEPA supports the setting of targets in batches. Given the length of the first batch, it is important that not only are the targets credible but also crucial that they are as stretching as possible to avoid possible carbon lock in.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

SEPA notes that there are lead-in times for policies enacted now, but also that there are available measures that could set us on a strong downwards trajectory pathway before 2020. We recognise 3% reduction in the first years may not be attainable, but we need to make sure we don’t carry on “business as usual” up to 2020. SEPA is concerned that reductions that could be made prior to 2020 may not occur without strong action.

In line with this, we need to recognise the purpose of the Bill is to reduce the concentration of greenhouse gases in the atmosphere and that earlier action makes this battle a lot easier in the long term. The sooner we start moving towards a low carbon economy and implementing measures that are making a sizeable contribution to emission reductions, the easier it will be to achieve the 2030 and 2050 targets.

Scottish Government’s technical note highlights a scenario up to 2020 that continues on the same pattern as we have done since 1990, rather than increasing the emissions reduction pathway. It is worth stating that such an approach, whilst not being proposed, approximates to only 1% annual reductions, and is completely inadequate.

1 http://www.theccc.org.uk/reports/ Building a Low Carbon Economy – the UK’s contribution to tackling climate change
Emissions reductions since 1990 have not always been attributable to mitigation measures and so to continue on this same pathway could be considered “business as usual”. For example, the decline of the manufacturing industry in Scotland has seen a decrease in Scotland’s emissions but not necessarily global emissions.

Q.4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

The net Scottish emissions account is an ideal concept to use as a point of reference against which the target for reducing greenhouse gases can be measured. SEPA welcomes the establishment of a carbon account for the tracking of carbon units and maintaining a database. SEPA has experience in this area as the body that enforces and administrates the EU Emissions Trading Scheme (EU ETS).

As detailed in SEPA’s Bill Consultation response\(^3\), SEPA believes that there should be limits on credits used by Scottish Government in meeting Scottish targets. SEPA recognises that it would be in contravention with the EU ETS to set a limit that applies to the traded sector before they have purchased international credits and therefore the limit should apply to the net Scottish emissions as a whole after the traded sector have been added to the Scottish emissions account.

International credits used for the net Scottish emissions account should be purely supplementary and applying limits is therefore a necessity. SEPA proposes a limit of one fifth of emissions reductions to ensure that efforts are focused in Scotland. This would strengthen the transition to a low carbon economy and energy efficiency measures and encourage investment in mitigation measures in Scotland.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

SEPA feels this is an accurate view of production emissions for the purpose of the target. However as Scotland’s influence goes far wider than the boundaries outlined as the definition of Scottish emissions, we would like to see provisions in the Bill for parallel reporting on consumption emissions. An end user inventory could illustrate the influence that Scotland’s domestic demand and imports has on international emissions. This could be made up of heat, electricity, transport, goods and services.

This would not only help with communication but also look at the influence that Scotland has on global emissions, for example, by looking at the impact of the steel we import has on emissions, the impact of the plastic goods we import and therefore provide at least an estimate of our influence on emissions globally. A key delivery challenge for this is to ensure the availability of acceptable data at an appropriate level from other countries.

\(^3\) http://www.scotland.gov.uk/Resource/Doc/259367/0077144.pdf SEPA’s response to the Consultation on proposals for a Scottish Climate Change Bill
Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

SEPA supports Scottish Government’s approach to obtaining independent, expert, advice on climate change.

SEPA also believes that there may be merit in exploring the potential for a body to undertake a wide ranging review of the impact of regulations and policies on climate change policy. A ‘Scottish Climate Change Regulatory Review Commission’ could actively invite submissions from stakeholders to identify inadequate, contradictory or outdated provisions. Such approaches have been used across a wide range of policy areas and have the advantage of allowing a transparent, consultative and considered approach. SEPA has in mind the sorts of processes used for the Hampton, Macrory and Davidson reviews (better regulation), the Crerar review of scrutiny, and so on.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

Reporting is clearly a key element of the policy cycle, as good performance reporting drives better performance and more timely intervention where required.

Many of the reporting requirements that SEPA called for in its response to the consultation have been incorporated, however, climate change science with a particular focus on Scotland (for example emissions for peat systems), could also be reported.

In the original Bill consultation there were three levels of duties proposed: advisory, monitoring and reporting/evaluation. However, direct monitoring no longer appears to be addressed on the face of the Bill. SEPA is also concerned about the lack of integration between monitoring from local authorities, the Scottish Government, SEPA and other reporting agencies. It is not clear that current climate change monitoring and reporting frameworks do in fact provide the necessary framework within which policy consequences can be explored.

In SEPA’s view, therefore, there is need to establish a more detailed, faster and more accurate picture of emissions of climate gases within Scotland in order to assist with planning, and meet increased demands for scrutiny. SEPA believes that this will need to involve both increased physical monitoring and assessment of some gases (e.g. nitrous oxides) and an increased capacity to assemble, verify and publish data.

This approach would also contribute to a more detailed understanding of the progress towards the targets and impacts of policies and other mitigation measures on greenhouse gas emissions. As a result this would lead to more robust and detailed reporting.

SEPA would be happy to respond further on the responsible body for this duty. In our response to the Bill consultation, SEPA put itself forward as the appropriate body for such a task. This was on the basis that, SEPA has carried out similar roles in measuring, assembling, verifying and publishing data, for example Waste Data, Scottish Pollutant Release Inventory (SPRI) and the EU ETS. However, clearly a debate is needed as to which body is best placed to carry out this task- from SEPA’s perspective it is difficult to see an alternative body that could logically carry out the task.
SEPA recommends the inclusion of provisions in the Bill to improve the measuring and estimation of emissions, verification and publishing of data, and a power for Scottish Ministers to require other organisations to cooperate with the central measuring/monitoring body.

**Q8** The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

**What are your views on this proposal?**

**Statutory Provisions**

SEPA fully supports the proposals in Part 4 and feels that statutory duties on the public sector (including central government directorates) should be part of the way forward in tackling climate change in Scotland. In particular SEPA feels that the duty should be placed on public bodies now, as part of the Bill, with statutory guidance on the meaning of the duty to be developed in due course.

Not only should the public sector lead by example but also the extensive influence that the public sector has on emissions via its own decision making should be recognised. Analogous voluntary agreements in the private sector and voluntary commitment in the public sector have been shown to deliver little more than business as usual in many cases.

**Taking account of the carbon impact**

As recognised above the public sector and government have a huge influence through their decision making on carbon emissions in Scotland (often referred to as indirect emissions). We are very much at the beginning when it comes to taking account of the carbon impact of policy decisions but there are some good examples of where progress is being made in this area. As our knowledge and skills develop in this area, provisions in the Bill requiring public bodies to take account of carbon impact in their procurement, policy and regulatory decisions would set us firmly on the pathway for reducing emissions and setting up a low carbon infrastructure to which we can build upon.

In addition, SEPA considers that there might be merit within the limits of devolved powers in placing a duty on regulators (including possibly SEPA, SNH, HSE, FSA, Marine Scotland, local authority regulatory services, Audit Scotland, CAA, Water Industry Commission and OFGEM) to consider carbon impact as part of their statutory duties. With regard to SEPA’s own regulatory functions, further provisions could be added to part 5, to amend the Environment Act 1995, to require SEPA to take account of climate change for all its regulatory decisions. Clear, consistent guidance on how to approach this would be needed and could be developed by the regulatory bodies in partnership with the Scottish Government.

Just as importantly, SEPA considers there should be specific duties on planning authorities and community planning partnerships to ensure that they consider greenhouse gas emissions in planning and policy decisions. The initial step in the majority of developments and redesigns is a planning application. Continually reducing emissions will be best achieved by adequately considering emissions at this stage. SEPA is already working with Scottish Government and the other responsible authorities under the requirements of Strategic Environmental Assessment (SEA) to improve the consideration of greenhouse gases at this stage in the process.

**Q9** The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

**What are your views on this proposal?**
SEPA note that there could be more pieces of legislation in addition to permitted times for muirburn that may require amendments in order to allow for adaptation to climate change impacts. A provision in the Bill recognising that as we develop our understanding and knowledge of climate change impacts we may need to amend other legislation would be useful.

Also, provisions could be included to amend the Water Environment and Water Service (WEWS) Act so that it is a statutory requirement to consider and report on adaptation under the WEWS Act, e.g. Wetlands Strategy and River Basin Management Planning (RBMP) in terms of adaptation.

SEPA feels that the section on adaptation should make a specific reference to sustainable development so that social, economic and environmental factors are all considered.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

SEPA has no specific comments to make on the muirburn proposals. However, as elaborated below, SEPA notes the vital importance of effective management of Scotland’s soil carbon resource in mitigating climate change.

SEPA’s view is that land management practices should aim for positive carbon impacts (or at least carbon neutral) and should aim to improve the resilience of Scottish soils in this respect.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

SEPA responded to the separate consultation on forestry provisions in the Climate Change Scotland Bill and our key points on the consultation on forestry provisions were:

- It is important that the provisions ultimately lead to helping Scotland achieve its climate change targets through a net reduction in carbon emissions.
- Renewable energy developments and woodland creation cannot be successful in isolation. Scotland must integrate a variety of mechanisms including: minimising woodland removal, conserving forest carbon stocks by low impact silvicultural systems, identifying core networks/areas to maintain biodiversity, establish energy crops, woodland creation and environmental protection through processes.
- In considering the consultation, SEPA would have welcomed more detail on the proposals and possible implications. For example, the consultation mentions remedying weaknesses in existing forestry legislation – it would be useful to have these weaknesses fully laid out in the consultation.
- Without an overall quantified carbon assessment of the proposals, SEPA has found it difficult to judge the merits of the proposals, and therefore restricted its comments to identifying issues for clarification/resolution.
- With the underlying objective being to help achieve the emissions reduction target in the Scottish Climate Change Bill, we would encourage conditions on the lease so that operators are required to take account of carbon impact.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

It appears that the Bill could be unintentionally weakening Energy Efficiency legislation. The Climate Change Bill repeals terminology in the Housing Act 2006 to improve energy efficiency whereas the Climate Change Bill looks to promote energy efficiency.

SEPA would also like to draw the committee’s attention to SEPA’s response\(^5\) to the Economy, Energy and Tourism Committee’s call for evidence on determining and delivering Scotland’s Energy future. SEPA noted that measures to address energy demand for existing building stock will need to be addressed. Also, we are still seeing major public developments (hospital and schools etc) basing decisions on building costs (now) rather than future costs of carbon, resulting in the wrong boiler type or heating system and inadequate energy efficiency standards. The cost of carbon must be incorporated into the design, planning and decision stage of building projects. SEPA would like to see the provisions in Section 48, 49 and 50 reflect this need.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?

Xxxxxxxxxxx no answer xxxxxxxxxxxxx

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

Key messages:

- Promotion and support could extend to the promotion of waste heat from fossil fuels use (working with the UK Government where appropriate).
- There is need to go further than ‘promote’ and to explore opportunities for improved coordination between key actors, use of the planning system and application of best practice standards to underpin the direction of the draft framework for the development and deployment of renewables in Scotland\(^6\) (includes Scottish Action Plan on renewable heat) and SEPA’s Thermal Treatment guidelines\(^7\).


\(^{7}\) [http://www.sepa.org.uk/about_us/sepa_boards/the_agency_board/agendas_and_papers/10_february_2009.aspx](http://www.sepa.org.uk/about_us/sepa_boards/the_agency_board/agendas_and_papers/10_february_2009.aspx) SEPA’s Thermal Treatment Guidelines approved by the Agency Board 10\(^\text{th}\) February 2009. Papers for the meeting page 67 to 110. [Link no longer operates]
Waste heat

SEPA welcomes the provisions that Scottish Ministers must take steps to promote the use of heat from renewable sources. Promotion and support could also be expanded to cover the use of waste heat produced by fossil fuel power stations and other industrial processes. SEPA also highlighted this issue in its response to the Economy, Energy and Tourism committee’s call for evidence for determining and delivering Scotland’s Energy Future. SEPA explained that Scotland requires a huge and sustained increase in its ability to utilise heat from renewable sources as well as waste heat from industry, power supply and thermal treatment.

Legislation to underpin waste heat and use of renewable heat policy

Scotland’s Renewable Heat Strategy: Recommendations to Ministers recognises that there are particular opportunities in Scotland because of the extent of areas off the gas grid, and the existence of clusters of potential heat demand and existing waste heat or potential renewable heat sources.

SEPA’s Thermal Treatment of waste guidelines set out the approach that SEPA will take in planning responses to, and licensing of, waste treatment facilities. The thermal treatment guidelines note that the location of thermal treatment facilities needs to consider the future use of waste heat, as an integrated network of facilities will ensure energy from waste is recovered efficiently.

“SEPA recognises that Scotland does not yet have mature or extensive heat-use networks. However, there are immediate opportunities for reliable and extensive heat use by co-locating thermal treatment plants with existing energy and heat intensive industries, or near to public developments such as leisure complexes and shopping centres. Another alternative is to develop facilities in areas with the potential for the co-development of heat-using industries. Low grade heat could be a driver for the development of eco-industrial parks, with a focus on waste treatment, reprocessing and manufacturing using waste materials, renewable energy production and local food production.”

Regulators, government and the renewables sector need to work more closely together to ensure the development and application of best practice industry standards and methods of working. Scottish Ministers and Planning Authorities (working with the UK Government where appropriate) have a central role in putting in place mechanisms to increase the use of waste heat and renewable heat sources. Scottish Ministers will need to interact with the Planning System to take steps to increase the use of heat from renewable sources and the utilisation of waste heat.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:
Waste prevention and management plans;
Waste data;
Deposit of recyclable waste;
Procurement of recyclate;
Reduction of packaging;
Deposit and return schemes;
Charges for carrier bags.

What are your views on these proposals?

With reference to the objectives of the Climate Change Bill, SEPA believes that there must be concrete evidence that the waste provisions provide an overall carbon benefit. SEPA would therefore advocate that a full life cycle assessment and carbon impact assessment is carried out in detail before the implementation of each waste provision to ensure they contribute positively towards the overall 80% emissions reduction target.

SEPA gave oral evidence at the Rural Affairs and Environment Committee on 4th February and also submitted a consultation response\(^9\) in October 2008 to the consultation paper on potential legislative measures to implement zero waste.

Further to this, Section 58 of the Climate Change Bill as could expand so that it covers products as well as packaging in deposit return schemes.

A simple but effective example of the benefits of a more flexible approach would be energy efficient light bulbs (one could list many other products that are potentially problematic from an environmental resource and carbon impact perspective e.g. mobile phones and batteries). Energy efficient light bulbs will hit the waste stream in their millions in a few years and therefore provisions for an incentive to the public could help recover their metal, glass and plastic content as well as keep their mercury content, albeit low, out of landfills and energy from waste systems.

SEPA suggest the following approach to widen this potentially useful instrument:

- Make the powers general to any products and inclusive of packaging.
- Ensure the powers can be used for full or partial refund schemes. This will enable either, a full refund on return approach, or a partial refund and part subsidy for recovery approach, which for some potentially hazardous household wastes may be necessary. This is not an uncommon approach to deposit refund schemes. Care would be necessary to ensure retailers cannot pocket part of the deposit. A central clearing house approach would avoid this.

There are clear opportunities to ‘close the loop’ in terms of ensuring that a waste material can be used as the input fuel or raw material for other processes, either within the same overall manufacturing process, or as a valuable raw material for another organisation. This can be achieved one of two routes: (1) within a tiered, proportionate regulatory system that reflects the risks associate with a particular waste or end-use, or, (2) where a case can be made to show that the use of waste materials is no worse than the non-waste equivalent for the environment and human health, as a new product or raw material.

Dealing specifically with the second route, SEPA is relatively unique within the UK as it has provided publicly available guidance on the definition of waste since 2006. Our sister agencies in other parts of the UK are working on their own guidance at the moment but have still not published anything. We supplemented SEPA guidance with specific guidance on the recovery of waste oils in 2007 and it is a piece of guidance around which we have had some success:

- A drilling waste management company recovers waste oil from offshore drilling mud so that it is no longer a waste when it is sent for reuse offshore.
- Working with the Quarry Products Association, SEPA published guidance on the recovery and re-use of road planings as a non-waste. This has reduced the costs and bureaucracy for civil engineering contractors and aims to encourage an approach that ‘closes the loop’ on up to 500,000 tonnes of road planings per year.
- We reached a successful end-of-waste conclusion for a company manufacturing biodiesel from used cooking oil and animal rendering wastes. Smaller biodiesel manufacturers are likely to benefit from a change in legislation in 2006 (i.e. an exemption from the requirement to hold a waste treatment licence) to allow small scale manufacturing under certain conditions.
- We are currently working with the Scotch Whisky Association on a framework document which looks at the reuse of outputs from distilleries in a range of activities, including their use as fuels, animal feed and soil conditioner.
- We are working in partnership with the Civil Engineering Contractors Association to develop guidance on the end-of-waste for clean soils from Greenfield sites.
- We are working with Scottish Power and ScotAsh to consider end-of-waste cases for the uses of the various waste ash streams from coal burning power stations.
- Working with the Quarry Products Association to see whether we can, on the basis of an end-of-waste case, allow the use of recovered waste oils as fuel in roadstone coating plants without requiring compliance with the EU Waste Incineration Directive.

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\(^9\) http://www.sepa.org.uk/about_us/consultations/sepa_responses_200.aspx SEPA’s response in October 2008 to the consultation paper on potential legislative measures to implement zero waste. [Link no longer operates]
Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

The 12 week consultation period provided ample opportunity for SEPA to consider the proposals for a Scottish Climate Change Bill. SEPA organised several internal seminars to discuss the proposal and SEPA’s response was also considered by the SEPA Board in April 2008.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

In our response to the Strategic Environmental Assessment Environmental Report consultation, SEPA welcomed the undertaking of a Strategic Environmental Assessment on the Scottish Climate Change Bill consultation and considered it to be a very comprehensive document that covers the issues in considerable detail and, importantly, identifies a comprehensive range of SEA mitigation measures.

In its original comments, SEPA recommended that a simplified report was prepared to support the introduction of the Climate Change Scotland Bill to Parliament which clearly sets out the key findings and SEA mitigation measures. SEPA noted that this would help inform decision making on the Bill as it progresses through Parliament; such a note was published on 23rd December 2008.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

No comment.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

SEPA believes that, taken as a whole, the provisions and policies to meet the targets should make a strong contribution to sustainable development. The advisory mechanisms established via the UK Committee have, as part of their definition, a requirement to take account of economic, social and environmental issues.

However, the same does not appear to be the case for adaptation measures. Adaptation measures should consider the social and economic impacts as well as the environmental impacts and there may be a case to re-examine section 45 of the Bill.

Q20 Do you have any other comments on the Bill?

SEPA sees the Bill as setting the framework (Part 1 -3) but also facilitating the move towards the ambitious targets required. Part 4 tackles the huge amount of emissions influenced by the public sector and Part 5 could therefore possibly expand to include provisions for mitigation measures in other more carbon intensive sectors.

There are further key areas that Part 5 of the Climate Change Scotland Bill could address.

The transport and agricultural sectors make key contributions to emissions. To reduce emissions from vehicles, there is a need to promote sustainable transport and take into account the carbon impact of new transport infrastructure decisions.

In agriculture, this could particularly look at mitigation measures for methane and nitrous oxide and the need to protect carbon content of soils.

A paper published by National Grid in January 2009, The Potential for Renewable Gas in the UK, noted substantial opportunities from biogas. One of the two main biogas processes is anaerobic digestion. SEPA wishes to see a major drive to stimulate appropriate sectoral and on-farm anaerobic digestion utilising both farm wastes and other sources of waste biomass. This could provide a significant contribution to a decentralised micro-generation energy system as well as diversification for the agricultural sector.
Scotland’s per capita water consumption is increasing in contrast to consumption patterns for other developed countries. Supporting measures to require and/or enable more effort to reduce water demand and improve water efficiency across all sectors would help reverse recent trends for increasing energy consumption associated with the supply of clean water and disposal of wastewater.

SEPA has initiated a discussion with Scottish Water concerning future energy use, recognising the importance of this issue to mitigating climate change. It is clear that existing regulatory needs and drivers will drive increased energy use in water and sewerage management in future, which are incompatible with climate change targets. It is SEPA’s view that radical solutions will be needed in future to avoid this materialising.

The Climate Change Bill should recognise the importance of Scotland’s carbon rich soils, and the need for their effective management. Scotland is in a unique position with a large amount of carbon in peatlands that needs to be protected and managed sustainably. Given the significance of carbon stores to Scotland’s carbon budget (our present carbon “store” is estimated as equivalent 200 yrs of present emissions)\(^\text{10}\) it seems reasonable for Scotland to legislate to protect these stores.

Given the sheer scale of the potential greenhouse gas emissions from land, there seems to be a gap in the range of powers and duties on public bodies to ensure effective management and protection.

Scottish public bodies already have a duty to further the conservation of biodiversity under the Nature Conservation (Scotland) Act 2004 and this would seem to allow Scottish Government to require the sustainable management of peatland via further guidance.

There is an opportunity in the Climate Change Bill Part 5 to emphasise the importance of the carbon stores by including provisions that ensure public bodies consider carbon explicitly when carrying out their duties in protecting Scotland’s soils.

Another way forward may be the inclusion of a duty on Scottish Ministers to issue a national carbon strategy for both peatlands and Scottish soils. The Bill could also include provisions for a statutory consultee in the planning process for soil carbon issues, and provision to enable a body to be given regulatory powers if necessary to ensure effective, sustainable management of soil/peatlands carbon.

\(^{10}\) Bradley et al. (2005) stated that Scotland’s soils contain an estimated 2196 million tonnes of soil carbon, to a depth of 100 cm, compared to a total of 4566 million tonnes for the whole of the UK.
On behalf of the Scottish Food and Drink Federation (SFDF), I would like to thank you for the opportunity to contribute to this consultation process.

In our view, a successful food and drink manufacturing industry is a vital component of a healthy Scottish economy, not least because it generates annual sales of £7.57 billion and exports worth £3.57 billion. It also provides employment for around 50,000 people, that is, one in five of the total Scottish manufacturing workforce.

Achieving Sustainable Economic Growth

We share the Scottish Government’s view that achieving sustainable economic growth should be our key priority. However, underinvestment in Scotland’s infrastructure over a number of years has, to an extent, acted as a brake on the business growth rate. Therefore, SFDF is of the view that Government has a crucial role to play in ensuring the physical infrastructure put in place across Scotland – including the electricity network - is fit for purpose and has sufficient capacity to meet the needs of a growing industry.

Renewable Energy Framework: Addressing Both Sides of the Equation

In recent years increasing energy costs, concerns over the impact of climate change and the nature of Scotland’s climate and geography have combined to give impetus to energy efficiency programmes and promotion of the generation of energy from renewable sources.

Therefore, we welcome the Scottish Government’s desire to develop a renewable energy framework and its ambition to increase the relative contribution of energy generated from renewable sources as part of Scotland’s overall energy mix. However, this is only one side of the equation.

On the other side of the equation – the macro side - an electricity network that is fit for purpose and has sufficient capacity across the whole of Scotland to supply the needs of growing businesses is crucial to the long-term success of our industry.

Therefore, the grid, grid connectivity, funding and planning all need to be addressed as a matter of urgency by the Scottish Government when developing a renewable energy framework if new sources of energy generation are to be harnessed and made accessible across the country.

Infrastructure: An Energy Network that is Fit for Purpose

As already stated SFDF is of the view that it is the role of Government to ensure that a physical infrastructure is put in place that is fit for purpose, has sufficient capacity to meet the needs of industry and facilitates growth.

The reality is, however, that Scotland has an ageing, limited capacity, grid-distributed electricity network which is geographically centralised. The characteristics of this network include weak, low voltage 11kV networks, often supplying small communities and farms or extra urban areas. Conversely, all areas are transmitted by high voltage 33kVA wooden pole transmission lines and >132kVA pylon lines which attract commercially restrictive connection and reinforcement charges.

In recent years this situation has literally applied a brake to business growth in a number of instances due to insufficient capacity in network sub-stations to supply additional power for companies seeking to extend their premises or increase production to meet growing demand.

To date, the only way to resolve this situation has been for companies to pay to upgrade the local network / sub station, adding significantly to business costs and impacting on competitiveness. Indeed, even where companies have been in a position to invest in their own on-site renewable energy generation, the perishable nature of many food and drink products means there is generally still a requirement to connect such projects into the grid in order to guarantee continuity of supply.

Note: The Scottish Food and Drink Federation has also made a submission in respect of waste. This has been published on the Scottish Parliament Rural Affairs and Environment Committee web site. Click here.
Therefore, when developing a renewable energy framework, this situation where the electricity network is developed and upgraded in such a piecemeal fashion cannot be allowed to persist. The Scottish Government needs to take a more strategic approach to development of the network and must ensure the grid, grid connectivity; funding and planning issues are all addressed as a matter of urgency.

The Transition to a Low Carbon Economy: The Contribution of Renewables

The Scottish Government’s aspiration of making the transition to a low carbon economy will not and cannot be achieved through the development of a renewable energy framework alone.

Reducing carbon emissions through the use of renewable energy must be taken in conjunction with a range of activities, including promotion and delivery of improved resource efficiency. In recognition of this, the food and drink manufacturing industry has already taken significant steps towards maximising their energy efficiency through our Five-fold Environmental Ambitions (FEA), which include a commitment to achieving a 20% reduction in CO2 emissions by 2010.

More generally, by analysing power usage, companies can develop a better understanding of where and how power is being used and thereby target savings through efficiency improvements. While this can be used to inform capital expenditure decisions, in today’s uncertain economic climate some companies may require a greater degree of support (advice and funds) from government to make the required investment to cover such initiatives.

With this in mind, SFDF recently secured agreement of all the main business support programmes to provide food and drink manufacturing companies in Scotland with access to a coordinated programme of support and advice. This coordinated programme of support is a significant benefit for our members in the food and drink manufacturing industry as it will assist them in delivering progress towards achieving our FEA.

SFDF would encourage the Scottish Government to promote the delivery of coordinated support and advice to companies and make additional funds available to companies to invest in efficiency savings.

Conclusions

Addressing the range of interrelated energy issues should be high on the Scottish Government’s list of priorities in seeking to develop a renewable energy framework which meets the needs of our industry and contributes to the achievement of sustainable economic growth.

The Scottish Government’s approach needs to strike the right balance between economic, social and environmental factors, in order to secure improvements and progress without damaging the underlying competitiveness of industry in Scotland. It also needs to be more strategic in approach and take into account the grid, grid connectivity, funding and planning in developing a renewable energy framework if new sources of energy generation are to be harnessed and made accessible across the country.

I trust our comments will be taken into consideration, however, if you require further input please do not hesitate to contact me.
The Food and Drink Manufacturing Industry

The Scottish Food and Drink Federation (SFDF) represents the food and drink manufacturing industry in Scotland. The food and drink manufacturing industry in Scotland has a gross output of around £7.57 billion and exports worth £3.57 billion.

SFDF is a devolved division of the Food and Drink Federation (FDF), the voice of the UK food and drink manufacturing industry.

As the largest manufacturing sector in the UK, food and drink manufacturers employ over 500,000 people and have a combined annual turnover of £70bn. UK food and drink exports in 2005 were almost £10bn.

The following Associations are members of the Food and Drink Federation:

ABIM  Association of Bakery Ingredient Manufacturers
ACFM  Association of Cereal Food Manufacturers
BCA   British Coffee Association
BCCCA Biscuit, Cake, Chocolate and Confectionery Association
BOBMA British Oats and Barley Millers Association
BSIA  British Starch Industry Association
CIMA  Cereal Ingredient Manufacturers’ Association
EMMA  European Malt Product Manufacturers’ Association
FA    Food Association
FOB   Federation of Bakers
FPA   Food Processors’ Association
GPA   General Products Association
IDFA  Infant and Dietetic Foods Association
MSA   Margarine and Spreads Association
NACM  National Association of Cider Makers
SB    Sugar Bureau
SIBA  Society of Independent Brewers
SMA   Salt Manufacturers’ Association
SNACMA Snack, Nut and Crisp Manufacturers’ Association
SPA   Soya Protein Association
SSA   Seasoning and Spice Association
UKAMBY UK Association of Manufacturers of Bakers’ Yeast
UKTA  UK Tea Association

Within FDF there are the following sector organisations:

FF    Frozen Food Group
LDT   Lifestyle and Dietary Trends Group
MG    Meat Group
ORG   Organic Food and Drink Manufacturers’ Group
SG    Seafood Group
VEG   Vegetarian and Meat Free Industry Group
YOG   Yoghurt and Chilled Dessert
SNH views climate change as the most serious threat over coming decades to Scotland’s natural heritage. In addition to its environmental consequences, climate change is likely to have major social and economic implications for people in Scotland and elsewhere. SNH aims to understand the effects of climate change on the natural heritage, and to help deliver the contribution that the natural heritage can make in limiting it and adapting to it.

The impact of climate change on Scotland’s natural heritage is likely to be profound, causing very significant changes to our ecosystems and landscapes within a timescale measured in decades. Current indications are that by the 2080s Scotland will be warmer, especially in summer, with snowless winters in some parts; winters may become wetter and summers generally drier. The range of many species and habitats may shift northwards, or up hillsides. However many species and habitats may simply be unable to keep pace with the rates of climatic change, and some species may become extinct.

The most obvious changes in Scotland may be to coastal, marine and freshwater ecosystems. As sea levels rise, saltmarsh and machair habitats will be lost where man-made defences or natural topography prevent them moving inland. In the seas around Scotland there have already been shifts in ranges in algal, plankton and fish abundance. Rivers may become more affected by low flows in summer and by flash floods in winter washing out spawning beds for salmon. Wetlands may dry out in summer allowing woody species to colonise or causing peat to erode with consequences for greenhouse gas emissions.

Flexibility is likely to be key to making sure that infrastructure and land use are resilient to future climate, weather patterns and weather events. The natural heritage has an important role to play by making sure that ecosystems retain sufficient integrity so that they continue to provide essential services, such as flood mitigation, productive land capacity and water supply.

SNH is currently developing a policy statement and action plan on Climate Change and the Natural Heritage. A summary of the draft policy statement is annexed, which describes the main expected impacts of climate change on the natural heritage.

SNH’s key contributions in responding to climate change will be:

• helping to understand and publicise the effects and consequences of climate change for the natural heritage;
• advising on infrastructure and land management practices which help to mitigate climate change;
• guiding adaptation so that nature can, as far as possible, adapt to a changing climate and so that people can make best use of natural processes in preparing for climate change;
• promoting action by organisations and individuals by setting an example in the management of SNH’s own operations, and through our wider environmental education work

Climate change should not only be considered ‘a problem of the future’. Its effects are already beginning to be evident in Scotland. Documented effects include:

• increasing average annual temperatures;
• increasing peak day temperatures (the 24-hour maximum);
• increasing length of the growing season;
• increasing sea surface temperatures;
• rising sea levels from thermal expansion of the oceans as well as melting glaciers and ice sheets;
• acidification of seas from increased carbon dioxide absorption.

We therefore strongly support the proposals for the Climate Change (Scotland) Bill.

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Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

We welcome the 2050 target. As discussed in the policy memorandum associated with the Bill, this is based on the desire to avoid dangerous climate change. However, ‘avoiding dangerous climate change’ is not mentioned in the Bill itself. In contrast, the UK Act (Section 6, 3a) requires that the advice that ministers receive on targets is to be based on developments since June 2000, the date of the Royal Commission on Environmental Pollution report Energy – The Changing Climate, which is referenced in the UK Act. We recommend a similar clause be included in the Scottish Bill, to provide a firm foundation if there should be any need to vary targets in future. The reference to ‘avoiding dangerous climate change’ need not be quantified, as understanding of the thresholds is likely to develop with scientific knowledge.

The target to reduce emissions by 50% in 2030 should be tightened. The overall effect of interim targets should be to achieve marked early reductions in emissions to follow an overall emission reduction pathway like the lower curve in Figure 1 (as discussed in the consultation paper on the proposed Bill during 2008). This approach is consistent with scientific advice that what is most important is the total change cumulative emissions over the period – represented by the area under the curve.

Faster early reduction will help avoid the need for major annual reductions in later years. The Bill proposals for an interim target of 50% in 2030 only amount broadly to achieving a linear pathway between now and 2050. We recommend that a further interim target for 2020 be introduced, set in the light of the recommendations of the UK Climate Change Committee. In our response to the consultation on the Bill we recommended reductions of at least 40% by 2020. If such a target were set, it would put Scotland on track to achieve a 2030 target of 55-60%.

It should be borne in mind that some of Scotland’s emissions may be difficult or impossible to avoid, for example those arising from historical disturbance of peaty soils, including drainage, dehydration and erosion, for example by tree felling and draining certain peaty soils to plant forest. This legacy – arising from earlier land management decisions - could remain as a significant ‘hard core’ of emissions by 2050. Further work is required to establish in detail the nature and amount of such emissions. However, their existence means that emissions from other sectors will have to be reduced by much more than 80% in order to meet an 80% target overall.

An intended overall percentage reduction of only 3% in each of the final years of the period up to 2050 will require a much higher proportionate reduction in ‘controllable’ emissions.

![Figure 1. Illustration of the effect on total emissions over time of different emissions reduction trajectories](source: Consultation proposals for a Scottish Climate Change Bill, Jan 2008, Fig 6)
The targets should avoid relying on uncertain technological advances to secure rapid reductions later on. Where reliance is placed on technological advances (e.g. on carbon capture and storage, nuclear fusion, wave power, hydrogen economy), firm policy frameworks should be put in place, including regulatory controls and expected timescales, to make sure that such technologies are operational by specific dates.

Otherwise there is a risk of lock-in to existing forms of high-carbon infrastructure. In particular we have recently commented that there should be a moratorium on new coal power plant until such time as a firm timescale can be set to implement carbon capture and storage requirements. We think that imposing a requirement for carbon capture readiness – meaning only that there is space on site and that general feasibility studies have been undertaken – is insufficient.

In contrast, there are many practical measures that can be taken now using existing technologies (such as energy management, combined heat and power, electric vehicles, and renewable energy development), and more effective use of measures to help change behaviour and lifestyles. Interim targets should reflect the availability in the short term of these many practical measures.

Finally, we note that Scotland could be a role model for the international community in delivering these challenging targets.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive

What are views on the setting of targets in batches from 2010 to 2022?

We support this approach provided the targets are compatible with the first three 5-yearly budgets recommended by the UK Climate Change Committee (2008-2012, 2013-2017 and 2018-2022). For the reasons set out above, we believe that the annual emissions reductions sought in this period should be higher than the annual emissions reductions sought in the last decade leading up to 2050.

Part 5 of the Bill is limited in scope, covering only selected aspects of forestry, energy efficiency and waste. To give effect to the targets or budgets we suggest that the Scottish Government produce a new Scottish Climate Change Programme, initially covering 2009-2022. The programme should cover all major sectors over which the Scottish Government has direct control, especially:

- Heat;
- Transport;
- Renewable electricity;
- Land use and land use change (including forestry and agriculture).

It should also cover areas that are important to achieving emission reductions in Scotland but are administered by the UK Government or the EU (e.g. emissions trading, product standards).

It would be helpful to develop ‘energy hierarchies’ for energy use in buildings and transport, similar to the well-established ‘waste hierarchy’. These, for example, would give priority to demand management and avoiding energy use, followed by energy efficiency, renewable generation, low-carbon generation, through to higher emission generation as the least desirable. Emissions should be quantified on a life cycle basis. The less that is achieved at the top of the hierarchy, the more infrastructure may be needed to deliver solutions further down the hierarchy, with a likely consequence that there will be more conflicts with the natural heritage and other environmental factors.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.
What are your views on this approach or any possible alternative approaches?

As discussed above, we favour emission reductions that lead to steeper reductions in the early years. We note that the provisions of the Scottish Bill are considerably less demanding over the period to 2020 than those of the UK Act which requires a minimum of 26% emissions reduction by 2020. We hope that the recommendations of the UK Climate Change Committee for 2020, for an ‘interim target’ of 34% and an ‘intended target’ of 42%, can be reflected in the final Bill.

Q4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

We agree with the principle that the Bill should ensure that action to reduce emissions is strongly weighted to domestic effort. We note that the UK Act contains a clause that limits the amount of carbon credits that can be purchased, and that the UK Climate Change Committee recommends limiting this to 10% for the ‘interim target’, so that 90% of the reductions are achieved through domestic effort or elsewhere in the EU.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

We agree with this definition, which is consistent with international reporting obligations. However, we recommend that the Bill also provides for reporting of emissions based on consumption of goods and services in Scotland. This issue was discussed in the consultation paper on the Bill. There is a risk that emissions associated with Scottish manufacturing might fall but only as a result of our importing similar goods from other countries, with the result that global emissions due to Scottish people might increase while Scotland satisfactorily meets its internal emissions targets. Scottish Government should keep itself well informed on such patterns of consumption so that mechanisms and policy measures can be designed to avoid this risk. Tracking emissions based on consumption is consistent with the adoption of ecological footprint as an indicator in the National Performance Framework, so most of the relevant data and information should be readily available.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

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1 The ‘interim target’ of a 34% reduction by 2020 assumes that the EU target to reduce emissions from the EU by 20% in 2020 remains in force. The UK CCC set a more ambitious ‘intended target’ of a 42% reduction by 2020 to apply if the EU adopts a 30% target for 2020, as they have stated depending on post-Kyoto international agreements.
We agree with the approach to rely on the UK Climate Change Committee until such time as there is a demonstrable need for a dedicated Scottish Committee or equivalent body. It may be important to make sure that the UK Committee is resourced so that it is able to present its advice so that it is directly relevant to Scotland (e.g. relevant legal, regulatory, policy and governance context). If there is a need to establish a Scottish Climate Change Committee, it should either be founded as an extension of the UK Committee, or required to work closely with the UK Committee, adding supplementary advice as needed. The composition of any such body should reflect understanding of the impacts of climate change on the natural heritage, and also social aspects of climate change, including both the social impacts of climate change and issues such as facilitating behaviour change.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland's emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

We agree with the proposals. Improvements are required in both the timing and content of the Scottish inventory of greenhouse gas emissions. There is currently a lag of approximately 2 years between production of the UK emissions accounts and disaggregated accounts for the devolved administrations. On the content, we have found major presentational differences in various inventories and reports, for example the treatment of emissions associated with land management and energy sectors, which makes it difficult to compare like with like. It is important that the inventories and reporting of emissions of greenhouse gases inform policy decisions in Scotland. We welcome the development of the Carbon Impact Assessment methodology by the Scottish Government, which should help to remove these discrepancies and achieve better alignment and reporting across economic sectors, relating financial spending and greenhouse gas emissions.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

We welcome these proposals and would be content with any reasonable duties imposed, that is, consistent with the degree of action required to reduce emissions, adapt to the impacts of climate change and making sure that ecosystems retain sufficient integrity so that they continue to provide essential services. As indicated in our opening remarks, we aim to lead by example.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

We strongly support this. As indicated in our introductory remarks and answer to Q1 climate change is already happening and we need to adapt to a changing climate in the future. This means making sure that infrastructure and long term decisions about land management and land use are resilient to future climate, weather patterns and weather events. The natural heritage has an important role to play by making sure that ecosystems retain sufficient integrity so that they continue to provide essential services, such as flood mitigation, productive land capacity and water supply. This requires that approaches to adaptation allow the natural heritage to adapt to changing climate so that it can continue to support the ecosystem functions that help society to adapt. Further details on our approach and recommendations on adapting to climate change may be found in our policy statement and Action Plan on Climate Change and Natural Heritage.

We welcome the Scottish Government’s progress on developing a Climate Change Adaptation Framework and have assisted its development. We understand that after 2012
this will become the reporting and action framework required by the Bill following the first UK Climate Change Risk Assessment, expected in 2011 under the UK Act. We recommend that the Scottish Adaptation Framework should form part of the Scottish Climate Change Programme as suggested in our response to Question 2, so that the Climate Change Programme contains both mitigation and adaptation strategies.

We recommend that the timing of the requirement to report is tightened from “as soon as reasonably practicable” after the UK Risk Assessment to specify a number of months. We welcome the proposals for 5-yearly reporting: a good comprehensive report every 5 years is likely to be of more value than a less detailed but more frequent analysis. It is important that this process stimulates the action required and this aspect of the Bill may need to be subject to similar independent monitoring and scrutiny arrangements that prevail for emission reductions.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are views on this proposal?

We support this. Fire has been part of upland environments for many thousands of years. It occurs naturally as a result of lightning strikes and it is probably also one of the most useful, and oldest, land management tools. Each year, less than 5% of moorland is burnt for agricultural, nature conservation and sport interests to enable the provision of fresh food sources on rough grassland or managed moorland for livestock, game and wildlife, and the management of older vegetation, which can act as a source of fuel for wildfires. However, it is a powerful tool, which needs to be used with skill and understanding if it is not to do more harm than good. If not undertaken at an appropriate time, or according to good practice, muirburn can exacerbate erosion on some slopes and soils, damage peat-forming vegetation such as sphagnum mosses reducing the ability of the bog to sequester carbon, result in fire spreading to the underlying peat leading to severe erosion, cause displacement or death to wildlife, especially birds and reptiles and recolonisation rates. The Muirburn Code sets out the constraints to limit the potential damage to risk of damage to agricultural, forestry, game, biodiversity, landscape, and archaeological assets. Consequently, we recommend that there is a requirement for Ministers to consult with relevant authorities, including SNH, before varying the permitted times during which muirburn may be made. Consideration of changes to the dates of the muirburn season should not be in isolation, on the basis of one possible driver of change. In some cases it may be difficult to disentangle changes attributed to climate change from other factors including land management. Decisions would also need to take into account the extent to which restricting muirburn season would reduce the amount of muirburn undertaken. This may have detrimental impacts on some habitats, including Natura and Biodiversity Action Plan habitats that are maintained by rotational muirburn.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

We support the work that FCS does, and in particular we welcome the way that forest management has developed into a multi-use, public-benefit process over the last 20 years. We strongly support multi-benefit forestry and would regard moves to single benefit forestry, even for carbon sequestration, as a potentially retrograde step. The development of joint ventures for renewable energy projects would be covered by existing safeguards in the planning process, and could be compatible with the delivery of multiple benefits. Some of the income from renewable partnerships could be earmarked to secure continued management of the national forest estate for multiple benefits. We would support this.

The outcomes associated with the proposals to lease-off some forest areas are less predictable. It is possible that management for the natural heritage could be perceived as
being less important in areas leased off. The lease-off could lead to less income for the remaining areas of the national forest estate and therefore fewer resources to support management for natural heritage benefits in those areas. This could lead to a weakened and 'de-commercialised' FCS, less able to lead by example and influence the private sector to undertake positive management for the natural heritage.

Establishing some firm principles to guide any leasing arrangements could reduce the likelihood of such undesirable outcomes:

• In the details of the lease and the use of any income, specify that the income should be spent in producing a balanced range of public benefits, not just carbon sequestration. The range of benefits should reflect the priorities, needs and outcomes sought in the areas that are being leased out.

• Require that the lease should be subject to formal review, for example through forest plans, every 10 years or so. It is extremely difficult to set the details of a lease for a period of 75 years which will cover all future options. For example, 75 years ago the most important use of timber from forestry was for pit-props, and decisions at that time could not have foreseen the management required for recent conservation issues or some of the difficulties associated with that, such as capercaillie leks and deer fences. Therefore, the terms of lease should provide for flexibility to require changed management for changing circumstances.

Q12 TO 16 (energy efficiency, waste, adequacy of consultation)

No comment.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government on the consultation proposals?

We are satisfied with the SEA process conducted by the Scottish Government, and its responses to the comments made by the consultation authorities. Consideration of the Screening Report commenced during pre-consultation stages of the proposals, with a report published in August 2007 and a determination in September 2007. A Scoping Report was published in September 2007, and the Environmental Report accompanied the consultation paper on proposals to introduce a climate change bill in January 2008, with comments invited in April 2008. A revised Environmental Report was published on the Scottish Government website on 4 December 2008, with clear responses to all of the comments made by the consultation authorities and relevant changes to the Bill (as introduced). We consider that the SEA has been a constructive process, adding value to the policy development.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

No comment.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

Despite our strong concerns about climate change and its impacts on Scotland’s natural heritage, we would be concerned if efforts to address it have the effect of narrowing down perspectives on sustainable development away from the broad suite of goals set out in the Scottish Sustainable Development Strategy and in Scottish Government’s 2007 Spending Review, to become overly focused on the single issue of carbon reduction.
Sustainable development has many angles, which are captured very broadly within the five strategic objectives of Government. Measures to address climate change will have to be designed sensitively, and with supporting policies and programmes, if they are to avoid making achieving these five broad objectives more difficult. Higher energy prices without improvements in energy efficiency could lead to greater levels of fuel poverty. Some approaches to restricting car use could make remote communities more fragile. Higher energy costs could affect costs for business. The Stern Review and the UK Climate Change Committee both emphasise the need for integrated policy interventions to reduce the likelihood of adverse outcomes, and both emphasise the long-term costs of failing to make early reductions in emissions: these are issues to be considered and designed around, rather than barriers to taking action on climate change.

We believe the need is to think in terms of what a sustainable low-carbon society that is well adapted to our changing climate will be like in 2020 and 2050, and actively steer Scotland’s development towards that vision. Decisions on major infrastructure will be crucial, as they may set a pattern for decades ahead. That is what is needed if the aspiration of Scottish Ministers is to be fulfilled that Scotland should be a leading nation in dealing with the issue of climate change.

Q20 Do you have any other comments on the Bill?

No comment.
DRAFT POLICY STATEMENT SUMMARY

There is now a scientific consensus that the planet is warming and that the degree of recent changes can be explained only by the effect of human activities. The impact on Scotland's natural heritage is likely to be profound, causing very significant changes to our ecosystems and landscapes within a timescale measured in decades. This statement sets out SNH's perspective on climate change and our role in responding to it.

SNH views climate change as the most serious threat over coming decades to Scotland's natural heritage. In addition to its environmental consequences, climate change is likely to have major social and economic implications for people in Scotland and elsewhere. SNH aims to understand the effects of climate change on the natural heritage, and to help deliver the contribution that the natural heritage can make in limiting it and adapting to it.

Increasing amounts of greenhouse gases in the atmosphere are leading to increasing global average air and surface temperatures, widespread melting of snow and ice, and rising sea levels. The climate is becoming more chaotic with more frequent and more extreme weather events, such as heat waves, heavy rainfall, drought, and high winds. The severity of these problems in particular places will depend on a variety of local factors. Current indications are that by the 2080s Scotland will be warmer, especially in summer, with snowless winters in some parts; winters may become wetter and summers generally drier. The range of many species and habitats may shift northwards, or up hillsides. However many species and habitats may simply be unable to keep pace with the rates of climatic change, and some species may become extinct.

There will always be a substantial amount of natural variability, giving rise to a wide range of weather events and weather patterns over months to years. Flexibility is likely to be key to making sure that infrastructure and land use are resilient to future climate and weather conditions. The natural heritage has an important role to play by making sure that ecosystems retain sufficient integrity so that they continue to provide essential services, such as flood mitigation, productive land capacity and water supply.

Our key contributions will be:

1) Helping to understand and publicise the effects and consequences of climate change for the natural heritage.

There are huge uncertainties over the likely effects of climate change on Scotland's natural heritage, or of how these changes can be influenced or managed. We aim to invest in research to improve that understanding, so as to enable our effort on adaptation to be well targeted.

2) Advising on infrastructure and land management practices which help to mitigate climate change.

We strongly support the need for major global reductions in greenhouse gas emissions in order to avoid a dangerous level of climate change – taken as a 2°C warming - beyond which there is potential for severe disruption of global ecosystems.

A wide range of measures is required, including energy efficiency, the use of renewable sources of energy, more sustainable modes of transport, and encouraging walking and cycling. In advising on such infrastructure, SNH will take into account its benefits in mitigating climate change and enabling adaptation to the impacts of climate change alongside the need to protect the natural heritage. We will advise on how Scotland’s rich renewable energy resource can be harnessed with least impact on the natural heritage.

We will encourage land management which protects the carbon stored in peatlands and other organic soils. These soils represent a very significant carbon reservoir, which if released into the atmosphere would be equivalent to around 170 years of greenhouse gas emissions from Scotland at current rates. We will also support the creation of new woodland with a view to carbon storage where it does not conflict with natural heritage interests.
3) Guiding adaptation so that nature can, as far as possible, adapt to a changing climate and so that people can make best use of natural processes in preparing for climate change.

We will support action to help both society and nature adapt to the effects of climate change. Climate change places new importance on considering the interdependence between species, habitats, and associated natural processes, and the benefits or services that people receive from these. SNH seeks to maintain the resilience of ecosystems so that they continue to provide the services that support human life as well as biodiversity. Restoring natural processes in freshwater systems can help in abating flood risks, and managed coastal realignment can allow natural habitats to provide protection against sea-level rise. Reducing other pressures on ecosystems, e.g. from pollution or habitat attrition, and maintaining diversity, will help nature to be more resilient to climate change.

As the climate changes, many species will need to be able to disperse into new areas where the climate remains suitable – usually northwards or upwards. Improving the connectivity between habitats through ecological networks can help species disperse into new areas. Protected sites will remain important for biodiversity conservation because characteristics such as greater habitat diversity and natural processes will continue to favour high biodiversity. They will also provide source populations and colonising habitat for dispersing species. For species that are unable to disperse, but still have suitable habitat within Scotland, their survival may be assisted by translocations but these can be high risk and costly and are a last resort. We will take a risk-based approach to eradication of invasive non-native species, taking account of both potential benefits and costs of action. For a few species, the effects of climate change may simply result in no suitable climate space in the UK and consequently their extinction.

4) Promoting action by organisations and individuals by setting an example in the management of SNH’s own operations, and through our wider environmental education work.

We will set an example in the management of our own operations. We aim to reduce our greenhouse gas emissions by at least 4% per year. We will work closely with Government and other public bodies to develop good practice and high standards in carbon reduction which can be applied elsewhere within the public sector. We will also review our operations to ensure that our offices, properties and visitor facilities on nature reserves are well prepared to withstand the effects and added risks associated with climate change. We apply sustainability criteria within our procurement processes, relating to energy and resource use, waste minimisation, recycling, and biodiversity impacts. We will encourage others to reduce their emissions too, and to take action to adapt to climate change, through our general environmental education work and by attaching conditions to the grants we give to other organisations.

These four roles will guide SNH’s work in responding to climate change. Our Climate Change Action Plan sets out in some detail the actions we intend to take over the next five years.
The SQA welcomes the invitation from the Scottish Parliament’s Transport, Infrastructure and Climate Change Committee to comment on the draft Climate Change (Scotland) Bill. We have reviewed the draft and are supportive of the Government’s intentions. We support the decision of the Government to seek independent, expert advice on climate change.

We are not qualified to comment on specific and detailed proposals in this important area. We would however make comments on the following specific questions.

**Duties of Public Bodies Relating to Climate Change**

By imposing duties on all public bodies and by giving appropriate guidance this will ensure a fair and even reporting structure across the public sector.

**Energy Efficiency**

By implementing improved energy efficiency of Scottish buildings and introducing measures to encourage population behavioural change, the Bill will go a long way towards meeting its overall emission reduction targets.

With Scotland’s excellent wind and water resource, the establishment of power generated from these and other natural renewable resources will contribute greatly to Scotland’s overall energy efficiency.

**Waste Reduction and Recycling**

A large proportion of the Scottish population participate, through their Local Authorities, in local domestic recycling schemes. This should make the introduction of further waste reduction and recycling measures, both domestically and in the commercial sector, more readily acceptable.
Scottish Renewables welcomes the opportunity to provide written evidence on the Stage 1 scrutiny of the proposed Climate Change (Scotland) Bill which is one of the most significant pieces of legislation ever considered by the Scottish Parliament. Scottish Renewables is Scotland’s leading green energy trade body. We represent over 240 organisations involved in renewable energy in Scotland and include many environmental NGOs in our wider associate membership. Further information on our work and membership can be found on our website – www.scottishrenewables.com

Scottish Renewables believes that the harnessing of renewable energy sources in a sustainable manner provides a unique opportunity to not only tackle climate change but to provide economic benefits to Scotland. The setting of statutory targets to reduce emissions is vital if we are to send the right signals to industry and wider society that significant changes are required to establish a low carbon economy.

However the setting of statutory targets on their own will not deliver the kind of changes needed unless accompanied by strong action that can be scrutinised by the Scottish Parliament. This is why we are proposing a robust supporting framework to accompany the Bill which will involve aligning the consideration of the financial Budget Bill and the financial spending review to the delivery of climate targets.

If Scottish Renewables can be of any further assistance to the Committee, we will be happy to provide further written or oral evidence in support of our statements.

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

Interim point targets will be useful in providing milestones on the way to delivering the 2050 goal, but the primary focus should be on the delivery of the target for the individual carbon budget cycle. The Bill should allow for subordinate legislation to adjust the level and year of any interim targets including the 2050 target. However this provision should only be included if there is an accompanying statutory purpose of the Bill to contribute towards a stabilisation of global average temperature levels at no more than 2 degrees celsius beyond pre-industrial levels. This important aim was adopted by the EU in 1996 and has been repeatedly reaffirmed including at the 2007 G8 conference. It is important that the purpose of the target is explicit on the face of the Bill, allowing flexibility to revise approaches and targets to deliver Scotland’s contribution to the global challenge in the decades ahead. Any proposed change in target levels should be supported by strong scientific consensus analysed and reported on through the UK Climate Change Committee and/or relevant Scottish body.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

The setting of annual targets within batches over a 12 year period is feasible provided the targets are compatible with the first three 5-yearly budgets recommended by the UK Climate Change Committee. The danger in early batches failing to deliver, would result in disproportionate pressures to reduce carbon emissions in a shorter period of time.
The electoral cycle of the Scottish Parliament is likely to provide an ultimate form of scrutiny for governments but detailed scrutiny of the carbon budget must take place in parliament aligned with the carbon assessment of the spending review and annual Scottish Budget Bill.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

The requirement to meet at least 3% annual carbon emissions in the period to 2020 appears to be questionable. There is insufficient explanation as to why the period up to 2020 is aspirational rather than mandatory in setting annualised carbon cuts. The perception is that annual carbon emission cuts of 3% is unlikely. If the Government does not have the confidence that annual cuts of 3% are achievable, then this should be identified and explained now, with a clear understanding that in certain future years the carbon emissions cuts will be considerably greater than 3%.

Q4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

International trading in carbon has a role to play in providing flexibility but could undermine the need to act now in Scotland to reduce emissions across all sectors and to capitalise on domestic renewable resources. There are issues regarding the credibility and regulation of international credits that need to be resolved before they can play a significant role. If they are to be used in the future a strict limit should be imposed and we would support a limit of at least 80-90% of carbon emission reductions being achieved through domestic effort or elsewhere in the EU.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

Scottish Renewables supports the inclusion of a Scottish share of international aviation and shipping. The reality that Scotland is part of an ‘island nations’ and dependent upon air and sea transportation for its people’s travel and exchange of goods cannot be under-estimated. However, there are issues surrounding, for example, the arrival of imports at a Scottish port or airport for onward delivery to a destination outside Scotland (or in the case of goods passing through say from Stranraer to the Cumbrian border) and whether there will be sufficiently robust systems to record the end user of a carbon commodity.
Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

There is a growing body of opinion that the UK Climate Change Committee may not have the resources and/or stretch to provide detailed advice on Scotland-only carbon emissions and the consequences of climate change. Scottish Renewables would support an independent Scottish body, which will work closely with the UK Climate Change Committee and other public bodies such as Audit Scotland, and may incorporate the role of the Sustainable Development Commission in Scotland. With increasing concerns about the need to secure carbon cuts in the first few years of the Bill’s passing, a stronger focus on what is happening and what corrective action should be applied, is more likely to be forthcoming in a dedicated Scottish body.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

The recent experience of minority government in Scotland has resulted in a shift of the balance of power in favour of the Parliament over the governing executive. This is a welcome development and in the current climate suggests that parliamentary scrutiny of carbon emissions cuts would be robust.

However, there is no guarantee that the current political situation will continue any time into the future and there are concerns that majority government can lead to parliamentary committees being less able to openly question the performance of the governing parties.

With this in mind, Scottish Renewables supports the reporting duties as stated in the Bill, but believes that the carbon assessment of individual budget lines in the spending review needs to also be comprehensively undertaken to enable scrutiny from parliamentary committees. There needs to be a form of legislative commitment in the Bill to this approach otherwise a meaningful way of assessing how government spending is directly supporting the delivery of targets will be opaque.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?
Approximately one-third of the Scottish Government’s revenue is transferred to local government and a similar significant proportion funds the National Health Service in Scotland. The Local Government Concordat clearly shows that the Scottish Government has a strong belief that Scottish local authorities have their own responsibilities and priorities to decide upon. However, the difficulties in committing local authorities to delivering Scottish Government policies within the Single Outcome Agreement process, together with Community Planning arrangements having less binding obligations on a local authority area, would suggest that local government will require early direction on their key role in cutting carbon emissions. Whilst some local authorities have made clear and significant progress in both the delivery of policies and services with due cognisance to the impact of climate change, there are too many local authorities who appear to be dragging their feet with the complaint that they are insufficiently resourced to transform their services without additional government funding.

The Scottish Government and COSLA need to work together and urgently on changing this culture and if significant change has not come about within the next 3 years, early implementation of a duty on local authorities and/or other public bodies should be considered.

As much as this might appear as using a ‘stick’, there are ‘carrot’ incentives which the government could consider to encourage a more positive approach to combating climate change including incentives to reduce energy bills and establish locally owned or community owned Energy Service Companies.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

Scottish Renewables broadly welcomes this approach and the experience of the past twelve months in consultation on such matters has been constructive.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

Scottish Renewables does not have a view on this provision.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

The Commission owns and manages a very large estate which is likely to include a significant number of sites suitable for generation of electricity from hydropower and wind. Whilst the Commission has in-house project development expertise it may prove commercially sensible to work in partnership with other players in the renewables industry to realise any potential, especially where it is desirable to promote rapid deployment.
However we believe that the energy generation by any such joint venture should be limited ‘to generate power from wind, hydro and micro power’ and that there is no suggestion that the Forestry Commission would form joint ventures to develop bioenergy projects of any scale. If bioenergy Joint Ventures were proposed, these may allow a situation to arise where Forestry Enterprise Services is effectively selling timber to itself. Real or perceived, serious market distortion in the wood fuel market may arise.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change. 

What are your views on this proposal?

Scottish Renewables is pleased to see that the issue of energy efficiency is included in the Bill, however, we are disappointed that an Energy Efficiency and Microgeneration Action Plan is long over-due. The action plan needs to set out what the current energy demand is and what it needs to be in order to reduce carbon emissions. Setting this out will clearly help industry and the general public to appreciate the scale of the challenge which we face.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?

Scottish Renewables would support moves incorporated into the Bill to require minimum energy efficiency standards to be met within the public and private sectors in Scotland. However, all avenues should be explored, such as using fiscal incentives to reward energy efficiency and/or microgeneration.

The Scottish Government should progress the extension of General Permitted Development rights for air source heat pumps and wind turbine technologies as a matter of urgency, as well as turn its attention towards solutions for tenemental properties.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

In our response to the Scottish Government’s consultation on the draft Renewable Energy Framework, Scottish Renewables set out a rationale of action which would further the promotion and deployment of renewable energy in Scotland.

Whilst we welcome the attention paid to renewable heat in the Bill and the recognition of urgent action in this area there is perhaps a missed opportunity to consider electricity and transport as well. Determined action needs to take place on all three fronts and would be keen to see the Bill promote this with clear, measurable actions from the Scottish Government (see following paragraph for an example).

In terms of the specific wording of the Bill, it could be more detailed by specifying the role of heat in domestic and commercial/industrial sectors and expectations of how each sector will reduce its carbon emissions over a period of time and indicating the powers that Ministers may implement to assist in that transition.
Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas: Waste prevention and management plans;

Waste data;
Deposit of recyclable waste;
Procurement of recyclate;
Reduction of packaging;
Deposit and return schemes;
Charges for carrier bags.

What are your views on these proposals?

Scottish Renewables is broadly supportive of these measures.

Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

Scottish Renewables welcomes the opportunity to put forward the views of its members on both proposed legislation and policy development on specific measures. The consultation process for the Bill has been constructive and encouraging.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

No specific comment at this stage.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

No specific comment at this stage.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

The Bill should have a positive impact on sustainable development as it will reduce emissions and also provide impetus to investment in a low carbon economy.

Q20 Do you have any other comments on the Bill?

The Bill contains highly commendable aspirations as a piece of enabling legislation, however it is the detail of the implementing legislation that will be more important and we look forward to seeing this. The Bill’s efficacy will be whether secondary legislation and government action will achieve the targets which are core of this legislation. There is considerable debate about what to do in the event that targets are not achieved. It is difficult to see how financial penalties against a government would be feasible, however, this legislation is not being enacted in isolation: international, European and UK obligations may come to bear on the performance of the devolved administration in Scotland.

Furthermore, the general purpose of the Bill should be to accelerate government action and delivery in the short term as well as the setting of targets for the long term. This means that areas such as carbon accounting of government action through the Scottish Budget, infrastructure planning, action on renewable energy and energy efficiency, building regulations and such like, are inter-related in making the Bill effective in practice. If the Bill is successful in truly facilitating the climate change proofing of Scottish public policy, then it will achieved far more than other initiatives aimed at mainstreaming core values and principles in Scottish life.
In the time since the Scottish Government was formed in 2007, amid a blaze of expectation for a Scottish Climate Change Bill and the subsequent ‘sustainable’ economic growth strategy, circumstances have changed. The UK Climate Change Act is now in place. Recession has hit most of the developed world and its implications for developing countries have barely featured on our horizon. The progress of the Climate Change (Scotland) Bill through its stages of parliamentary scrutiny may provide an opportunity to look again at how we approach ‘sustainability’ within our economic strategy. Even with the challenges of tackling climate change, Scotland has a strong competitive advantage to develop a low carbon economy, with economic benefits which are in balance with our natural environment and social concerns.
The Scottish Rural Property and Business Association (SRPBA) welcomes the opportunity to provide comments on the Climate Change (Scotland) Bill to the Transport, Infrastructure and Climate Change Committee. The SRPBA represents land managers and rural businesses across Scotland with wide ranging interests including agriculture, forestry, moorland management and tourism. We acknowledge that climate change is a global issue and that ultimately all countries in the world must make a firm commitment to tackling the problem. However, some developing nations are continuing to produce phenomenal amounts of greenhouse gases without due regard to the consequences of their actions. The SRPBA believes that Scotland is capable of leading the way as an exemplar of how to be a clean, green nation. We see Scotland as potentially acting as a model to other countries of how to act effectively in tackling climate change.

The SRPBA recognises that the rural sector is a contributor to greenhouse gas emissions but we believe it also has considerable potential to help mitigate against climate change caused by human activity. It is important for the competitiveness of the rural sector that disproportionate or inappropriate mitigation measures, which result from pressures to reach targets set out in this Bill, do not have an adverse impact on the business activities of our members beyond that which might be considered reasonable to help address areas of significant climate impact. We strongly support measures that enable land managers to contribute positively to carbon sequestration and the development of renewable energy, particularly where these measures can contribute to sustainable rural development and economic growth. The SRPBA was particularly encouraged by research carried out by Scottish Agricultural College (SAC) economists last year who found that farming and forestry could make up to a 25% cut in greenhouse gas emissions by 2020 at very little cost, indeed, some options could actually save land managers money. We are strongly supportive of such win-win situations.

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

The SRPBA recognises the seriousness of the threats posed by climate change at both a national and a global scale. At a national scale, Scotland has been experiencing rising temperatures and more frequent winter storms in recent years which have impacted on the Scottish population, the environment and the economy. At a global scale it has been predicted that climate change will lead to sea level rises, it will have regional effects on crop productivity (it could cause famine in some areas and it could alter the range of agricultural pests), it will potentially increase diseases in some areas and it may also change the composition and range of many ecosystems.

Scientists have warned that climate change is likely to result in sudden and dramatic changes to some of the major geophysical elements of the Earth if global average temperatures continue to rise as a result of the predicted increase in emissions of greenhouse gases. They have identified nine different ways in which the earth could be suddenly tipped into a potentially dangerous state that could last for many centuries, for example, melting of the Greenland ice sheet could result in the shut down of the North Atlantic thermohaline circulation causing dramatic cooling in North West Europe (Lenton and Schellnhuber, 2007). Therefore, the SRPBA is fully aware of the need to act now to tackle greenhouse gas emissions in order to prevent these ‘tipping points’ being reached.

Consequently, we agree that Scotland must take large steps to reduce greenhouse gas emissions. We consider the targets set in this Bill challenging but necessary if Scotland is to make a significant contribution to tackling climate change. Therefore, we agree with setting a 50% reduction target for 2030 and an 80% reduction target for 2050. We believe that the implementation of the Bill will have to be accompanied by a good communications strategy as the 80% target is so challenging that it may put some land managers off trying as it may be perceived as being unachievable.
Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

The SRPBA believes that it is imperative that a balance is found between setting emissions targets sufficiently far into the future but not so far that they become meaningless. We think that significant changes in emissions are likely to occur in steps rather than a gradual reduction over time. For example, large scale renewable energy projects may be allowed to proceed after several years going through the planning process. This may be the case with offshore wind and tidal/wave power. The SRPBA thinks that setting annual targets in batches will help focus government priorities within defined timescales. If this was not the case then successive governments might well put off making hard decisions on the basis that the target timescale is far into the future. Setting annual targets in batches will also help drive research and development into renewable technologies within defined timescales.

The SRPBA is encouraged to see in section 4.4 of the Bill that Scottish Ministers must, when setting annual targets, also have regard for a number of other criteria. We are particularly encouraged to see economic circumstances (Scottish economy, competitiveness of particular sectors of the Scottish economy and small and medium-sized enterprises) and the likely impact of the target on those living in remote and rural communities included in the list of criteria.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

Prior to 2020, the Scottish Ministers will be expected to set annual targets which build towards delivering emissions reductions of at least 3% each year. Cuts of 3% year on year are not statutorily provided for in the Bill until 2020. This signifies that the Scottish Government does not think that a 3% year on year target could be met before 2020. The Scottish Government has calculated that if emissions continued to reduce at 1.23% per year (the average fall between 1990 and 2006) until 2020, then an annual average reduction of 3.95% would be necessary after 2020 to achieve an 80% reduction by 2050. Therefore, the year on year reduction in greenhouse gas emissions after 2020 is closer to 4% than 3% (the percentage quoted in the Bill). The SRPBA believes that it is necessary for the Scottish Government to take action sooner rather than later based on the Stern Review conclusion that to carry on with business as usual would have ‘catastrophic’ financial consequences in the future. The SRPBA suggests that if a target of 3% year on year emissions reductions is not achievable before 2020, then perhaps a lower target of 2% each year should be set. We think that it is not acceptable to carry on for 10 years without having any specific targets in place. It is imperative that progress towards the 50% reduction target by 2030 and the 80% reduction target by 2050 is not compromised.

Q4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?
On the whole, the SRPBA is supportive of the concept of “net Scottish emissions account” outlined in the Bill. We are encouraged that the Bill allows the Scottish Ministers to modify the definition of Scottish removals to take account of potential additional types of removal which may be recognised in the future (Section 15.2).

However, we do have reservations about the provisions made for shipping and aviation outlined in the Bill. Section 14 states that “The Scottish Ministers may, by order, make provision regarding the emissions of greenhouse gases from international aviation and international shipping that are attributable to Scotland”. We acknowledge that aside from scientific issues, international aviation and shipping are difficult problems both politically and methodologically. This is because there has never previously been a need to attribute these greenhouse gas sources to a particular country and the difficulty of attempting this has resulted in international policy agreements such as the Kyoto Protocol ignoring the issue. However, the SRPBA believes that these are important and growing sectors which must be factored into mitigation policies. Therefore we believe that the wording of the Bill should be changed from “Scottish Minister may” to “Scottish Ministers must” take into account international aviation and shipping attributable to Scotland when calculating the net Scottish emissions account.

The SRPBA believes it is important that measures to balance the “net Scottish emissions account” in relation to reduction targets by carbon trading should not be pursued to the detriment of mitigation measures in Scotland. Consequently, there should be a limit on the number of carbon units which Scotland can purchase. We think that Scotland should be encouraged to generate and sell carbon units rather than buy and use them.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

The SRPBA agrees with the definition of Scottish emissions given in the Bill but we feel that emissions from international aviation and shipping attributable to Scotland must also be included in the total.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government's approach to obtaining independent, expert advice on climate change?

The SRPBA believes that Scotland should establish a Climate Change Commission, not a Committee, in order to signify it is not controlled directly by the Scottish Government but is an independent think-tank. We feel that the UK Committee does not have sufficient expertise about what is happening in Scotland or about Scottish structures to give independent expert advice to Scotland on climate change. However, the SRPBA envisages that the UK Committee could provide additional useful advice to the Scottish Climate Change Commission.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?
The SRPBA believes that the reporting process is crucial. Targets set in statute focus the minds of administrations by applying a degree of political, legal and moral pressure, even if financial or legal sanctions are not involved. We recognise that the issue of sanctions for not reaching targets is complicated because the government could end up fining itself.

The SRPBA is supportive of the reporting mechanisms outlined in the Bill which require Scottish Ministers to: (1) lay an annual report before the Parliament giving details of Scotland’s emissions, (2) lay a report before the Parliament setting out proposals and policies for meeting current and future annual emissions targets, (3) if the net Scottish emissions account exceeds an emissions target they must lay a report setting out the proposals and policies by which they intend to compensate for the excess emissions and (4) final statements for 2030 and 2050.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

The SRPBA agrees that the Scottish Government must be able to impose duties on public bodies in relation to climate change, issue guidance to those bodies and require that they report upon the discharge of those duties. We feel that without clear defined duties, public bodies may fail to take appropriate action which might place them out of step with the government. Therefore, we are supportive of the proposals outlined.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

The SRPBA believes that if the Scottish Government is to produce a report about how Scotland can adapt to climate change it must avoid the use of buzz words and phrases as found in the “Adapting our ways: Managing Scotland’s Climate Risk” consultation paper.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

No clear indication is given about whether Scottish Ministers will be inclined to make the muirburn season begin earlier/later or finish earlier/later and whether the season will be longer or shorter and the SRPBA cannot support such an open ended proposal. If the burning season was shortened this would inevitably result in a reduction in burning leading to an increased risk of unplanned fire in the summer months fuelled by larger quantities of old, dry vegetation remaining on the hill. Consequently, carbon storage within the peat would be threatened and this is at odds with the Scottish Government’s desire to mitigate against climate change.
Based on current understanding of climate change and its effect on moorland there appears to be no strong evidence that the current dates for muirburn need to be varied. The SRPBA maintains that issues associated with changing weather patterns and concerns over controlling fires in difficult conditions or burning when the ground is too dry can be addressed though stricter adherence to The Muirburn Code. The SRPBA supports the view that not enough is known about how long-term trends in climate will affect muirburn and therefore we are not convinced that, at this stage, additional powers for Ministers are required. It is also difficult to see how changes in permitted dates on a Scotland wide basis would be appropriate given there is so much local variation in terms of weather conditions, fauna, vegetation and many other site-specific or environmental factors.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

- The SRPBA is supportive of joint ventures and believes that they represent an excellent opportunity for FCS to participate more fully in reducing greenhouse gas emissions in Scotland. The money raised from joint ventures would be invested in future tree planting to achieve the government’s other target of 25% woodland cover by 2050. They would create new jobs which would come at an appropriate time given the current economic climate. FCS can provide land and management expertise while the other partner(s) can contribute their experience in overseeing renewable energy projects. Therefore, successful joint ventures are achievable.

- The leasing proposal is much more controversial. So little detail is given about the proposal that it is difficult to either support or reject it as it stands. We do not agree with the leasing proposal outlined in the consultation paper for a number of reasons:
  o It is understood that the most productive areas of forestry would be leased and therefore where will the money come from to fund the environmental, recreational, educational and research work currently carried out by FCS?
  o FCS has a long tradition of supporting processing industries by guaranteeing supplies and thus maintaining timber flows to the timber industry. It is not clear how this could be assured with a commercial operator.
  o We have reservations about one company leasing such a large proportion of forestry in Scotland. This could create an imbalance in the timber market and potentially cause problems for the timber trade.
  o There is no guarantee that the money raised from leasing would be put back into the forestry sector.
  o Any lease arrangement that attempts to ensure that the public’s interest in the national forest estate is retained is likely to be very complex, possibly not 100% effective in the long run and very expensive overall.
  o A 75 year lease does not relate to rotation length and this may lead to the demand for a lease roll over or sale of land.

- The SRPBA has concerns about the proposed not-for profit trust competing head on with the private sector for afforestation sites. The trust could initially have a very large sum of money to play with depending on how the rent will be paid. It has not been clarified whether the rent would be paid upfront in a lump sum or if it will be paid annually. If the former is the case, this could represent a problem to other growers in Scotland. We also object to the transfer of the landlord’s interest in leased national forest estate land to a not-for profit trust. Overall control must be maintained by Scottish Ministers to ensure all activities and their impacts remain in the national interest and are accountable to the Scottish people through parliament.
• We suggest that planting by the private sector would increase to meet government targets of 10,000ha/yr if changes were made to the Single Farm Payment. There are costs and risks involved with planting trees on bare land whereas one can let that land remain bare and receive money for doing so in the form of a Single Farm Payment. Reform of these rules would remove one barrier to increasing planting.

• Additionally, the SRDP needs to be simplified to make money more readily accessible to growers. Private owners and investors have not lost their appetite for planting, as demonstrated by the large oversubscription to the Ayrshire locational premia under the old SFGS. In short, if the incentive is present, the private sector will provide the forests.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

The SRPBA welcomes the production of such an action plan but it must be designed to take account of old rural properties, recognising that they are very difficult to make thermally efficient. We would particularly support an action plan that identifies support and incentives available for upgrading Scotland’s housing stock.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government's thinking in this area.

What are your views on this approach?

The SRPBA is supportive of owners of non-domestic buildings receiving guidance to improve energy efficiency. However, we do not agree that owners should be legally required to develop a programme of cost-effective improvements to reduce emissions and improve energy efficiency unless financial assistance is made available.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

The SRPBA agrees that measures should be put in place to incentivise the production of heat from renewable sources. We promote the use of woodfuel as a carbon neutral fuel which is more environmentally sustainable than fossil fuels. We recognise that woodfuel heat systems are more effective when they are located close to a wood supply, otherwise carbon emissions will be incurred during transport. Therefore, we encourage the use of local woodfuel supplies where this is possible.

However, the SRPBA believes that there seems to be a bias in the Bill by singling out renewable heat and not mentioning renewable electricity and transport. Emphasis needs to be placed across all three sectors in order to meet the ambitious 2050 target.
Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

- Waste prevention and management plans;
- Waste data;
- Deposit of recyclable waste;
- Procurement of recyclate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

What are your views on these proposals?

The SRPBA considers all of these areas vital to achieving the emissions reduction targets set in this Bill. We believe that the Scottish Government should make funds available to Local Authorities and/or private enterprises to capture and utilise methane from existing landfill sites and to build and operate anaerobic digestion plants or incineration plants to produce energy from food waste, fallen stock and other non-recyclable waste. Funds should also be made available to encourage the setting up of local ventures to deal with recycled materials including glass, plastic, electrical and other wastes. Incentives often prove more effective than regulation but enabling regulation should remain an option.

Q16 What are your views on the adequacy of the Scottish Government's consultation in advance of publishing the Bill?

The consultation was adequate.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

No.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

No.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

The SRPBA believes it is important that the measures to combat climate change in Scotland are proportionate to the impact they have on a global scale. While we acknowledge the importance of reducing Scotland’s greenhouse gas emissions, we must stress that it is also necessary to ensure that Scotland’s business competitiveness is not compromised disproportionately. It is essential that fragile economic activities are not adversely affected in the quest for greenhouse gas emission reductions, particularly in rural areas. The SRPBA believes it is imperative that efforts to reach reduction targets are backed up by support and initiatives which focus on the economic opportunities presented by climate change, rather than focusing on regulation.

Q20 Do you have any other comments on the Bill?

No.

References
INTRODUCTION

Scottish and Southern Energy welcomes the opportunity to comment on the proposed Scottish Climate Change Bill. SSE is headquartered in Perth, is Scotland’s largest company and employs over 17,000 people. SSE’s core purpose is to provide the energy people need in a reliable and sustainable way; it has set out an investment plan to 2013 of over £3 billion in renewables with much of that investment intended to be in Scotland, representing a timely boost for the Scottish economy. By 2013 SSE intends to have doubled its renewable energy portfolio in the UK and Ireland to 4000MW, maintaining and extending its current lead as the biggest renewable energy generator in the UK, and has set a sector-leading target of reducing the carbon intensity of its entire power generating portfolio by 50% by 2020. By reducing exposure to increasingly volatile prices for fossil fuels in international markets for energy, Scotland should enjoy a long-term benefit from more indigenous energy produced from renewable sources.

This piece of legislation is of the utmost importance and it is vital for the economy and the wellbeing of the people that we get it right. We strongly support the 80 per cent target by 2050 - but long-term targets are no substitute for short-term action.

DELIVERY

Debate on targets must not be a substitute for, or distraction from, adopting accompanying policy delivery actions. The Ministerial foreword to the initial bill consultation document contained ambitious commentary on the issues: now it is time to translate that commentary into DELIVERY, to ensure that ambitions are realised. It is imperative that Scotland puts in place the accompanying actions and policies to achieve the targets and that the legislation drives specific actions by industry, organisations, individuals and government at all levels.

ACCOUNTABILITY

It is also important that government action to meet targets is closely monitored and that Ministers are genuinely and transparently accountable to parliament on an annual basis for progress. They should be required to demonstrate the progress made in the relevant areas of public policy - such as in renewables, planning, energy efficiency, transport, housing and transmission infrastructure for example - to ensure we don’t do too little, too late. Although some early measures may take time to deliver the output of emission reduction, action plans should specify when emissions are expected to be reduced in each sector as a result of the action taken so that appropriate assessment and accountability can take place.

CLIMATE CHANGE: A PRIORITY ACROSS GOVERNMENT

The question of where climate change sits in a hierarchy of priorities for government agencies and departments is also a crucial question – one which does not appear to be specifically answered. This may be an issue for the duties, aims and objectives of SNH and SEPA, but equally, prioritisation cuts across all government departments and agencies as well as local government, their local plans and approach to developments. According to the Ministerial foreword when the Bill was introduced ‘Climate change will change the world we live in. As a society we are at the cusp choosing which world we will pass to our children: a greener, sustainable economy, or a world where mass deaths from droughts, famines and storms and extinction of species is the norm.’ All of Scotland’s environmental legislation, including duties which govern the agencies on a statutory basis, needs to reflect this.
Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

SSE supports both as minimum targets.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

In principle SSE has no objection to the grouping of annual targets into batches, as long as the batches are framed within timescales that are consistent with political cycles so that no government will ever be able to revert to the 'not in my term of office' syndrome. The original proposal to set budgets over 4 or 5 year periods makes more sense than a budget to 2022 from 2010. In addition, annual scrutiny of progress towards targets would naturally be referenced at 3% minimum. However, to set one budget for 12 years may allow far too much leeway to project action into the future instead of the early action that is required. The targets and budgets should of course, be aligned with UK and International targets

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

The targets and framework should be set consistent with international, European and UK commitments, and on a per capita basis, to be aligned with the scientific recommendation of what is needed to keep global average temperature increase to below 2 degrees Centigrade. Early action is needed and it should be possible, if not obligatory, for the government to set the direction and expectation that we must reduce emissions early, regularly and urgently.

Q.4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

SSE believes that the Scottish Government should encourage action to be taken which aims to achieve the majority of carbon reduction from Scottish source emissions. SSE also believes that trading has an important role to play in tackling global climate change and should not be artificially restricted. However, measuring the effort undertaken in trading schemes can be complicated and for the EU ETS will differ depending on what allocation methodology is used - increasingly the EU will be moving from allocation to a fully auctioned system.

(Where emissions are grandfathered or benchmarked, the effort undertaken by an installation can be calculated by comparing actual emissions against allocated allowances in the same time period. Where allowances are auctioned effort can only be measured in aggregate by comparing the total number of allowances issued in the auction against actual emissions) For this reason it is more important that the Scottish Government creates the right policy framework to ensure that significant action is taken across all sectors, than that effort is expended on complicated formulae for calculating and monitoring the impact of national and international emissions trading schemes. SSE favours a mechanism in the Bill that will oblige government to deliver 80% of the pollution reduction from Scotland. The UK Climate Change Committee has recommended a set of figures up to 2020 that specifies domestic, traded and credit purchase. This amounts to a 34% cut predominantly through domestic emissions reduction, and 42% total through domestic emissions reduction and credit purchase. SSE would support the adoption of this model for the purposes of both consistency and effectiveness.
Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

The term ‘attributable’ as a definition may be problematic to assess precisely, but in general a ‘rule of thumb’ approach may be better than attempting to achieve perfection. However, it should be noted that rather than cut emissions over the last 18 years, most of the substantial cuts have simply been exported – for example in closing steelworks and then importing the same product from overseas. It is still Scottish demand that is causing the emissions made elsewhere, and therefore this is an important factor in assessing pollution caused by people in Scotland.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

SSE agrees with this approach. Additional advice to the Scottish Parliament will be needed when it scrutinises government action, and we would suggest that additional effort needs to be considered, perhaps with the joint efforts of both the Scottish Sustainable Development Commission and Audit Scotland.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

SSE would broadly agree with the arrangements for scrutiny, but it is vital that the parliament plays a scrutiny role across portfolios similar to the way it operates in relation to the Budget process. Action is needed in every sector. Reporting and Scrutiny will need to do the same. Indeed, assessing the carbon budgets in relation to the finance budgets in a conjoined manner would help the process greatly. Ministers must be accountable for their actions. The process of parliamentary scrutiny enables the successes or failures of political action to be felt keenly in the political arena. With financial or legal sanctions on Ministers being generally difficult to impose as a form of punishment for failure, the key driver for failure or success is Ministerial credibility. Parliamentary committees also reflect a diversity of political parties and would be relatively independent. Ministers would present a report on their ACTIONS and the IMPACT of those actions, as well as reporting the quantified emission levels.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

All public bodies should be given a general duty to have regard to the targets when carrying out any of their public functions and this could be done on the face of the Bill. For example, Local Authorities, SEPA and SNH should have a duty to have regard to the targets when considering low or zero carbon and supporting infrastructure proposals. Given the scale and influence of the public sector in Scotland, SSE also agrees that there should be enabling powers incorporated into the Bill which can be brought forward as secondary legislation at a future date. Local authorities and the private sector may benefit from the universal application of policy measures and setting expectations as early as possible. Many of the potential requirements on local authorities for example, could include: a duty to meet specific targets and a duty to consider climate change impacts through all public procurement and planning. Carbon budgets could be set by the same teams that set cash budgets across all sorts of public and private bodies. This will ingrain the concepts. Best Value guidance ought to incorporate climate impact criteria, so that procurement helps deliver cuts in emissions. Although ‘sustainable development’ is reflected to some degree, specifying emissions is likely to be more effective, reflecting a priority and be more easily quantifiable.
Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

SSE broadly supports this approach.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

No specific view.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

SSE broadly agrees with the proposal subject to some conditions. As stated previously, all of Scotland's agencies and public bodies should play their part in delivering action on climate change. In principle, the possibility of private and public ventures making maximum use of Scotland's forest estate to deliver renewable energy solutions should be advanced. Concerns over the long term stewardship of Scotland's forest resources have been raised by a number of stakeholders since the launch of the consultation. Some of these concerns, where appropriate, could be addressed through the framing of leases, contracts and management conditions. SSE would readily participate in discussions with other stakeholders to ensure that the twin objectives of sustainable use and management of forestry resources and the delivery of renewable energy solutions are delivered.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

An action plan on energy efficiency is long-awaited, and welcome. The action plan should also set out emission saving targets through energy efficiency and assessed as part of the scrutiny process. Rapid delivery of insulation and energy efficiency measures is vital. SSE supports an area-based approach to rolling out a nation-wide programme of energy efficiency and insulation measures. We were delighted to see cross-party support for this approach in the recent vote in parliament which “calls on the Scottish Government to consider a comprehensive and fully funded Scotland-wide scheme on this scale to provide energy audits, insulation provision and financial support for micro-renewables where appropriate.” SSE also supports the energy assistance package proposed by the Fuel Poverty Forum.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government's thinking in this area.

What are your views on this approach?
SSE would support moves incorporated into the bill to require minimum energy efficiency standards to be met within the public and private sectors in Scotland. Given that existing homes will still constitute two thirds of the total housing stock by 2050, a major focus of public policy change should be in improving the fabric and performance of building stock. All avenues should be explored, such as using local and national tax incentives to reward energy efficiency or microgeneration. Just as the local government finance deal has delivered an incentive for local authorities to freeze council tax levels, similar conditions on funding allocations to local authorities could be considered. Measures to incentivise local authorities to deliver emission reductions and specific climate-friendly actions such as through procurement strategies, renewable energy development plans and energy efficiency initiatives. Business rates in respect of renewable energy developments such as wind farms could be payable directly to the local authority in which the wind farm is located for example. Permitted development rights could be incorporated in the bill to enable easier installation of low-carbon and renewable devices on buildings.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

SSE broadly supports the Scottish Government’s nominal target of 11% renewable heat by 2020. This is clearly a challenging target but given the 14% target at the UK level we should perhaps revise this upwards to ensure consistency across the country and ensure Scotland is playing its part. It will require significant developments in energy efficiency as well as in renewable heat technology deployment. Whilst we acknowledge that the bulk of heat use is in the domestic sector, there is significant potential renewable heat deployment in the industrial and commercial sectors and this should be given sufficient weight in policy development. The economies of scale are greater in industrial and commercial uses of heat and there may also be greater potential for closed loop waste to energy systems in these sectors. We also note that the carbon intensity of heating fuels is higher in these sectors, thus delivering better carbon savings per pound of investment in renewable alternatives An incomplete appreciation of GSHP capability may also lead to an underestimate of its potential contribution. It should be noted that the GSHP industry has ambitions to install 100,000 installations per annum across the UK. GSHPs are also a viable option for community based district heating schemes and this should be suitably incorporated into government action planning. Cooling needs to be considered alongside heat, for both mitigation and adaptation reasons. We would challenge the recent assertion in the Scottish Government's renewables pilot that appears to back Air Source Heat Pumps, not GSHP. We believe the reference data and costs associated with GSHP used in the pilot is out of date and does not incorporate significant gains in cost and output efficiencies and its highly effective application in specific circumstances. We recommend the government revisits this. The UK RES consultation suggests that 7.3million UK homes will be required to install solar thermal technology by 2020, to contribute to a 14% renewable heat target. Although capital costs are high and payback periods long, SSE believe that mass installation of this proven, easily installed technology will be necessary in order to meet any renewable heat target. The scale of the renewable heat target must not be underestimated. It is imperative that all sources of renewable heat are considered and deployed where best suited. If Scotland is to meet its target, then it must ensure that the conditions ensure that all renewable heat technologies can flourish. The cost of this challenge should not be undervalued. The Enviros report used as a foundation to BERR’s UK RES consultation estimates the cost to overcoming the barriers to achieve 10.5% renewable heat is nearly £8billion; on a population share, Scotland’s share would be £700million. Above all else, Government and stakeholders must develop a strategy for mass deployment on this scale in order to succeed.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

Waste prevention and management plans;
Deposit of recyclable waste;
Procurement of recylcate;
Reduction of packaging;
Deposit and return schemes;
Charges for carrier bags.

What are your views on these proposals?
Broadly supportive of these measures.

**Q16** What are your views on the adequacy of the Scottish Government's consultation in advance of publishing the Bill?

Generally positive, there appears to have been significant effort deployed at engaging with stakeholders and the wider public.

**Q17** Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

No specific comment at this stage.

**Q18** Does the Bill raise any equalities issues you would wish to highlight?

No specific comment at this stage.

**Q19** Do you have any comments on the impact of the Bill on sustainable development?

The Bill should have a positive impact on sustainable development as it will reduce emissions and also provide impetus to investment in a low carbon economy.

**Q20** Do you have any other comments on the Bill?

The overall purpose of the Bill should be to accelerate government action and delivery in the short term as well as the setting of targets for the long term. This means that areas such as renewable energy planning, upgrading of the electricity transmission system, the National Planning Framework, the Marine Bill and the formation of Marine Scotland, a Heat and Energy Efficiency action plan, etc are all crucial components and factors that will determine the effectiveness of the Climate Change Bill. This leads to the conclusion that the scrutiny of the bill must also focus on the effectiveness of these delivery mechanisms and associated action plans, and emission reductions across the different sectors for it to be meaningful.
Scottish Water Response to the Call for Views on the Climate Change (Scotland) Bill by the Scottish Parliament Transport, Infrastructure and Climate Change Committee

Introduction

We welcome the opportunity to provide evidence to the Committee on the proposed Climate Change (Scotland) Bill. During 2008 Scottish Water issued a detailed response to the consultation on earlier proposals for this bill setting out some of the challenges for the water industry in addressing climate change.

We are pleased to see additions to the current bill that take account of the need for adaptation. We believe that it is useful and necessary for both adaptation and mitigation to be considered together within the bill. The Flooding Bill promotes multi-agency approaches and surface water management planning and is an example of the sort of partnership approach across wider aspects of climate change adaptation – the requirement to produce a programme must be seen in the context of partnership.

General Statement

We are fully supportive of the aims and ethos of the bill. We understand the scientific basis on which the targets are decided and also the moral responsibility for developed nations to demonstrate leadership on this issue. Our vision is that Scottish Water always demonstrates responsibility in delivering its duties.

The water industry is at the forefront of climate change. We depend on a healthy environment for reliable, good quality water to treat and supply to customers. Further, we act to protect the aquatic environment by treating and safely returning society’s wastewaters without causing flooding or pollution. A changing climate challenges the provision of these services.

In respect of carbon it must be recognised that the water industry is an energy intense sector. The challenge of meeting public health and aquatic environmental quality imperatives has seen a step change in technology in recent years with the advent of tertiary wastewater treatments, membrane technologies and UV disinfection.

Rising Energy Demand

It is estimated that the £4bn we will invest between 2002 and 2010 to meet service, health and aquatic environmental imperatives will increase energy demand by 2.5% per annum. However, backtracking on quality is not an option. We need a good quality environment and we are a critical service supporting a healthy Scotland.

Legislators in Scotland and Europe collectively need to recognise that future quality enhancement must be balanced by holistic assessment of the net benefit or cost. Local enhancement must be considered in the context of the global impact from potential emissions increase.

There is a need for a full review of legislation written in a “pre-carbon” era to identify unintended carbon consequences from EU, UK and Scottish Law. Full carbon assessment should be demanded of all new legislation. Implementation of legislation must consider the wider impact and whether there are policy mechanisms etc by which carbon can be mitigated.

A Scottish Water Climate Change Strategy

Our strategy commits us to be proactive on behalf of customers, to seek to understand the impacts and secure service in a changing climate and to contribute appropriately to carbon mitigation by reducing our energy demand, becoming more efficient and generating renewable energy.

On adaptation we have taken steps to identify the work that will be required to properly assess the risk and respond appropriately. Our intention is that prior to physical investment we will work in partnership with others to understand the service risk, the timeframe over which impacts may be felt, and the response necessary to secure service. This will ensure we commit expenditure as efficiently as possible.
On mitigation, Scottish Water is committed to carbon management and to the production of annual footprint reports of operational activities. Our current footprint is circa 470,000 tonnes CO₂ equivalents. We have been a leading influence on the development of carbon assessment tools in the water industry, in particular to examine emissions associated with investment planning.

We are presently exploring tools that will support the assessment of the “whole life” carbon impact associated with investment planning. This may help ensure that future decisions properly accommodate the need to report, manage and reduce carbon.

We generate up to 5% of our electricity demand from renewables (predominantly hydro), and have assessed our capacity to increase this as part of our mitigation measures. We are currently developing a 'Carbon Attainment Plan' that seeks to identify the contribution that each part of Scottish Water needs to make towards managing carbon – making carbon part of ‘business as usual’.

**Specific Points**

**The 2050, and interim 2030 carbon targets**

We recognise the scientific basis on which the 80% reduction is predicated, and agree that a trajectory to achieve 80% by 2050 requires a challenging interim target. To do otherwise risks back loading action on emissions reduction, increases the risk of failure to achieve the target and allows a greater net emissions over the period. For this reason, it is sensible and right to introduce an interim target that would allow all sectors to begin planning their carbon management approaches.

We believe that a genuine multi-agency approach is required to agree and secure the necessary actions and funding to deliver emissions reduction cost effectively across all sectors of the economy. To do this will require significantly increased focus on the carbon abatement costs across the economy in order that attention may be focussed on areas where there is greatest opportunity and efficiency.

**Annual Targets and Carbon Budgeting**

The setting of annual targets that are appropriately scoped and costed presents a significant challenge to Scottish Ministers. This builds on the issue raised above, namely that greater clarity is required on the ability of the Scottish economy to make emissions reductions that will both contribute meaningfully to the long term goals, and do so in a manner that is both cost effective and equitable.

During our earlier consultation response, we expressed the view that clear budget periods over 5 years, with sufficient lead time would be necessary, and that a degree of flexibility in balancing budgets is required. This is because our industry has extremely long lived assets, 8 year objective setting periods and 4 year regulatory investment plans. We need sufficient sight of budgets and the implications for Scottish Water in order to make appropriate plans. The ability to vary targets annually, along with the significant work required on cost effectiveness brings a degree of uncertainty to the process.

Annual targets offer a useful profile within a budget period, but we believe it is more important to produce longer term budgets that will cost-effectively drive the right opportunities and contribute to the overall trajectory of emission reduction.

**Public Sector Duty**

The public sector is a diverse range of organisations with differing carbon impacts and reduction opportunities. It is imperative that we consider (1) emissions associated with a public body in delivering its duties, and (2) emissions from third parties that are ‘caused’ by the public body – the public body’s unintended impact on carbon in the wider economy through policy, legislation, planning decisions etc.

With respect to the operational emissions of a public body, an appropriate duty would require organisations to report carbon performance regularly, and develop carbon management plans that demonstrate how carbon is being ‘mainstreamed’ throughout its operational practices. Such a plan may be submitted for approval by the sponsor unit which would itself have a duty to mainstream carbon thinking across its remit. Periodic review of progress against the plan may then follow.
It is unrealistic to expect all public bodies to default to the same trajectory as the proposed targets. This is because each body will have a different mitigation capacity. The key focus must be on cost-effective reduction to ensure that tax and water charge payers get value for money for carbon abatement.

With respect to the carbon consequences of legislation, policy or decisions made by public bodies we believe there should be a duty to consider how, in the course of its activities, seemingly unrelated policies or decisions may drive unintended carbon consequences elsewhere in the economy.

Carbon management is interconnected with all parts of the economy and a multi-agency approach with government, regulators, authorities, NDPBs etc, to take account of the degree to which their decisions impact carbon emissions.

We believe that building the right carbon management tools to encompass whole life costing of carbon will allow us to see the most cost effective means by which carbon could be reduced. Added to which, proper evaluation of the capacity and cost efficiency of investment in renewables across public sector and cost efficiency will enable the identification of suitable carbon mitigation goals.

Adaptation

We are pleased to note the provisions for laying a programme for adaptation before Parliament. We believe that only through multi-agency partnerships particularly those associated with critical national infrastructure will we successfully integrate policy and action towards securing a well adapted Scotland. We are committed to continuing to work with Government and stakeholders toward achieving this.

Waste Management

Through our waste management facilities in our non-core business “Scottish Water Horizons” we have significant green waste composting and recycling capacity that we are looking to expand. We believe that there is scope to streamline the regulation surrounding such activities to promote sector expansion and the inclusion of carbon beneficial activities such as Combined Heat and Power units.
This is the response of SIMPAC LTD to the 20 questions you have requested views upon as follows:-

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

A1 The baseline against which these targets are being measured is either 1990 or 1995. Are these baseline numbers already available and if so where can they be found? That is critical for measurement purposes and the public must be told of them.

These targets are unrealistic and unattainable, without a huge ongoing tax burden on the people of Scotland and it would require a ridiculous and impossible commitment from politicians who will all be out of politics long before the final deadline in 2050. We have not and will NOT meet our meagre Kyoto Protocol targets which were at least realistic and attainable had we made a concerted effort so to do. No smug kudos for saying "we've done our bit" if the majority of the world ignores their part. Africa, Asia, and India represent more than 50% of the world's population and they will not allow us to stifle their economic revolutions. Furthermore it is naive of us to expect them to do so.

No other country has undertaken such a target as Scotland has proposed and whilst it might massage egos to think that we will be the leader in this field, all it will do is further denude the country of manufacturing industry, make Scotland uncompetitive, and create no appreciable difference to the alleged 2 degree rise in temperature which some experts THINK might be the extent of climate change over the next 100 years.

One part of this Bill (see section 15 below) will INEVITABLY INCREASE CO2 AND METHANE EMISSIONS yet it is included in a Bill to REDUCE such emissions. This is by no stretch of the imagination clarity of thinking, by introducing a Bill which in part will INCREASE the problems it is intended to solve.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

A2 This is nothing more than a cop out. The lack of attaining the Kyoto targets should attest to that. A 12 year target with internal batching of say every 3 or 4 years with the Parliamentarians and/or Government changing every 4 years looks like a recipe for "blaming the previous administration politics" to me. If you are truly serious set annual targets and have the infrastructure in place to measure the effect against these targets so that within 2 months of the end of a year we, the public who would have to finance the reductions in emissions can truly judge their effectiveness. That gives the public a running total for the 12 years and your efforts can be measured against that and the voters can vote accordingly. Furthermore if other countries don't comply then we should not be boxed into set targets which the majority of the world's population is ignoring.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

A3 Refer back to answer 1. This is a totally unrealistic approach, wonderful in conceptual pie in the sky thinking, but unattainable. It is impossible to plan more than the length of one Parliamentary term as unforeseen circumstances WILL occur, just as today, we have the credit crisis which is making a mockery of attempts to increase consumption whilst reducing emissions.
This is simply posturing and should be kept out of the Bill so that we are not internationally ridiculed.

Q4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland...

A4 You can massage figures as much as you wish, buy or sell carbon units as much as you want but the reality is it won’t make the any significant difference to the level of emissions in the world. We represent about 0.07% of the world’s population. China and India represent together 37%. China has, for the past 3 years and for the next 2, been building and commissioning at least 2 new coal fired power stations every week. The Chinese public want heating in the winters and air-conditioning in the summer – we in the West have it, why shouldn’t they? The people of India, who are industrially presently well behind China, dream of their electric washing machines and their petrol driven Tata motor cars rather than walking to work, and they all want to have running water and hygienic toilets. Power generation gives them all of these Western conveniences and the consequent greenhouse gas emissions from power stations are the least of their Government’s concerns, however much they posture about their green credentials when talking to the West. Rightly, their Governments are more concerned about avoiding revolution and reducing hunger, poverty and disease, all of which will be helped enormously by industrialisation and employment.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

A5 This seems reasonable

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

A6 The key to this question is “independent, expert advice”. Let’s ensure we understand the facts and not the current hype of the type of the now totally rejected Al Gore form of political misinformation. It would seem reasonable to accept truly independent expert advice; save that this is a politically motivated Bill and the UK Parliament has little influence from the SNP which is the party in power in Scotland. However, if the Holyrood view is to accept the UK Committee independent expert advice, then we in Scotland should submit the independent advice we have already paid for in the question of charging for carrier bags which produced a unanimous conclusion in 2006 that the unintended consequences of charging for carrier bags would produce a negative effect on the transport used annually, the further destruction of the infrastructure in Scotland and an increase in waste findings leading to an increase in greenhouse gas emissions from such increased waste arisings. Sadly we are merely shadowing the Westminster Bill in this area and we have already rejected this section for Scotland. It has no place in this Bill.
Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

A7 Define regularly please. Annually would be a good definition. The public and voters need to be kept informed of the efficiency of Government.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

A8 Please no more public sector jobs with attendant pension costs.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

A9 It would be good to know about what has actually happened rather than fanciful projections based on computer models based on hype. See A1 above on unattainable targets.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

A10 I understand there is a tourism connection in ensuring the regeneration of moorland, and if so please consult the relevant tourism authority and the owners of the moorland so burnt.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

A11 Not competent to answer this.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

A12 About time. Start with all publicly owned buildings which are a disgrace – automatic movement detectors for lights in all Government and Local authority buildings and set the heating at a constant 65 degrees with no exceptions.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government's thinking in this area.

A13 Good.
Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

A14 I have no problem with this section. However, do all the sums, add up all the renewable resource power available in the next 30 years and we still will have people dying from the cold, the lights turned off and industry handcuffed unless we introduce an element of nuclear power. My children and grandchildren will be stymied from providing themselves with a decent lifestyle. Nuclear power we CAN, WILL and MUST learn to deal with if Scotland is to be a force in the decades remaining of this century and beyond.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

- Waste prevention and management plans;
- Waste data;
- Deposit of recyclable waste;
- Procurement of recyclate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

A15 I do not think that unregulated powers of this nature should be sneaked through as part of a Climate Change Bill or any other Bill. This give enormous power to the Government of all flavours going forward, which allows the introduction of law in any of the areas mentioned WITHOUT FURTHER CONSULATION OR EXAMINATION BY THE PUBLIC. The Environment Minister says these may well not be used, and are a backstop. This kind of legislation has NO PART in a democratic society and should be excluded in its entirety.

Charges for carrier bags: - Why this appears anywhere in this Bill and particularly under waste reduction remains a travesty of our democratic process. The Scottish Parliament has already in 2004 – 2006 spend an estimated £2,000,000 of taxpayers money investigating a proposed Environmental Levy on Plastic Bags Bill and unanimously rejected that Bill for very clear unambiguous reasons that to do so would create substitution of lightweight plastic bags by heavier bulkier and more inefficient carriers which was clearly and quantifiably proved to be counterproductive in reducing waste. Whilst Section 59 is all encompassing and non specific as to the material from which the carrier bags are manufactured, there is no doubt that measures already undertaken to reduce the number of bags used (as endorsed by all four UK environment Ministers) has inevitably increased the weight of product used, the bulk of the product used and defeat the very intention of the measure suggested.

There have already been two long and costly “consultations” undertaken by Parliament on this issue. The first when examining the proposed Levy Bill elicited over 1100 responses, over 1000 of which specifically said “no” to a levy on plastic bags. The second, on the Implementation of Zero Waste proposals, stated that “the proposal relating to single-use carrier bags only received support from a minority of respondents”. Both indicated clear majority opposition to the idea of having to pay for carrier bags. It is therefore undemocratic to include such a measure when the issue has already twice been consulted upon, and unanimously rejected by Parliament.

Furthermore, all of the major UK retailers have already signed up to a voluntary code of conduct in 2007, instigated and endorsed by the Carrier Bag Consortium (www.carrierbagtax.com), which required retailers to reduce the ENVIRONMENTAL IMPACT of carrier bags by the end of December 2008 by 25%. This has not yet been
officially reported upon (WRAP have however indicated that the target has been exceeded) but the retailers involved have now undertaken with the UK Government to reduce the NUMBERS of carrier bags by 50% from the base line in mid 2006, by the summer of 2009.

You will all have seen and understood the retailer campaigns being run, including being asked if you need a bag, to bring back the previously used bag, to pay for a carrier bag, to buy alternative products, jute, cotton, nylon, bags for life, woven polypropylene and nonwoven polypropylene, and the occasional switch to paper from plastic in non food applications.

All of these campaigns are been promoted as being “better for environment” and more “ecologically friendly” so why did the Scottish Parliament unanimously reject that in 2006?

The answer is a combination of many reasons which are listed below and expanded in further detail for your understanding. Be aware that it is only the lightweight polyethylene (plastic) supermarket carrier bag that is actually being targeted under this section 59 of the proposed Bill as it is the one which is most in use throughout the UK, and no other type of bag has shown any reduction with all the substitute products having increased availability and use.

Accordingly, a reduction of 50% (as prescribed by the agreement mentioned above) in the number of carrier bags will probably

1. Increase the weight of bags used in Scotland from 10,610 tonnes to 38,343 tonnes per annum
2. Increase the bulk and cubic capacity of bags used in Scotland from 27,660 cubic meters to 232,476 cubic meters per annum of product.
3. Increase the weight of transit packaging from 704 tonnes to 4,100 tonnes per annum
4. Increase the number of lorries - full (unlikely to be full) 20 ft lorry loads from 3,457 to 29,059 per annum
5. Increase the number of full pallets moving around our country from 76,064 to 639,306 per annum
6. Increase the amount of carcinogenic exhaust fumes from vehicles as a result
7. Increase the traffic congestion in our cities, towns and countryside as a result
8. Increase the incidence of road kill of our animals and probably humans
9. Contravene the Kyoto principle, the Bali agreement, the Poznam agreement, EU, UK and the Scottish targets set for Carbon Dioxide, Methane and other greenhouse gas reductions, by increasing their emissions.

This is a much increased and greater environmental cost than that which was estimated in 2006 as the substitute products for the lightweight carrier bags being replaced which are all being sold in today’s retail market are far heavier, bulkier and incidentally more expensive than was anticipated in 2006.

These are more accurate figures from those which the Environment and Rural Development Committee (ERDC) reviewed in 2006, as we now know what substitute products have been introduced, and when this potential disaster was understood by them, they had the foresight to understand the damage to the environment that they were being asked to make into law. Thankfully they intelligently voted unanimously against this ill conceived idea. Further consequences not able to be quantified by me, inevitably include more exhaust fumes, more traffic congestion, more road damage, more wildlife and probably human road kill as well.
Sadly the damage does not end there. In that significantly fewer lightweight supermarket carrier bags are available, the public will be forced to replace their re-use which, according to WRAP pre the introduction of the Code of Conduct, stood at between 74 and 80 %, with alternative truly single use products. These are likely to be an increased use of plastic black bin bags, pedal bin and swing bin liners, nappy bags, dog dirt bags, and food, freezer and sandwich bags to carry lunches and sandwiches to work, all of which will negate any perceived benefit from the introduction of charges to reduce lightweight plastic carrier bags.

Detailed analysis of the calculations based on actual weights of products currently available and, estimated usage based on information obtained in the market place, are attached as Appendix A, Appendix B, Appendix C. They show clearly the position as it was for Scotland alone in 2006/7 and as it is likely to be in mid 2009 with the products currently available. Back up sheets show the product analysis with weights and the packaging and bulk calculations for all products. To really frighten yourselves, multiply all figures by 13 to arrive at the UK damage which will be inflicted on our Environment.

Do not be misled by either the tacit mildly reluctant acceptance by the retailers of this required reduction in number of bags or that they are anything other than ecstatic and enthusiastic about these plans to reduce free carrier bags. Please take time to understand the following,

1. The retailers reduce their costs by reducing the number of bags they give away “free”. In the UK when there is a 50% reduction in number, that is tantamount to Government handing them extra net profit annually of £100,000,000
2. Should they charge 5p for the remaining lightweight bags (as M & S do) they will save another £50 - £120 million per annum , less what they generously give of the public's money to charity after deducting the costs of the bags, an administration cost, and the VAT remitted to the Treasury. The ever suffering public believes all their 5p is going to charity, and it most certainly is not.
3. They now sell many different types of alternative bags, jute, cotton, heavyweight plastic, woven and non woven polypropylene and nylon bags, all making significant profit for the retailers
4. They are seen to be “generous” giving the “net proceeds to charity”. It’s the PUBLIC’S money they are donating without any contribution from them.
5. They are perceived to be “doing good for the environment” when, if you understand this submission, they are actually damaging it.

This remains a shrewd commercial decision rather than a studied philanthropic one for the retailers.

These are some of the quantifiable DIRECT environmental costs which will occur by simply reducing the number of lightweight supermarket bags in circulation. The unquantifiable, but inevitable, increased damage from points 6 – 10 above, will be hugely significant.

There are further INDIRECT costs to the environment as well. In Eire, when they introduced a €15 cent plastax (now increased to €24 cents per bag) in 2002, the whole retail experience changed. No plastic bag was exempt from the tax other than small bags under approximately 250 x 375 mm. As a consequence, there was, and remains a visual and almost universal change from plastic to paper bags in the non food retailers. Boots, Mothercare, Next, Topshop, Evans, Miss Selfridge, M & S, Topman, Burton, Debenhams, to name but a few, all changed from plastic to paper in Eire only, whilst retaining plastic in their UK operations. Furthermore, in Eire, many of the paper bags had to be laminated with polypropylene (another plastic) to stop them disintegrating when wet and avoiding ink transfer onto clothes when carried. Yet another unintended consequence of the tax was therefore using more plastic than saving.
In the Irish food supermarkets the whole retail presentation of food altered with all fruits, vegetables, pies, bakery products and deli products changing from being sold loose, to being sold in collation packs, so that they were not contaminated by being placed in the dirty, reusable non-plastic substitute carrier bags inevitably soiled by milk spills, dirt absorbed from the pavement, soap residues and other unsavory unhygienic contaminants (this is a public health hazard waiting to happen).

You simply cannot buy loose fruit or vegetables in an Irish supermarket – they are all now prepackaged in plastic trays and plastic clam shells, wrapped inevitably in shrink film. To give you some indication of the crass stupidity of this decision, 4 bananas in an Irish supermarket are now presented on a plastic tray, covered in shrink film with two paper adhesive labels attached thereto, one showing country of origin and the other the price. The weight of all that packaging is equal to 7 times the weight of a UK supermarket check out carrier bag and 16 times the weight of a fruit and vegetable carrier we use at present. The packaging consisted of 4 different base materials which rendered the waste very difficult to recycle. These changes WILL inevitably happen in the UK if the public increasingly do not have free carrier bags supplied at the checkout.

Factually in Eire the weight of plastic film used annually increased by more than the weight of film saved as the public bought heavier bin bags and garbage bags to compensate for the lack of carrier bags used to contain their waste rubbish.

The Irish turn a blind eye to these massive hidden waste increases, please do not make the same mistake by ignoring these inevitable consequences for Scotland.

Recently, the Environment and Rural Development department announced a £5 million fund availability over a two year period for “improving material recovery facilities and to develop a home market for plastics reprocessing, and inform us that they will be working to significantly increase public awareness of waste issues, including reprocessing carrier bags.” Whilst I am truly encouraged that Parliament is at least making some attempt to address the plastics issue, the inclusion of plastic carrier bags under this funding is totally unnecessary and compounds a glaring lack of knowledge of facilities already available within Scotland.

May I respectfully remind you of the statement from John Langlands, the MD of British Polythene Industries, a major Scottish Plc, at the evidence taking on the failed attempt to levy a charge on plastic bags in 2005, whose recorded response to the Environment Committee, including Mr. Lochhead the current Environment Minister, on October 26th 2005 was as follows: “We are the largest recycler of polythene film in the UK and probably in Europe—we recycle about 75,000 tonnes of polythene film a year. If you can get it to us by whatever means, we can recycle it. The stuff that we cannot turn into refuse sacks or building film we turn into Plaswood, which we use to manufacture park benches and signs, for which we have won awards and which we sell to Scottish local authorities. That is a good use of recycled products and something that must be encouraged and developed in the community.”

This Scottish facility, in Dumfries, for recycling plastic film and carrier bags is and has been in place for over two decades. Why don't local authorities use it? Also the TIC committee should be educating these local authorities in an understanding of what is needed to instigate a collection service from the public which delivers what you seek without a penny of your £5 million allocation. Save the fund for hard plastics, ABS, PET, PP, PS and PVC, all of which are far more prevalent, both in tonnage and in bulk, in our waste stream than polythene film. It would be a very brave, and some will say stupid, businessman who, in these difficult times, would invest today in recycling plastics or paper with such uneconomic price levels for these products coupled with surplus raw material already available worldwide.
Plastic is environmentally easily and economically recycled, using less resource than any of the substitute products both initially and on recycling, and Parliament should be encouraging continued use of lightweight bags rather than reducing their use which leads to further damage to the environment from substitute products.

The Government should be far more proactively encouraging the public to reuse their lightweight plastic carrier bags where hygienically possible, and to recycle them in the plethora of disposal units now visible in the forecourts of most major supermarkets. It should demand and encourage Local Authorities to instigate a collection from householders of plastic carrier bags. It should provide educational literature for schools aimed at encouraging the intelligent use, reuse and recycling mantra on plastic bag use, and not demonising them.

The carrier bag industry, more specifically the plastic carrier bag industry, is under attack from all sides

1. The UK Customs and Excise impose import duties on imports ranging from 3% to 25%
2. The EU has imposed additional anti-dumping duty on plastic bags ranging from 5% to 29%
3. Towns and villages attempt to force a ban plastic bags which is legally unenforceable, as confirmed by Jane Kennedy, the UK’s Environment Minister (Hansard Monday 19 January 2009)
4. Government in Westminster regards them as evil with the Prime Minister stating that he “wants to get rid of plastic bags”
5. Government in Scotland specifically includes them in their Zero Waste initiative and again specifies them in the draft Climate Change (Scotland) Bill
6. A two year campaign, voluntarily undertaken by all the major retailers to reduce the ENVIRONMENTAL IMPACT of carrier bags by 25% then subsequently changed to 25% in NUMBER of carrier bags without consulting the parties involved.
7. A further extension to that policy to reduce the NUMBER of carrier bags by 50% from the 2006 base level (around 1 billion carrier bags in Scotland) by summer of 2009.

All aimed at reducing what you must think is a massive part of our household waste findings.

The reality is that household waste arisings in Scotland amount to some 3,500,000 tonnes annually, of which, in 2006, ALL plastic carrier bags accounted for less than 8,500 tonnes per annum. At that time, paper and card based household waste accounted for 850,000 tonnes and with the demise of a paper maker in Fife that claimed to recycle over 100,000 tonnes per annum, that figure is actually around 950,000 tonnes of paper waste per annum. The voluntary scheme mentioned in point 6 above has (as agreed by WRAP) been met and exceeded, therefore reducing the tonnage of plastic to less than 6,400 tonnes per annum.

This now represents less than 0.2% of waste arisings and why should time and energy be wasted on such an insignificant percentage of waste when there is close to a million tonne mountain of paper waste and other identifiable component groups like food requiring more immediate action.

Furthermore, the reduction by 50% of the NUMBER of carrier bags used in Scotland, will have consequences which will hugely damage the environment of our country as
the public are forced, by ill conceived Government policy, to reduce the number of lightweight bags in use only to substitute them with heavier reusable bags made from paper, jute, cotton, woven and non-woven polypropylene. This is not just a possibility – it has and continues to be happening right now. If even half of the surviving 50% of the carriers remain lightweight supermarket carriers then these unintended consequences are already damaging our environment.

Do not close your mind to these consequences and understand that they ARE ALREADY HAPPENING, and as a result, the Kyoto protocol, the Bali agreement, the EU targets for carbon dioxide and methane gas reductions all will be significantly more difficult to achieve as this new mountain of waste, enough to cover the pitch at Hampden to a depth of 30 meters every year, will generate significant increases in both these greenhouse gases and more if the landfill physical conditions are met.

In terms of transport here are some facts: One 20 ft container will hold approximately:-

1. 1,700,000 lightweight plastic supermarket bags or
2. 300,000 heavyweight plastic “bags for life” or
3. 70,000 equivalent strength paper carrier bags or
4. 45,000 woven polypropylene plastic carrier bags or
5. 35,000 non woven polypropylene plastic carrier bags or
6. 22,000 jute carrier bags (with laminated plastic lining) or
7. 30,000 cotton carrier bags

Please relate these numbers to storage, transport and disposal logistics.

Serious awareness should also be understood about the “down weighting” which continues unabated in all forms of packaging and manufacturing today: the substitution of glass bottles by plastic bottles: the change from cardboard collation packs to plastic packs, the lightening of motor cars, and all forms of public transport by changing from steel bodywork, bumpers and interior fittings to plastic panels: shrink film and plastic vacuum packs replacing cardboard cartons; plastic pallets replacing wooden ones: paint pots changing from steel to plastic; fruit and vegetable transit packaging to avoid damage and extending food shelf life changing from paper and cardboard to plastic; paper carriers changing to plastic carriers; soup tins changing to plastic cartons and pouches; metal pipes changed to plastic, wooden and metal windows changed to plastic, are just a few of the changes seen recently.

Why? – simply to reduce packaging waste, reduce overall weight for transport considerations and increase energy efficiency, preserve products from spoiling and transit damage, increase shelf life, reduce theft, increase efficiency and preserving resources - all of these are achieved by down weighting and all are achieved by changing from various materials to plastic. What this section of the draft Bill will do is increase the weight and bulk of the product and in many cases increase the complexity and variety of materials used, rendering them more difficult to recycle – clearly going against all that is happening in the market place to use less of the world’s resources and become more efficient. The Courtauld Commitment, a voluntary agreement, launched in 2005, between WRAP and the major grocery retailers has as one of its aims, that the signatories must seek ways to reduce the weight of packaging. This Bill will be doing exactly the opposite.

Do not be taken in or take decisions under the mistaken belief, that we will save any oil as a result of this projected change. Polyethylene (plastic) bags are manufactured from by products, naphtha and ethylene, resulting from the distillation of oil and gas into fuel. Accordingly, for as long as we drive cars, use buses, trains, aircraft and bikes or switch on an electric light, these by products will be produced and if not used in the manufacture of plastics, it would be flared off into the atmosphere.
Our overview of the targets set by the draft Bill is that they are commendable but probably unrealistic and therefore unachievable and accordingly are likely to concentrate efforts in the wrong direction. We should be encouraging solutions to deal with the possible 2 degree warming estimated to occur within the next 100 years, for example bringing more current unproductive cold agricultural land into producing additional food and revenues. Continue to seek alternative energy solutions by all means, but do not ignore the opportunities which such warming will bring.

There will be an enormous cost to the people of Scotland (and to the rest of the World) in the cause to reduce emissions, in the perhaps mistaken belief that in so doing, we will address the problem of climate change. I do not profess to be an expert in this field, but I would recommend that every member of the Committee, in order to gain a comprehensive alternative view to that which is currently in vogue on this issue, reads the following books on the subject of Climate Change, which will undoubtedly change their perspective of what they are attempting to achieve.

1. The Skeptical Environmentalist by Bjorn Lomborg published in 2001
2. Cool It by Bjorn Lomborg as an update published in 2007
3. An Appeal to Reason by Nigel Lawson, former Chancellor of the Exchequer

Lomborg, a Danish statistician regarded by Time magazine as one of the 100 most influential persons on Earth, comprehensively and with unchallenged statistical facts, destroys Al Gore’s “An Inconvenient Truth” analysis of the problem, and whilst Lomborg does not deny that there is a slight warming of the earth, he provides historical evidence suggesting that this is a natural, perfectly normal, repeating cycle. These three books explode the many myths associated with the current hysteria on climate change and that we are responsible for it. Lomborg’s view is that the cost of fighting climate change cannot be justified by the likely benefit, and that there are more pressing problems for the world to address. He proves, for example, that many more people die from winter cold than would perish in future from summer heat waves, and that climate change will, therefore, save more lives than it costs. He also proves that the reduction in numbers of polar bears is caused by humans killing them and has nothing whatsoever to do with global warming.

This draft Climate Change Bill has many sensible and very demanding targets for the country to meet. However there is no justification for the continuing attack on the ubiquitous plastic carrier bag as such a move will only make those targets much more difficult to meet.

Contrary therefore to what is proposed in the draft Bill, Parliament should avoid the stigma of introducing a Bill which increases environmental damage and produces even more carbon dioxide and methane gases, by not only encouraging the use of lightweight plastic bags, but also their sensible re-use and highlighting their recycling properties, for the simple reason that they are clearly the most efficient environmentally friendly product currently available for transporting retail purchases home.

Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

A16 The ONLY product specifically mentioned in the whole of this bill is “carrier bags”. No request for either attendance at the evidence giving was made to anyone in the manufacture, import, distribution or business of supplying plastic carrier bags was sought and no request for information from this section of business has been made. In that 95% of the carrier bags in 2006 were agreed by Government to be made from plastic, it is surely remiss of both the TICC and REA committees to proceed to
comment upon laws which will materially affect these businesses and their employees. The consultation in this specific regard has been totally inadequate.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

A18 I have no knowledge of when this was commissioned or what the Assessment concluded.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

A18 Equalities? Irrelevant for Climate Change save that the public may be forced to buy carrier bags which would discriminate against the poor.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

A19 If we don’t embrace new nuclear power stations then our beautiful countryside and our inshore waters will be smothered by wind farms, hydro electric dams and wave power generators. The tourist industry, so important for Scotland, will die.

Q20 Do you have any other comments on the Bill?

A21 Remove section 59 in its entirety. It will

1. Increase Transport throughout Scotland
2. Damage the Infrastructure throughout Scotland
3. Have a damaging effect on the Climate Change Bill by increasing greenhouse gas emissions.

Isn’t that exactly what the Transport, Infrastructure and Climate Change committee are to report upon?

If you don’t recommend removal of this section you will be passing a Bill which includes a section which runs contrary to all the other sections and will merely undermine all other efforts to address the perceived issue.

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We regret that we have not had the time to produce a detailed response to the Bill, but would briefly make the following points.

[a] We are a member of Stop Climate Chaos Scotland, and support their ten top Bill priorities, at


[b] Spokes made a detailed submission to the consultation prior to the Bill. As far as we can see, none of the points in that submission have found their way into the Bill, and therefore we reiterate those concerns. That submission may be found at


[c] With regard to both (a) and (b) above, a primary concern is that emission reductions of at least 3% annually should be achieved from the start, and not from a date well in the future.

[d] The mechanisms by which emissions reductions can and will be achieved both in the short term and the long term must be an urgent priority, and we are not clear how far the Bill will achieve that, rather than just setting abstract targets.

[e] In particular, there must be mechanisms to ensure that short-term 'quick wins' are acted on urgently. To expand somewhat on this point, in the light of our own recent experience...

The value of 'quick wins' (at the same time as moving as urgently as possible towards a non-carbon-powered more electric future) was emphasised by Lord Adair Turner, head of the UK Advisory Committee on Climate Change in his recent lecture at Edinburgh University's McEwan Hall. In particular, in terms of quick wins, he referred to (a) a rapid programme to insulate all domestic properties in Scotland and (b) immediate investment in making our towns and cities walk and cycle-friendly.

Regrettably, and remarkably in this context, the Scottish Government, which professes 'Sustainable' economic growth, took a diametrically opposed stance in the recent 2009/10 Scottish Budget - rejecting a 10-year all-Scotland street-by-street house insulation programme; and ignoring (not even assessing) the evidence-based all-party recommendation of the Transport, Environment and Climate Change Committee to increase the present (miserable) level of investment in walking and cycling infrastructure. Funding clearly was available for such quick wins, given that trunk road spending is increased by over £150m as compared to 2008/09, whilst walking and cycling investment is frozen at (in total) far, far below even the levels of the increase in trunk road spending. Clearly, it is just a question of priorities, and the government's priorities in terms of Climate Change quick-wins are quite topsy-turvy.

As the Bill stands, it is difficult to see how it would persuade the government to adopt any quick wins at all - particularly given that the 3% annual reductions will not come into force until over a decade into future.
WRITTEN SUBMISSION FROM STOP CLIMATE CHAOS SCOTLAND

Below is the Stop Climate Chaos Scotland (SCCS) response to the Transport, Infrastructure and Climate Change Committee’s Call for Views on the Climate Change (Scotland) Bill. SCCS is a coalition of more than 30 organisations campaigning on climate change. SCCS members include environment and development NGOs, faith groups, trade unions, community councils, student societies, women’s organisations, a mental health charity, and many others. In Scotland, those members have a combined supporter base of over 1.5 million people.

This document represents the areas of broad consensus in the coalition, and does not necessarily represent the detailed policy positions of all members. For the more detailed positions of individual members, please refer to their individual consultation responses.

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050. What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

SCCS welcomes the long-term reduction target of at least 80% by 2050, and fully supports the requirement that this target is based on the basket of six Kyoto greenhouse gases. This is the minimum reduction required by Scotland, and the rest of the developed word, if it is to make a fair contribution to preventing dangerous climate change.

However, not only is this end target critical but so too is the emission reduction path taken to reach this goal. Scotland must meet its target of at least 80% via a trajectory that constrains total cumulative emissions over the period to 2050 to a fair share of a safe global budget. Any interim target should be on at least such a trajectory. SCCS would like to see an ambitious interim target of 50% reduction by 2020.

The proposed interim target of a 50% emissions reduction by 2030 does not ensure we will cut our emissions at the necessary rate to help prevent dangerous climate change. Indeed, initial calculations indicate that simply aiming for the 2030 target would result in approximately 200 million more tonnes of CO₂ equivalent being emitted into the atmosphere by 2050 than would be the case if the trajectory resulting from emissions reductions of 3% a year were followed, as promised in the SNP election manifesto.

SCCS would like to see the interim target revised so that a 50% emissions reduction must be achieved by 2020 rather than 2030. Not only does this place the target on a more desirable trajectory, it also places the Scottish interim target in line with other UK, European and international targets – all of which have 2020 targets rather than 2030 targets. Scotland is well placed to deliver this more ambitious target because of the opportunities we have in terms of producing renewable energy. There will also be economic benefits for Scotland in early investment in green technologies as we can build up expertise and a skilled workforce ahead of other countries. The earlier target will also give investors confidence to invest in renewable and carbon-reducing technologies, as the demand for these technologies will be ensured.

- Set out a framework that will achieve at least an 80% reduction in greenhouse gas emissions by 2050.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive. What are your views on the setting of targets in batches from 2010 to 2022?

SCCS believes that the Climate Change (Scotland) Bill must set in place annual emission reductions of at least 3% year on year, right from the start. Only annual targets will guarantee that the necessary minimum will be done.

Without an annual statutory target of at least 3% per year, the risk of inaction in early years and the subsequent delays in making significant early progress towards the 80% cut are significantly increased. If action is delayed, the effect will be to increase the concentrations of greenhouse gases in the atmosphere towards dangerous levels. Recent scientific evidence gives greater urgency to immediate emissions...
reduction as it describes a rapid acceleration in the rate of growth of atmospheric CO₂ concentrations from 1.3% per year to 3.3% per year and a decline in the efficiency of the world’s natural carbon sinks.

The costs resulting from delaying meaningful climate change action have been repeatedly shown to dwarf the immediate costs of reducing our emissions. The UK Climate Change Committee and others have echoed the conclusions of the Stern Review that first set out the economic imperative of early action. If we do not immediately make reductions of at least 3%, we will be required to make much steeper cuts in the future that will challenge our economy and society.

Globally, emissions must peak and begin a rapid decline in the next few years. This means that developed nations must be actively reducing their emissions now. Scotland’s leadership on climate change is dependent on committing to immediate emissions reductions of at least 3% per year. While targets of at least 3% per year should be the primary aim of the Bill, climate science is increasingly suggesting the need for increasingly ambitious targets. In light of this, and in order to account for the latest scientific evidence, SCCS supports the Bill’s intention of setting annual targets in multi-year batches.

However, when setting multi-year batches of annual targets a number of criteria should be adhered to:

1. A minimum 3% annual target between 2010 and 2050 should be maintained. Therefore, any annual targets proposed would have to be over and above 3%.
2. Consideration of a fair and safe cumulative budget must be included in the factors to which Ministers and the advisory body must have account when setting multi-year batches of annual targets.
3. Consideration towards meeting an interim target of 50% by 2020 must be included in the factors to which Ministers and the advisory body must have account when setting batches of annual targets.

We also have concern about the current periods and timelines outlined in the Bill. In particular setting the first set of annual targets by June 2010 – halfway through the first annual target - seems to build in an excuse to either miss or set a weak annual target for 2010.

- Establish in statute annual emission reductions of at least 3% year-on-year from the start, not just from 2020, compatible with a fair and safe cumulative budget identified by the advisory body.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

SCCS believes that the current requirement in the Bill - which simply states that Scotland’s emissions must be less than the previous year between 2010 and 2019 and then from 2020 until 2050 they must be reduced by at least 3% - is inadequate. Cuts of at least 3% a year need to be in place right from the start. The resulting framework fails to incentivise the necessary immediate emissions reductions, does little to encourage the large-scale investment required to kick-start the transition to a low carbon economy, and ultimately undermines any interim target.

If the Bill sets in place immediate annual emission reductions of at least 3%, there will be greater certainty of what the minimum annual target from 2010-2050 will be, right from the time the Bill is implemented. Consideration of a fair and safe cumulative budget must be taken into account when Ministers and the advisory body set annual targets.

Scotland could have the strongest climate legislation in the world, but without annual emission reductions of at least 3%, the Climate Change (Scotland) Bill cannot hope to fulfil the Scottish Government’s ambition of “setting an example to the rest of the world of how a developed nation can become greener sustainably.”

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4 Ministerial foreword to Consultation on Proposals for a Scottish Climate Change Bill
it is the blueprint for other nations following in our wake, then it is even more important it addresses the urgency rather than delaying the shift to a low carbon economy into the future.
Q.4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

SCCS believes that the key objective of the Scottish Climate Change Bill must be to reduce Scotland’s emissions by at least 80% by 2050.

The unlimited access to overseas credits allowed by the Climate Change Bill undermines Scotland’s leadership on climate change, increases the risk of dangerous climate change and would mean that Scotland misses the opportunity to develop a low carbon economy.

SCCS proposes that at least 80% of the effort to cut emissions in any given year should take place in Scotland. In its latest report, the IPCC concluded that in order to tackle climate change the developed world must reduce its emissions by at least 80%.5

If we do not limit access to carbon credits we may not succeed in sufficiently reducing our domestic emissions, become over-reliant on an immature carbon market and not incentivise investment in carbon abatement technologies here. Taking action in Scotland to reduce our emissions will place us at the forefront of the low carbon economy and help to ensure we fulfil Scotland’s considerable renewables potential.

In order to achieve this we must address the role of the EU Emissions Trading Scheme (ETS) in both reducing emissions in Scotland and the rate of reduction it compels. The ETS captures almost 50% of Scotland’s emissions, the majority of which originate from the power sector. As it currently operates, the ETS allows for all the emissions reductions it requires to be met outside of Scotland, both from within the EU and, very substantially, from the developing world.

Over-reliance on the EU ETS sector builds two fundamental weaknesses into the Climate Change (Scotland) Bill. Firstly, the level of cuts that will be required under the ETS over the next decade will be wholly inadequate to match the Scottish Government’s ambition of at least an 80% cut in emissions by 2050. The current annual rate of reduction currently prescribed by the ETS is only 1.74% a year between now and 2020. This is particularly inadequate as the ETS includes areas of the economy which most climate analysts (including Lord Stern, Lord Turner and the IPCC) identify as critical to achieving a low-carbon economy. Indeed the power sector, a key part of the ETS, needs to be almost zero carbon by 20306. In this context, it is critical that Scotland takes domestic action designed to supplement the reductions achieved through the EU ETS. Requiring a minimum level of domestic effort to meet the Climate Change Bill targets will provide a framework to drive the necessary supplementary reductions.

Secondly, in addition to setting an inadequate emissions reduction trajectory, the ETS also allows for almost 50% of Scotland’s emissions to be reduced overseas, either in Europe or, through its link to the Kyoto Protocol’s Clean Development Mechanism7, across the developing world. A minimum level of domestic effort is needed to correct for this and place the balance of emission reductions firmly within Scotland.

SCCS’s proposal that the Bill requires a minimum level of domestic effort does not limit the legal access the ETS sector has to external carbon credits, it simply establishes that of the total volume of emissions reduced in any one year at least 80% occurs in Scotland. In effect, the minimum level of domestic effort presents a

5 Indeed the UK Committee on Climate Change recently stated that, “the majority of 80% will in the long term need to be achieved via domestic action”. ‘Building a low-carbon economy – The UK’s contribution to tackling climate change’, First Report of the Committee on Climate Change, December 2008, TSO pxi

6 The First Report of the Committee on Climate Change says “Any feasible path to a 80% reduction by 2050 will require the almost total decarbonisation of electricity generation by 2030”, ‘Building a low-carbon economy – The UK’s contribution to tackling climate change’, December 2008, TSO p198.

7 The Clean Development Mechanism (CDM) allows developed countries to offset their own emissions through emissions abatement projects in developing countries. There is concern that many of these projects do not offer emissions reductions that are genuinely ‘additional’ to what the developing country had already committed to, and that therefore they cannot be guaranteed to offset emissions from developed nations.
powerful incentive to develop and implement policies designed to tackle our power sector or other sectors outside the ETS such as transport.

A Scottish Climate Change Bill, which limited the proportion of emission reductions bought in from elsewhere, would make Scotland an industrialised nation that has demonstrated its willingness and ability to make deep cuts at home. In so doing, Scotland would be at the forefront of generating greater trust and confidence amongst developing countries, which is desperately needed in advance of the international talks in Copenhagen in December 2009. It would also have the added benefits of:

- Ensuring the Scottish Climate Change Bill meets its overall objectives of at least an 80% reduction in Scotland’s greenhouse gas emissions and guide Scotland to a low carbon economy;
- Capitalising on the economic benefits of early investment in green technology; and
- Encouraging an equitable global solution to climate change.

SCCS also believes that there needs to be absolute transparency in reporting what level of reductions has been achieved through purchasing international credits. The annual reporting of progress towards emissions reduction targets must clearly show both actual emissions reductions from Scotland, as well as the net emissions reductions after credits are taken into account.

- Ensure that at least 80% of the effort to cut emissions takes place in Scotland.

Standards

Any international credits bought by the Scottish Government must at least meet the requirements set out under the Gold Standard8. The Gold Standard is the most widely endorsed quality standard for designing and implementing carbon offset projects. The Gold Standard’s main purpose is to ensure that projects are both reducing emissions and fostering sustainable development. According to members of the SCCS coalition, the Gold Standard best reflects the objectives of the Kyoto Protocol.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

International aviation and shipping

SCCS fully supports the inclusion of Scotland’s share of emissions from international aviation and shipping in the definition of ‘Scottish emissions’, along with those emissions from sources in Scotland.

However, emissions from international aviation and shipping must be included in the Climate Change Bill from the very start. Although the Cabinet Secretary announced that the “Government has taken the bold decision to include emissions from international aviation and shipping within its targets”9 the Bill as presented to the Scottish Parliament does not include these emissions. As it currently stands, the Bill says that Scottish Ministers may by order make provisions regarding emissions from international aviation and shipping and that before doing this they must ask for advice from the ‘relevant body’. Despite reassurances from civil servants in their evidence to the Committee, this falls short of including emissions from both international aviation and shipping from the outset and does not guarantee that they will be included in the immediate future.

Aviation is a significant and rapidly-growing source of greenhouse gas emissions, and urgent action is required to put it on a more sustainable path. It is one of the fastest-growing sources of greenhouse gas emissions in the UK. Between 1990 and 2006, Scottish CO2e emissions from aviation have risen by approximately 185%. In recent years, emissions have been growing at over 10% a year. If we choose to ignore the emissions from international aviation and shipping, our calculations suggest that we will in effect make less than a 70% reduction by 2050, well short of the minimum needed of 80%.

8 http://www.cdmgoldstandard.org/about_goldstandard.php?id=11
The Scottish Climate Change Bill needs to account for the total sum of emissions Scotland is responsible for producing. Excluding a particular sector undermines the intention of the legislation and threatens the credibility of the Bill. As a matter of principle, it is important that the Bill includes emissions from international aviation and shipping. We are responsible for these emissions and cannot simply put off acknowledging that responsibility until some time in the future. This is especially true given that, as the Cabinet Secretary pointed out, “Scotland benefits greatly from international trade and travel,” and therefore, “it is right to take responsibility for the Scottish share of these emissions”\(^\text{10}\).

If the inclusion of these emissions is delayed until some unconfirmed date in the future, it introduces a potential disruptive element into the emissions reduction trajectory. With limited warning, Scotland’s emissions would need to be reduced at a greater rate than had been planned for and without the necessary investment plans in place. Accounting for Scotland’s full emissions responsibility from the outset ensures there is a long-term projection of the total emissions reduction needed, this is a prerequisite for investment in a low carbon economy.

Emissions from both domestic and international aviation for Scotland are currently reported on as part of the UK Greenhouse Gas inventory. This methodology follows the most robust and accurate approach recommended by the IPCC. The data is provided by the Civil Aviation Authority and sets out details of each individual flight, including airport origin, destination, fuel type, plane type and engine type.\(^\text{11}\)

SCCS proposes that the Bill should be amended to allow for the methodology used to account for emissions from aviation and shipping to be revised in the future so that it continues to follow international best practice. This would mean emissions from international aviation and shipping were included from the outset and the Bill would recognise, as is the case elsewhere, that there must be scope to keep in step with international reporting methods.

- **Include emissions from all sectors in the framework and targets set out in the Bill, including those from international aviation and shipping, from the very start.**

### Consumption

SCCS would also like to see parallel reporting on those emissions that result from consumption in Scotland. Our consumption of goods and resources generates further emissions that are not counted under a production based reporting system. The Scottish Government have committed to reporting on Scotland’s ecological footprint annually as one of the National Performance Indicators, this means that it would be relatively straightforward to present an account of Scotland’s CO\(_2\)eq footprint. SCCS would like to see such an account reported on at least every year along with the production-based emissions account the following reasons:

- **Global responsibility:** climate change is the response to a global change in the atmospheric concentration of greenhouse gases. Scotland’s shift towards a service-based economy means it is increasingly important that we account for this burden shift of greenhouse gas emissions to other countries.

- **Policy levers:** both production- and consumption-based reporting methods have their strengths in ensuring Scotland is able to target its policy levers to address climate change. Importantly, consumption-based reporting helps to identify the drivers behind changes in the worldwide impact of emissions from Scotland’s consumption patterns. It also allows for a much more subtle understanding of the critical drivers and behaviours behind Scotland’s emissions.

- **Visible indicator:** consumption-based reporting can provide a valuable footprint-based representation of our contribution to climate change. The footprint description provides a powerful communication tool, allowing for an immediate and intuitive appreciation of our global contribution to climate change, empowering consumers to make choices that reduce Scotland’s consumption emissions.

- **Individual responsibility:** we all have an important role to play in reducing Scotland’s greenhouse emissions. Consumption-based reporting provides the disaggregated description of Scotland’s emissions that highlights the contribution the individual can make to a national target, both in behaviour and consumer activity.

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\(^{10}\) Consultation response from Scottish Government: [http://www.scotland.qov.uk/Publications/2008/10/response](http://www.scotland.qov.uk/Publications/2008/10/response)

\(^{11}\) Greenhouse gas emissions data from international aviation and shipping for Scotland can be found here. [http://www.airquality.co.uk/archive/reports/cat07/0811180855_International_aviation_and_shipping1990-2006_final_v5.xls](http://www.airquality.co.uk/archive/reports/cat07/0811180855_International_aviation_and_shipping1990-2006_final_v5.xls)
Data availability: the data needed to provide a consumption-based report of Scotland’s emissions are available now and are being used to deliver the Scottish Government supported Local Footprints Project\textsuperscript{12}. The necessary data are available at both a Scotland and local authority level.

\textsuperscript{12} See \url{http://www.sustainable-scotland.net/page.asp?pg=25} for more information about the Footprint project.
• Ensure Scotland counts all its emissions and reports on those produced by products and services we consume as well as emissions produced domestically.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

SCCS believes that Scotland needs a distinctive body to support delivery of the Climate Change (Scotland) Bill from the moment it is implemented. Although that body would work constructively with the UK Climate Change Committee, there are so many crucial differences between the Scottish and UK contexts that a separate Scottish body is essential. Indeed, the Chair and Chief Executive of the UK Committee on Climate Change have both indicated in response to questioning that they may not be able to support Scotland in these different approaches and areas.

The legislative framework that Scotland will be working within is different from the rest of the UK, e.g. Scotland is committed to emissions reduction through annual targets. The policy context is completely different with much that affects climate change emissions and adaptation devolved, and whether in housing, transport, energy or education the priorities and approaches may be different from the rest of the UK.

The organisations that will be expected to deliver under the legislation are distinctively Scottish, whether in local government (which operates under a completely different structure and funding arrangement in Scotland), agencies or other public bodies. The cultural, educational, legal, social and geographical context is different. The tools and measures to support the implementation and delivery to the targets under the climate legislation will need to be tailored to Scotland.

SCCS further believes that the body should be a Scottish Climate Change Commission (not Committee, so as not to be confused with the Climate Change Committee in Scottish Parliament).

While the Scottish Government will be responsible for delivery of the targets within the Scottish Climate Change legislation, the Scottish Parliament should be responsible for auditing progress and ensuring delivery. Scotland’s Parliament should be able to seek advice from an independent, arms-length body which can support it in ensuring that the targets and plans implemented deliver the requirements of the Climate Change legislation.

A Scottish Climate Change Commission is needed to provide that advice and support; advising Parliament on the global scientific picture; supporting them in the review of delivery or even plans in order to reach targets; monitoring progress in Scotland; and putting activity in Scotland into international context. Such a Commission could provide Scottish Government with advice and support, but as a body that is ‘owned’ by the Scottish Parliament rather than the Government it would remain independent from Government and therefore not compromised by being too close to Government.

• Establish a Scottish advisory body, a Scottish Climate Change Commission, in the primary legislation to support delivery of the Bill when it is enacted.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

The Bill sets out a framework of annual, interim and long-term targets to ensure that Scotland achieves at least an 80% reduction in greenhouse gases by 2050.
In order to be absolutely sure that Scottish Governments, from now until 2050, deliver the targets on time and by the amount that is necessary to make our contribution to avoiding dangerous climate change, the reporting mechanisms and processes set out in the legislation must be tough and meaningful. These will be critical to holding Government to account and ensuring that any failures to deliver are addressed.

Parliamentary process

In line with the Cabinet Secretary’s commitment to make the process tough enough that any Minister in the future would rather go to the dentist and have all his/her teeth pulled out, than come to the Scottish Parliament and tell them he/she has failed, the following process is proposed:

1. Annually, the First Minister (as the Minister with an overview of all departments) should be required to make a statement in the Chamber in front of the whole Parliament. This statement will be on progress in the last year (i.e. have Government met the targets) and set out the plans for the coming year.
2. The full annual report to accompany this statement should be placed in the Scottish Parliament Information Centre (SPICe). It should be accompanied by an annual report response from the Scottish Climate Change Commission (see SCCS Briefing 4), which gives a global snapshot and independent commentary on how Scottish Government has performed and advice for plans for the next year. It could also be accompanied by an audit of the numbers Government set out13.
3. With these documents available to inform the Parliament, there should be a 6-8 week process of scrutiny undertaken by the Audit Committee (as a mandatory committee) on what has been achieved, any failings and particular areas needing investigation to inform the next year’s plans. Evidence should be invited from external sources, including the Scottish Climate Change Commission and secondary Committees (for example in relation to transport or local government) could also be appointed.
4. The Audit Committee should then produce a short report, with recommendations, which would form the basis of an informed debate in Parliament. At the end of this debate, there would be a vote on the recommendations and, potentially, the Government’s proposals for the following year could be amended if deemed necessary to achieve the right cuts.

This process would ensure that there is adequate information and support provided to the Scottish Parliament to allow informed and meaningful scrutiny of the progress on achieving targets. With the Scottish Parliament empowered to undertake strong scrutiny, it would mean that the Government is held to account through a strong, robust process which is transparent and accountable.

The sanctions that would be placed on Government for a failure to achieve targets would be political.

Public bodies reporting

We call for a general duty on public bodies (see 8) and therefore propose that public bodies should report annually on progress on measures to tackle climate change. This could be reinforced by the relevant Parliamentary committee calling in a selection of annual reports each year for scrutiny. In addition, innovative ways of involving local communities directly should be explored. Local accountability might be strengthened by local hearings. For example, an annual schools gathering where students could question appropriate Councillors and officials on the report.

On public bodies, the Bill leaves too much to secondary legislation which may be implemented at some point in the future. In our view, this will unnecessarily delay urgent action by these bodies to cut greenhouse gas emissions.

Cross-sectoral scrutiny

The current proposals state that there will be an annual statement to Parliament. The need for cross-sectoral scrutiny is acknowledged by a proposal to meet with the Convener’s Group in the Scottish Parliament.

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13 Done by Audit Scotland
The intention of this proposal is good, however, SCCS does not consider the Convener’s Group to be the appropriate forum for this discussion. We are concerned that the Convener’s Group does not meet in public (therefore lacks transparency and accountability) and is not currently constituted in a suitable manner to support the scrutiny of such an important piece of legislation. Instead, a process led by the Audit Committee (which is mandatory) would offer a formal process that is transparent and accountable in line with the Consultative Steering Group principles.

If the government are to be held to account to an appropriate standard of assessment, transparency and expertise, SCCS believes it is essential that the Scottish Parliament Committee system be utilised, in conjunction with the Scottish Climate Change Commission and a meeting of the full Parliament, as outlined above.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

SCCS supports the proposal to place climate change duties on public bodies. However, this should be in the Bill as primary legislation and enacted now, not at a possible date in the future.

While some local authorities are innovative and ambitious in their emission reduction plans, existing guidance and voluntary measures are not enough to ensure that all public bodies play their part in tackling climate change. If they were, serious action would already be happening.

SCCS believes it is critical to give all public bodies climate change duties that will ensure they all take the necessary action to contribute towards delivery of national targets for emissions reduction. Public bodies will only be able to contribute to climate change targets if these targets are included in their procurement and commissioning practices and this needs to be reflected in the Scottish Government’s procurement regulations and guidance.

It will be impossible for the Scottish Government to deliver its emission reduction targets without the active support of and lead from the public sector. At UK level, the need for a similar duty on public bodies to help deliver the Climate Change Act was not included and a need for it has been identified14. Climate change duties introduced from the start mean that everyone is on a level playing field, and how they deliver those duties can be made appropriate for each organisation and local authority area.

If there are no duties laid out at the start, Scottish Government may have to be more prescriptive in order to ensure action is taken, through policies and regulation. A general duty across the public sector would be fairer and more flexible.

When consulted on this issue, the majority of Local Authorities responded positively to the proposed duties.

The statute as drafted would just serve to delay implementation and require consulting these bodies all over again on the same question, which they have just responded positively to, thereby delaying investment and planning towards delivery towards the national goal.

The Carbon Reduction Commitment, being introduced in 2010, will apply to large public bodies but will not set even those, let alone all public bodies, on a path to reducing greenhouse gas emissions in line with national targets. A public body duty will cover the full range of activities carried out by the body, including the extremely important one of procurement, which can be a very effective lever outside the public sector. In relation to Local Authorities, it could help fulfill outcomes in many Single Outcome Agreements, such as emission reduction or footprint reduction. It would also further the intentions of the Scottish Climate Change Declaration (SCCD). This was always intended to pave the way for action on climate change, not be the whole answer. A duty would underpin the commitments under the SCCD.

The Bill must establish a duty on public bodies to consider the impact of climate change in all their decisions and to pursue, in a manner based on sustainable development principles, reductions in carbon emissions in line with national targets. The duty would also apply to adaptation work. This should be implemented immediately so the public sector is involved in delivery right from the start.

SCCS also believes that all public bodies should be required to report annually on the specific measures they have taken to tackle climate change (see 7). Furthermore, all public bodies should be required to seek to negotiate a workplace environmental agreement with their recognised trade unions.

- Establish duties on all public bodies to reduce greenhouse gas emissions in line with the national target.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

SCCS supports the requirement for Scottish Ministers to lay before Parliament an adaptation programme for Scotland, following publication of a UK report on the impact of climate change.

However, SCCS does not believe that such a programme as detailed in the Bill will be adequate in dealing with Scotland’s adaptation needs.

SCCS believes that Scottish Ministers should be required to produce their own climate change impact assessment as well as reporting annually to Parliament on programmes of sustainable adaptation action. The Bill should therefore ensure that:

- Climate change impacts, consistent with UK reporting, are identified for Scotland’s particular circumstances. This will assist public bodies in carrying out adaptation work under their general climate change duties.
- Scottish Ministers seek independent assessments of progress made towards implementing the adaptation programme, from the UK Committee on Climate Change and any Scottish advisory body established with functions relating to climate change.
- Sustainable adaptation is secured across all sectors, safeguarding the future of Scotland’s communities, biodiversity and ecosystems.
- Scotland supports adaptation work to address the impacts of climate change on vulnerable communities and ecosystems in developing countries. Any support must be additional to existing overseas development assistance.

SCCS believes that the Bill should require the production of a Scottish adaptation programme, at least every three years, which should include:

- an assessment of the current and future predicted impact of climate change in Scotland;
- the objectives of the Scottish Government in relation to adaptation to climate change;
- the Scottish Government’s proposals, policies and timescales for meeting those objectives; and
- key indicators by which to measure progress.

and should provide for:

- an independent assessment, at least every two years, of progress towards implementing the objectives, proposals and polices set out in the adaptation strategy; and
- annual reporting to the Scottish Parliament of achievements and revisions to the strategy.

Even with immediate and significant cuts in our emissions, the changes we are already committed to will have an impact on Scotland’s communities and wildlife. Wildlife that is already stressed will be ill-equipped to cope with climate change. We need increased investment in protected areas, on land and at sea, and more environmentally friendly management of the wider countryside to secure healthy populations. Adequate resources and effort must be directed at improving the resilience of Scotland’s wildlife in the face of climate change.
An annual reporting requirement on adaptation, and a requirement to develop a set of indicators to measure progress would assist in measuring success and highlighting areas where more research or resource is required.

- Be explicit that sustainable development is core to the purpose and delivery of the statute in relation to mitigation and adaptation.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

We would highlight that the proposed clause is an enabling clause giving Ministers the power to make changes should they consider it ‘necessary or expedient to do so in relation to climate change’.

Given that the impacts of climate change are already evident in the habitats associated with muirburn we support these provisions, which would give Scottish Ministers powers similar to those in England and Wales to take account of these changes and vary permitted time for making muirburn as appropriate.

We would add that we also support the idea of making provision through a licensing system for out of season burning, to allow flexibility of approach. To provide the necessary safeguards for the natural heritage from out-of-season burning, we consider that a licensing system should be put in place and it seems to us most appropriate that such a system is administered by Scottish Natural Heritage as the Scottish Government’s advisors on nature conservation.

Such a licensing system would, as mentioned, enable a flexible approach whilst a change in the unlicensed dates would reflect the needs of a changing climate and bring Scotland into line with England and Wales. We would welcome amendments to the draft Climate Change (Scotland) Bill to enable such a licensing system to be established at the same time as any changes in the permitted times for making muirburn.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

SCCS is concerned that the forestry provisions are distracting from discussion of the overall aims and objectives of the Climate Change (Scotland) Bill, the urgency of reducing our emissions and how we propose to meet the targets. These provisions were introduced late in the day, meaning that there has not been appropriate consultation on the details of this.

SCCS supports the idea of Forestry Commission Scotland being able to participate in environmentally appropriate joint ventures to address climate change. However, without adequate legislative scrutiny, we do not believe that the Climate Change (Scotland) Bill is the appropriate place for the Government to propose new forestry provisions and enabling powers – such as those under Clause 47 (1), (2), and (4) - that would fundamentally alter the legal basis of Scottish forestry regulation, forestry and practice. SCCS would expect to see full consultation and public debate on such fundamental changes, undertaken separately from the Climate Change (Scotland) Bill.

It concerns us that forestry has been isolated as a form of land use. Other aspects of Scotland's land use have not been included in the Bill, nor are they being debated.

SCCS is also extremely concerned that the proposal to lease substantial parts of the National Forest Estate to private companies threatens jobs. We share the concerns about the risk to jobs that have been raised by the Forestry Commission Trade Unions, who oppose the leasing proposal. The unions back the Bill’s
targets on climate change and the expansion of renewable energy programmes. They acknowledge that the Scottish Government has promised no compulsory redundancies, but they warn that this commitment and staff terms and conditions could be at risk under any transfers and they conclude that several hundred good quality jobs could be lost in the forestry, timber processing, recreation and tourism sectors.

As drafted, the Bill also offers no guarantee that the money generated from the sale of the forestry estate will be allocated to climate change mitigation. We also note that this method of funding climate change-related activities is not sustainable as it would be a one-off payment in return for the land, and therefore does not provide a secure source of financing in the years and decades to come.

Overall, we believe that the Climate Change (Scotland) Bill should take a more holistic approach to rural land use, rather than just considering forestry and muirburn. It is vital to addressing within the Bill the 25% of Scotland’s greenhouse gas emissions that come from land use. An indication in the Bill that the forthcoming Land Use Review would set out a strategic approach for managing Scotland’s land use in relation to climate change would be welcomed.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

While SCCS supports the requirement for Ministers to produce an action plan setting out measures to improve the energy efficiency of buildings in Scotland, we are concerned that the measures set out in this section of the Bill do not match the level of ambition laid out in earlier sections of the Bill, nor in existing statute. It is essential that the Scottish Government adopts a comprehensive and sustainable approach to reducing emissions from energy use, and brings forward, at an early date, a comprehensive energy strategy taking account of demand reduction, energy efficiency and renewables, and to review it periodically.

SCCS is concerned that the current drafting of this section would actually lead to a weakening of the duty on Scottish Ministers. In section 179 of the Housing (Scotland) Act 2006, Ministers have a duty to improve energy efficiency in domestic housing. In contrast, the drafting of this section of the Bill merely gives Ministers a duty to promote energy efficiency, while section 179 of the Housing (Scotland) Act would be repealed by the passage of this Bill. Such a weakening of the duties on Scottish Ministers is unacceptable.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?

SCCS welcomes the proposals in the Bill, which confer on Ministers the power to make regulations providing for the assessment of the energy performance of non-domestic buildings and emissions associated with such buildings. However, we believe the voluntary approach outlined will fail to deliver the level of emissions cuts required. The Bill should therefore confer powers on Ministers to mandate energy efficiency improvements in both domestic and non-domestic buildings.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

SCCS supports the encouragement of promoting more district heating systems and the financial assistance the government is committing in this area.

However, the illusive definition of renewable sources raises serious cause for concern. The use of waste as a renewable fuel directly conflicts with the attempts to reduce CO₂ emissions. Incinerator technologies
(gasification, pyrolysis, mass burn, plasma) emit almost a third more CO₂ per unit electricity generated than coal-fired power stations. It is also a contradiction of internationally recognised definitions of zero waste.

SCCS does not view these technologies as renewable and wants to see the government promotion of anaerobic digestion as the primary 'renewable source' in this commitment, as being the least harmful thermal technology to human health and climate change emissions.
SCCS believes that a reducing amount of waste incineration should be permitted, and that energy from waste facilities must maximise energy conversion possibilities with strict heat recovery rules, while avoiding policies that require waste production to feed energy from waste plant.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

- Waste prevention and management plans;
- Waste data;
- Deposit of recyclable waste;
- Procurement of recyclate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

What are your views on these proposals?

SCCS welcomes the introduction of powers to establish deposit and return schemes, targets for packaging reduction schemes, and charges for supply on carrier bags and further recycling provisions. However, further work is required on waste reduction and prevention, as the priorities of the waste hierarchy.

SCCS supports a move towards zero waste as one important strand of climate change mitigation, but is disappointed with the Scottish Government’s definition of zero waste. SCCS opposes the definition of waste incineration as either renewable energy or as part of zero waste. Among the range of definitions, many of our members support the following internationally recognised definition of zero waste, as set by zero waste practitioners and scientists, recyclers and community waste organisations:

"Zero Waste is a goal that is both pragmatic and visionary, to guide people to emulate sustainable natural cycles, where all discarded materials are resources for others to use. Zero Waste means designing and managing products and processes to reduce the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them. Implementing Zero Waste will eliminate all discharges to land, water or air that may be a threat to planetary, human, animal or plant health." 15

The Government’s inclusion of energy recovery has no place in this definition and aim of zero waste. It only provides disincentives to further developments on reduction, reuse and recycling by including the 25% of waste targeted for energy from waste.

SCCS encourages Scottish Government Ministers to further refine their definition of zero waste, based on sustainable development principles within the context of global climate change.

SCCS welcomes the introduction of waste prevention and management plans for businesses and public bodies, alongside other waste reduction and recycling measures. Much can be learned from the community sector which has been active in this area for many years. It is essential to bring businesses fully on board in this area, while public bodies have a crucial role to play in leading by example, as part of overall sustainable development strategies.

Concerted action by the public sector can make a major contribution to reducing Scotland's waste, can set a good example for the private sector and can encourage employees to change their behaviour at home - although often now workers find they are doing far more recycling at home than at work and want employers to take much stronger action.

These proposals should help ensure public and private sectors tackle waste prevention, waste reduction and recycling in a focused, planned manner in line with all relevant legislation, guidance and targets and making use of sustainable procurement policies to effect improvements. Negotiated workplace environmental agreements will ensure the best chance of successful implementation of plans.

15 Zero waste International Alliance, November 2004
Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

The fact that more than 20,000 people responded to the Scottish Government’s consultation is a measure of how important the Climate Change (Scotland) Bill is perceived to be. With this in mind, it was disappointing that the Scottish Government did not make more effort to engage individuals and communities around Scotland in the consultation process. The majority of the respondents became aware of the consultation because of the hard work of NGOs, rather than because of any genuine attempt by the Scottish Government to solicit their views.

This was particularly disappointing given that in order to achieve the targets within the Bill, the Scottish Government is going to need buy-in and support from every sector of society, and every individual in Scotland. The earlier people can engage in the process the better.

It was also a stark contrast with the consultation on the Smoking, Health and Social Care (Scotland) Bill – where significant Government effort was made to engage members of the public and due respect was paid to their opinions.

Finally, SCCS believes that the questions in the consultation document could have been significantly more accessible. Obviously there was a need to consult on the detail of trading schemes, carbon budgeting etc, but we believe there was also a need for more general questions about the principles and objectives of the Bill, responsibility of different sectors to take action, the role of Scottish communities in climate change mitigation and adaptation, and the broader international context.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

No view.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

We already know that climate change is compounding existing global inequalities. Poverty increases people’s exposure to the adverse effects of climate change, and poor communities are the most vulnerable, even though they have minimal responsibility for creating the problem. Between 2000-2004, 262 million people were affected by climate disasters annually. 98% of these people were in the developing world.

Climate change is also projected to increase the number of refugees and immigrants from areas least able to cope with a changing climate to areas with greater resources. The possibility of increased immigration flows raises equality and societal issues around questions of race and immigration.

By making a legislative commitment that Scotland will keep within a fair share of a global greenhouse gas budget, at least 3% reductions per year and at least 80% reduction by 2050, the Scottish Government will set a positive precedent and consolidate its position as a global leader on climate change, as well as playing its part in addressing global and intergenerational inequalities.

It is equally important that mitigation and adaptation policies are held against criteria of social and environmental justice within Scotland. Efforts to reduce emissions and adapt to the impacts of climate change must go hand-in-hand with existing work to lift people out of fuel poverty and address environmental injustices.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

Global sustainable development must be an underpinning principle of the Bill and SCCS would like to see this acknowledged in the long title of the Bill. This may have precedence given that the Rural Agriculture and Environment Committee have recommended that the Flood Risk (Scotland) Management Bill be amended to include ‘more specific reference to sustainability on the face of the Bill.’

16 UNDP 2007 World Development Report
17 Rural Affairs and Environment Committee, Stage 1 Report on the Flood Risk Management (Scotland) Bill
SCCS further believes that the Climate Change (Scotland) Bill should place a duty on the Scottish Government to ensure that any mitigation and adaptation efforts contribute to the furthering of sustainable development and ensure the avoidance of negative social, economic and environmental impacts; either within Scotland or in the developing world.

- **Be explicit that sustainable development is core to the purpose and delivery of the statute in relation to mitigation and adaptation.**

**Q20**  Do you have any other comments on the Bill?

SCCS is keen to ensure that the provisions in the Bill are implemented effectively. We believe the courts should have a role in scrutinising the delivery of the targets. We would like it made clear that, as in England and Wales, the courts have an important preventative role in using their powers to quash Ministerial decisions on issues such as future targets, or projects or programmes that were likely to lead to breaches of the targets. In doing so, the courts would have to be able to consider the merits of the matter, and in particular the relevant advice of the relevant Advisory Body. It would also be critical that access to the court was timely and affordable. Unfortunately, these three criteria, despite being established by the Aarhus Convention and the three EU Directives arising from this, are not met fully in Scotland at present.

Even judicial review is less easily accessible in Scotland than in England and Wales where the courts have accepted the principle of ‘protective costs orders’ where campaign groups take such actions in the public interest. These provide a guarantee that the threat of a punitive costs award cannot deter a legitimate action to seek judicial review. New provisions in Scottish law are needed to ensure that affordable, timely and merits-based access to justice is available in cases relating to the Bill’s objectives. This would ensure that public interest groups could seek a court ruling if ministers were failing to comply with their duties under the Bill. Such provisions may not require primary legislation, but we would expect Ministers to commit to ensuring that the necessary provisions are brought forward.

- **Ensure that strong enforcement measures are set in place in statute.**

Therefore, Stop Climate Chaos Coalition Scotland priorities for the Climate Change (Scotland) Bill are that it must:

1. Set out a framework that will achieve at least an 80% reduction in greenhouse gas emissions by 2050.
2. Establish in statute annual emission reductions of at least 3% year-on-year from the start, not just from 2020, compatible with a fair and safe cumulative budget identified by the advisory body (see 4).
3. Include emissions from all sectors in the framework and targets set out in the Bill, including those from international aviation and shipping, from the very start.
4. Establish a Scottish advisory body, a Scottish Climate Change Commission, in the primary legislation to support delivery of the Bill when it is enacted.
5. Ensure that at least 80% of the effort to cut emissions takes place in Scotland.
6. Establish duties on all public bodies to reduce greenhouse gas emissions in line with the national target.
7. Set in place robust, transparent reporting measures so the Scottish Parliament is well informed on progress in meeting targets and Government is held to account on mitigation and adaptation.
8. Ensure that strong enforcement measures are set in place in statute.
9. Ensure Scotland counts all its emissions and reports on those produced by products and services we consume as well as emissions produced domestically.
10. Be explicit that sustainable development is core to the purpose and delivery of the statute in relation to mitigation and adaptation.
SCCS members are:

- A Rocha
- Association for the Conservation of Energy
- Baldernock Community Council
- Christian Aid Scotland
- Church of Scotland
- Concern Worldwide Scotland
- Edinburgh University Students Association
- Friends of the Earth Scotland
- Glasgow Eco-renovation Network
- Glasgow Students Representative Council
- Greenpeace
- Heriot Watt University Students Association
- Justice and Peace Scotland
- Mercy Corps Scotland
- National Trust for Scotland
- Oxfam Scotland
- People and Planet
- RSPB Scotland
- SAMH
- SCIAF
- Scottish Action on Climate Change
- Scottish Episcopal Church
- Scottish Seabird Centre
- SEAD
- Spokes
- Sustrans
- Tearfund
- Transform Scotland
- UNISON
- WDM Scotland
- Woodland Trust
- WWF Scotland
SPT welcomes the opportunity to engage with the Transport, Infrastructure and Climate Change Committee regarding Scotland’s leading commitment to climate change. We look forward to working closely with our public and private sector stakeholders in this challenging time to deliver a world class transport system that may contribute significantly to the statutory framework proposed by Government that will result in considerable reductions in greenhouse gas emissions across Scotland.

SPT recognises transport’s contribution to greenhouse gas emissions and actively promotes more sustainable transport through the development and delivery of our Regional Transport Strategy. The RTS is available to view or download via the SPT website (www.spt.co.uk), however, copies of all documents are available on request.

In terms of the consultation questions, SPT provides the following comments:

**Q1** The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

SPT believes that, while ambitious, both the 2050 target (80% GHG emission reduction) and 2030 interim target (50% GHG emission reduction) show that the Scottish Government recognises the need for immediate and sustained action over the long-term to mitigate the impact of Climate Change due to GHG emissions.

**Q2** The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

We agree that the setting of batches, with the first from 2010 to 2022, is necessary to ensure that mitigation measures are developed and implemented in the short term.

**Q3** The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

SPT agree that this is a suitable approach.

**Q4** The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

SPT believe the concept of a ‘net Scottish emissions account’ will provide the essential baseline to which future targets can be measured at national level. We believe that a limit should be implemented on the number of carbon units which Scotland can purchase because
it will ensure that Scotland takes further strides to sustainability through real change rather than offsetting our emissions through fiscal measures. The Scottish Government should also consider implementing a process to further reduce the limit over time to encourage even greater levels of reduction through innovation and working in partnership.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

SPT agrees that the proposed definition of Scottish emissions is suitable.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

SPT agrees that provision to obtain independent, expert advice is necessary to ensure that Scotland’s needs are met, particularly since more stringent GHG emission reduction targets than the rest of the UK are being set. Furthermore, it is appropriate that the Scottish Government obtains advice that is fully impartial on prioritisation of actions needed to reach the targets.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

We agree that the proposed reporting arrangements are fit for purpose.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

SPT agree it is right to impose duties on public bodies in relation to climate change. However, we recommend that those public bodies should be consulted as early as possible to ensure that those duties, and associated targets, are both realistic and achievable. Furthermore, we recommend that there be a strong commitment from the Scottish Government to provide sufficient financial support to public bodies in order to achieve their agreed targets.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?
SPT agree that the proposed reporting arrangements should be introduced.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

SPT believe that the energy efficiency of buildings in Scotland will be an important component in reducing GHG emissions since it is recognised that non-domestic buildings are responsible for nearly a fifth of all carbon emissions.

SPT is committed to improving its environmental performance through the development and implementation of an Environmental Management System accredited to ISO14001. As part of this commitment, we have developed a corporate Environmental Policy Statement that outlines key environmental objectives, including building energy efficiency measures, and how SPT will act to achieve these.

Similarly, SPT seeks to enable behaviour change through initiatives encouraging the use of more sustainable transport options, for example through campaigns, improving bus services, travel planning, and new initiatives such as the recently launched car-sharing scheme, SPT Journey Share (www.sptjourneyshare.co.uk).

SPT therefore agree that the creation of an action plan covering the energy efficiency of buildings and the behaviour change is vital for a co-ordinated approach in Scotland. We would welcome a commitment from the Scottish Government to involve organisations such as SPT in the development and delivery of the action plan, and again, that adequate resources are in place which allow organisations like SPT to deliver on the commitments in the action plan.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

The introduction of the Bill will necessitate a ‘step-change’ in Scotland’s approach to sustainable development. A focus on more sustainable transport options – and investment therein – is vital as part of an integrated approach to achieving targets set. A key part of this will also be the further integrations of transport and land-use planning, particularly for new developments, ensuring that appropriate sustainable transport options are in place and thereby encourage people to leave their car at home, at least for part of their journey. SPT, at a regional level, is working closely with Glasgow and Clyde Valley Strategic Development Planning Authority on the first Strategic Development Plan, both organisations being focused on ensuring a more sustainable approach is taken to development in future.

SPT recognises the vital role that the public sector will play in meeting the targets set by Government. As a Regional Transport Partnership, SPT understand that we cannot tackle climate change in isolation, and that we must work in partnership with our member councils, other public sector agencies and the private sector (e.g. operators). Public sector financial support can encourage greater levels of commitment from the private sector to improve vehicle technologies that will reduce emissions.

A recent example includes SPT’s trial introduction of two state-of-the-art hybrid buses – low floor vehicles converted from purely diesel power to the latest diesel-electric hybrid drive technology. Hybrid-drive buses are powered by a battery pack connected to a small car-sized diesel engine or the existing bus diesel engine running at greatly reduced speed. The buses also use regenerative braking technology as a further energy-saving feature, which recharge the batteries whilst braking. These buses were provided to a private bus operator under contract to SPT. We intend to monitor reduced CO2 emissions, fuel consumption and noise...
levels throughout this extensive trial and will communicate the results to industry to encourage greater uptake of newer, cleaner technology.

However, the trial could only have been undertaken through both collaboration and investment from SPT. Therefore, it is essential that the public sector must be fully supported by the Scottish Government to ensure that we continue to lead the way in the implementation of more sustainable transport practices.
We support the general thrust of the CRNS (Community Recycling Network Scotland – click link) response, but would want to emphasise the potential for re-use to markedly improve the commercial viability of the "used resources" industry. We have recently completed an analysis of the economic benefits of repairing/re-using/dismantling parts and selling white goods such as washing machines which arrive at Dundee City Council's three bring sites. Our conclusion was that reclaimed goods to the sum of at least one third to half a million pounds sterling per annum are being lost through the standard WEEE compliance schemes. We can send figures if you wish. Extrapolate this across Scotland......We hope you are fully reflecting on the impact of the forthcoming "Re-use Directive" from Europe.

We have operated in the same territory as our local councils in Tayside for almost twenty years and generally have witnessed a dearth of enterprise in their approach to waste. We advocate the non-profit-distributing community enterprise model for maximising the value in "waste". We advocate releasing this potential through requiring councils to put the management of civic amenity/recycling sites out to tender with a community benefit clause where the bottom line is real, unsubsidised local job creation.

Energy in Buildings new and existing

We deplore the failure to implement the likes of SPP6 and would raise the bar for minimum building standards to Scandinavian levels. We have no chance at present of achieving zero carbon buildings by 2016, unless we start now. A higher investment in buildings energy performance will easily be recouped by long term revenue savings and if we don't do that now, we will have the awesome task of upgrading (retrofitting) poorly performing buildings in the future.
Dear Sir

CLIMATE CHANGE (SCOTLAND) BILL

Tearfund is a Christian relief and development agency building a global network of local churches to help eradicate poverty. Tearfund undertakes operational work on climate change adaptation and disaster risk reduction and campaigns on mitigation and adaptation issues as well as undertaking other relief and development work.

Tearfund Scotland is a national branch of Tearfund and is based in Glasgow with charitable status in Scotland. We submitted a response to the Consultation Document issued by the Government last year and are pleased to have the opportunity to comment further now on the Bill. We are a member of the Stop Climate Chaos Scotland Coalition and endorse the observations which the Coalition is submitting. Any differences in detail between our views and those of the Coalition should not be taken as any disagreement with the overall content of the Coalition’s submission.

We believe the proposed legislation to be immensely important. Many of the areas in which Tearfund is working are already experiencing the impact of climate change. A report published by us in 2005 drew together observations from our contacts in 13 countries in Africa, Asia and Latin America. They spoke of the devastating effect on individuals and communities of unpredictable seasonal changes, especially uncertainty about the onset and duration of annual rains. They spoke of widespread flooding and of droughts which had already lasted for several years. In some cases both flooding and drought were experienced in the same country in the same year and were affecting areas that had not previously been prone to them. Conditions have not improved since 2005 and the work which Tearfund undertakes to assist adaptation does not resolve the problem.

The consequences are broadly fourfold: lack of access to water for drinking and for livestock, food insecurity as crops fail to flourish, an increase in water borne and endemic disease, and migration. In 2005 there were estimated to be 25 million environmental refugees. In Mali, as an example, the situation was described as follows:

*Arable lands and pastures are diminished and potential workers are unemployed and hungry. Huge numbers of people move to the towns where other difficult problems await them. They are malnourished and subjected to under-development with its consequent diseases, illiteracy and misery.*

We are pleased therefore that the Scottish Government proposes to take serious steps towards the reduction of emissions internationally by taking a robust approach to the reduction of emissions from Scotland.

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050. What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

Tearfund Scotland supports the proposal to require emissions of greenhouse gases in 2050 to be at least 80% less than those of the baseline year of 1990. This accords with current scientific advice of what is necessary to prevent global temperature rising more than 2°C above the pre-industrial levels, and represents a fair share of allowable emissions from Scotland to that end.
We feel some concern, however, that the interim target date is more than twenty years away and as such does not adequately reflect the urgency of the need to secure substantial reductions in emissions. We note that the Climate Change Act 2008 for the UK as a whole, in Section 5 relating to carbon budgets, effectively has an interim target for 2020. We would like to see the Bill contain a first interim target date in 2020 while also retaining the later 2030 date.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

Joint answer with Q3.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

The interim and 2050 targets are important, but it is essential that emissions should be reduced progressively from the time the legislation comes into force if greenhouse gases are not to continue to accumulate in the meantime. Accordingly we support the intention of setting annual reduction targets; 3% per annum must be regarded as the minimum if the interim and 2050 targets are to be achieved.

We have indicated earlier in our letter that, from our experience, the impact of climate change is already being felt in many other parts of the world and is having an especially serious impact on communities that are already living in marginal and disadvantaged circumstances. We consider the problem to be urgent and that reductions of at least 3% per annum should be made statutory well before 2020. We recognise that there may need to be some lead-in time, but consider that it would not be unreasonable for 3% targets to become mandatory from 2012, ie three years after the likely enactment date, which would phase with the next set of Kyoto targets from 2012.

The Bill provides for annual targets to be set up to sixteen years in advance, or even longer if they are set before the statutory latest dates proposed in Section 4(2). We do wonder whether there will be sufficient flexibility in setting targets so far in advance to allow for the extent to which targets were met in previous years or for changes in scientific knowledge or advice. We note that Section 6 would allow Ministers to modify annual targets after they have been set, but this would seem to detract from the certainty which setting targets in advance might be deemed to provide.

Q.4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?
A fundamental point must be that the majority of effort towards meeting targets set by the legislation should be made within Scotland. It would be undesirable if future Scottish administrations were able to claim to be meeting their statutory obligations because substantial purchases of international credits had been made. At worst, it would be possible for a Scottish Government to take no action in reality to reduce emissions but to claim success by a massive purchase of credits.

Tearfund Scotland believes that the Scottish Climate Change Bill should:

limit the proportion of emission reductions that can be achieved outwith Scotland (ie through trading) to levels and standards to be advised the advisory body of Section 19 (our preference would be that the limit should be less than 30 per cent);

require that annual reports on progress show actual gross reductions achieved in Scotland as well as net reductions which take into account any credit trading.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

We are disappointed that the Bill proposes to give Ministers only the power and not a duty to include emissions from international aviation and shipping within the Scottish emissions account.

Data in the AEA Energy and Environment report on greenhouse gas emissions for the period 1990-2006 show that emissions of carbon dioxide attributable to Scotland from navigation and civil aviation in 2006 accounted for 3.2% of emissions from all uses of energy. They had increased by 28% since 1990 at a time when emissions from all energy use sources had fallen by 2%. Emissions from civil aviation alone increased over that period by 115% and accounted for 1.3% of all energy use emissions in 2006 compared with 0.6% in 1990.

While emissions from navigation and aviation at present represent a relatively small proportion of total energy use emissions the rapid rate of growth which has occurred, especially in emissions from aviation, convince us that must be included in the Scottish Emissions Account from the outset.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

No submission.
Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

No submission.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

The targets for emissions reduction are ambitious and it will not necessarily be easy for the Scottish Government to achieve them. We agree with the statement in the Policy Memorandum that the public sector will have a pivotal role to play. Local authorities in particular are likely to have a significant role to play in their property management, traffic management, land use planning and waste disposal functions. We note that the Scottish Government is committed to working in partnership with the public sector, but we consider that the Bill should require statutory emissions reductions targets to be imposed on all public bodies at an early date, say within five years. The Memorandum suggests (para. 39) that statutory duties may only be imposed as in due course emissions reductions become harder and more expensive to deliver. This is a clear invitation to public sector bodies not to implement those easier, less expensive measures to reduce emissions now, but to retain them as available options to ensure that eventual statutory targets can be met.

The imposition of duties should be accompanied by a duty on the Government to issue guidance and a requirement on public bodies affected to report on compliance.

Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

No submission.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

No submission.
Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

No submission.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

No submission.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?

No submission.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

No submission.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

Waste prevention and management plans;
Deposit of recyclable waste;
Procurement of recyclate;
Reduction of packaging;
Deposit and return schemes;
Charges for carrier bags.

What are your views on these proposals?

Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

No submission.
Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

No submission.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

No submission.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

In our response to the Consultation Document we said the following:

*It would appear* (in the fourth paragraph of the foreword to the Consultation Document (p.2)) *that the Scottish Government’s only clear purpose is to make Scotland a ‘more successful country’.* We would have thought in view of the admirable aspirations expressed in the previous paragraphs, and given the potential seriousness of the impact of climate change for humanity as a whole, that at least one other purpose, with high priority, would be to work individually as a Government and with the international community to adopt measures to minimise further climate change. This would provide an appropriate rationale for the Discussion Document.

*Instead, it would seem that the theme of ‘sustainable economic growth’ is to be taken as the foundation for much that follows in the Discussion Document. ‘Sustainable’ economic growth is too close in general understanding to ‘sustained’ economic growth and does not allow for the possibility that continued economic growth may not be possible, particularly in the more developed countries, if emissions are to be reduced to the extent that is required.*

‘Sustainable economic growth’ is not the same as ‘sustainable development’. The clear implication of that concept, as it emerged at Rio de Janeiro in 1992, is that development can only be considered sustainable if it accommodates social and environmental objectives as well as economic ones. The outcome of the Rio conference reflected concerns of many of the poorer countries of the world, and it is these countries that are now beginning to experience, and increasingly will experience, the worst impacts of climate change. The potential impact of unrestricted climate change on society and the environment in these countries will be immense.

We continue to be concerned that the Scottish Government may believe that the Scottish targets will be achieved primarily through economic growth. While there undoubtedly will be commercial opportunities for renewable energy technologies, we do not envisage that technology alone will secure the reductions that are required. The Consultation Document noted that it is our consumption patterns which are unsustainable (para. 2.6). Changes of lifestyle are likely to be necessary to achieve the emission reduction targets and this may, in more developed countries, involve a diminution of economic growth. Further, an emphasis on growth may mean that economic priorities in times of recession become a justification for failing to meet emissions targets. We consider it important that the Bill should make clear that it is underpinned by the concept of sustainable development.

The current preamble to the Bill is no more than a summary of the Bill’s contents. We would like it to contain a clear statement that the purpose of the Bill is to ensure that Scotland, as a member of the international community, makes a fair contribution towards minimising further climate change. We would also like the Bill itself to require Ministers, as they exercise the powers and duties given them by the Bill, to do so with the objective of contributing to sustainable development. This would accord with other legislation such as the Town and Country Planning (Scotland) Act 1997 as recently amended by the Planning etc (Scotland) Act 2006, Section 1.
Q20  Do you have any other comments on the Bill?

Section 4(4) requires Ministers to have regard to various criteria when setting annual targets. These include consideration of the impact of the target on those living (presumably in Scotland) in poverty (subsection (4) (e)) and those living (again presumably in Scotland) in remote and rural communities (subsection (4) (f)). As we have noted earlier it is those who are living in poverty and those who are living in remote communities in the developing world who are especially vulnerable to the impact of climate change. We would therefore like to see subsection (4) require Ministers, having taken appropriate advice, also to have regard to the impact of climate change (as opposed to the target) on those who are living in poverty around the world or who are brought into poverty as a consequence of climate change. The requirement to have regard to international policy relating to climate change (subsection (4)(h)) does not adequately address this point.

We are grateful for the opportunity to comment on the Climate Change (Scotland) Bill. We have not sought to comment on all Sections but trust that the observations we have made will be of assistance to the Committee in their deliberations. We would particularly urge them to consider making amendments to the Bill to incorporate those points which we suggest would strengthen the Bill.
Stop Climate Chaos Scotland is a coalition of more than 30 organisations campaigning together to tackle climate change. The coalition members include environment and development NGOs, faith groups, trade unions, community councils, student societies, women’s organisations, a mental health charity, and many others. In Scotland, the members have a combined supporter base of over 1.5 million people.

The Stop Climate Chaos Coalition Scotland priorities for the Climate Change (Scotland) Bill are that it must:

Set out a framework that will achieve at least an 80% reduction in greenhouse gas emissions by 2050.

Establish in statute annual emission reductions of at least 3% year-on-year from the start, not just from 2020, compatible with a fair and safe cumulative budget identified by the advisory body (see 4).

Include emissions from all sectors in the framework and targets set out in the Bill, including those from international aviation and shipping, from the very start.

Establish a Scottish advisory body, a Scottish Climate Change Commission, in the primary legislation to support delivery of the Bill when it is enacted.

Ensure that at least 80% of the effort to cut emissions takes place in Scotland.

Establish duties on all public bodies to reduce greenhouse gas emissions in line with the national target.

Set in place robust, transparent reporting measures so the Scottish Parliament is well informed on progress in meeting targets and Government is held to account on mitigation and adaptation.

Ensure that strong enforcement measures are set in place in statute.

Ensure Scotland counts all its emissions and reports on those produced by products and services we consume as well as emissions produced domestically.

Be explicit that sustainable development is core to the purpose and delivery of the statute in relation to mitigation and adaptation.
1. Introduction

1.1 Transform Scotland is the national sustainable transport alliance. We campaign for a more sensible transport system, one less dependent on unsustainable modes such as the car, the plane and road freight, and more reliant on sustainable modes like walking, cycling, public transport, and freight by rail or sea. We are a membership organisation bringing together rail, bus and shipping operators; local authorities; national environment and conservation organisations; local environment and transport campaign groups; and individual supporters.

1.2 We wish to thank the Committee for the opportunity to submit views on this important piece of legislation.

1.3 We gave oral evidence to the Committee at its meeting held on 10th February 2009.1 Our written views submitted in advance of that evidence session should also be read in conjunction with this submission.2

1.4 We are a member of Stop Climate Chaos Scotland and are happy to support its views that the Bill should:

1. Set out a framework that will achieve at least an 80% reduction in greenhouse gas emissions by 2050.
2. Establish in statute annual emission reductions of at least 3% year-on-year from the start, not just from 2020, compatible with a fair and safe cumulative budget identified by the advisory body (see 4).
3. Include all emissions in the framework and targets set out in the Bill, including those from international aviation and shipping, from the very start.
4. Establish a Scottish advisory body, a Scottish Climate Change Commission, in the primary legislation to support delivery of the Bill when it is enacted.
5. Ensure that at least 80% of the effort to cut emissions takes place in Scotland.
6. Establish duties on all public bodies to reduce greenhouse gas emissions in line with the national target.
7. Set in place robust, transparent reporting measures so the Scottish Parliament is well informed on progress in meeting targets and Government is held to account.
8. Ensure that strong enforcement measures are set in place in statute.
9. Ensure Scotland counts all its emissions and reports on those produced by products and services we consume as well as emissions produced domestically.
10. Be explicit that sustainable development is core to the purpose and delivery of the statute in relation to mitigation and adaptation.

1.5 Our responses to the 20 questions set out by the Committee in its Call for Views are outlined in the following section. In our answer to question 20, we express the view that the Bill should be accompanied by sectoral targets and action plans for the principal emission sectors: e.g. heat, transport, and land use.

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

We support the 2050 target (80% reduction by 2050).

We do not support the proposed 2030 interim target (50% reduction by 2030). This target is inadequate as it is not on the required emissions reduction trajectory.

We note the recommendation of the UK Committee on Climate Change in its December 2008 report that UK emissions be cut by 42% by 2020.3 Given Scotland’s abundance of renewable energy potential and its tradition of compact cities, Scotland is in a good position to over-contribute towards meeting the UK target; as such, we support the proposal of Stop Climate Chaos Scotland that the interim target should be set at a 50% reduction by 2020 (instead of 50% by 2030).

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1 See <http://www.scottish.parliament.uk/s3/committees/ticc/or-09/tr09-0601.htm>.
Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

The Bill should be amended to put in place reductions of at least 3% per annum from the start. This would effectively negate the requirement to set targets in batches.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

This is not acceptable (because of volume of cumulative emissions that would be generated by following this emissions trajectory). The Bill should instead provide for annual reductions of at least 3% per annum from the start.

Q4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

We have concerns with the entire practice of carbon trading. The system is open to abuse at an international level and is difficult to monitor in practice. In particular, we have concern that the concept of purchasing units will be used as a mechanism by which the most polluting nations can put off reducing their carbon output. The recent collapse in the carbon price used in the EU ETS demonstrates the innate vulnerability of attempting to use carbon markets as a response to climate change.

There should be a strict limit on the extent to which Scotland can operate this mechanism, and we support the proposal made by Stop Climate Chaos Scotland that at least 80% of effort to reduce emissions be carried out in Scotland.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

We are content with the description used in the policy memorandum.

However, we are not content with the Bill’s treatment of this matter. The Bill should include emissions from international aviation and shipping from the start - rather than only allow for them to be included at a later date. There is an established methodology for reporting on these emissions and there is no good reason why they should be excluded from the emissions covered in the Bill.

Indeed, the failure to include emissions from international aviation and shipping would deeply undermine the credibility of the Bill. It would certainly be difficult to sustain claims that the Scottish climate change bill was in any way a “world-leading” piece of legislation if it was to specifically exclude emissions from international aviation.

The Bill also fails to make provision for consumption reporting (e.g. for emissions arising from goods imported from overseas). We support the Stop Climate Chaos Scotland proposal on this topic.
Q6  The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

We support the proposal of Stop Climate Chaos Scotland that the Scottish Committee on Climate Change be established at the earliest opportunity.

Q7  The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

We are broadly content with the reporting framework proposed.

However, reporting is not in itself sufficient. We are very concerned that the Bill provides no financial incentives towards meeting the targets, or an enforcement framework to ensure that action is taken to meet the targets. We are in broad support of the approach set out by Oxfam and Friends of the Earth Scotland on this topic.

Q8  The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

Given the financial resources available to public bodies, we see no prospect of the emission reduction targets being met unless their efforts are directed towards acting in accordance with the national targets. Otherwise, we expect the ‘free rider problem’ to predominate - that is, individual local authorities (for example) will decide that they are a special case and that it is instead the responsibility of others to take action.

Public bodies should be expected, from the start, to contribute to emission reduction in line with the national targets. Public bodies should be expected to be responsible for emissions across their areas of operations (e.g. for local authorities, emissions across their local authority areas) rather than just from their own estate.

Q9  The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

Because of the long delays in implementing measures to reduce greenhouse gas emissions, we are now faced with the impacts of climate change - irrespective of the measures that are now taken to decarbonise society. As such, it is important that plans now be put in place to introduce adaptation mitigation measures against the most obvious risks. We made our views on this topic available in our response to the Scottish Government’s consultation on its proposed climate change adaptation strategy.4

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Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?
We have no views on this proposal.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?
We have no views on this proposal.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?
We have no views on this proposal.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?
We have no views on this proposal.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?
We have no views on this proposal.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

Waste prevention and management plans;
Waste data;
Deposit of recyclable waste;
Procurement of recyclate;
Reduction of packaging;
Deposit and return schemes;
Charges for carrier bags.

What are your views on these proposals?
We have no views on this proposal.
Q16 What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

We are content with the consultation carried out.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

We have no views on this topic.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

We have no views on this topic.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

We have no views on this topic.

Q20 Do you have any other comments on the Bill?

1. Absence of provisions on transport

We note that the Bill highlights several areas where measures are to be taken, such as building insulation, renewable heat, waste reduction and plastic carrier bags, yet it makes no mention of transport, despite this being the second largest source of greenhouse gas emissions. (Indeed, the only specific mention of transport in the Bill is to propose an exemption for international aviation and shipping - despite the former being widely acknowledged as one of the most swiftly growing source of greenhouse gas emissions.)

2. Requirement for sectoral targets and action plans

We have severe doubts regarding the likelihood of the Scottish Government to meet the targets set out in the Bill given its current priorities in transport. There is a fundamental mismatch between Scottish local authority and Scottish Government priorities and the comprehensive decarbonisation of society that the Bill in effect calls for. As such, we consider it important that the Bill be accompanied by sectoral targets and action plans for the principal emission sectors: e.g. heat, transport, and land use.5

We note that the Sustainable Development Commission Scotland, in its November 2008 second assessment report, stated that: 6

“[T]he continued growth of road transport will make achievement of proposed greenhouse gas emission reduction targets difficult unless there is a considerable reduction in these emissions from other sectors of the economy. Government transport policy and spend does not yet demonstrate a strong commitment to progressively “decarbonise” Scotland’s transport sector.”

Yet in the three months since the publication of the SDC’s report, we have seen the publication of the Strategic Transport Projects Review and the final version of the revised National Planning Framework. Amongst other things, the former set out a new £9 billion programme of spending on trunk roads, while the latter aims to legislate for airport expansion and a new motorway bridge over the Firth of Forth. Furthermore, the past months have also seen the Parliament reject the proposal of the TICC Committee that the Scottish Budget be amended to provide for an increase in expenditure on the active travel modes, the most sustainable modes of transport.

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5 We would note that the setting of sectoral targets was a specific recommendation of the Scottish Parliament Environment and Rural Development Committee’s report on its climate change inquiry (paragraph 29): “The Committee recommends that the Executive should set robust and challenging sectoral targets where adequate data is available. It should set out an urgent plan for how it will develop targets in other sectors, and from there produce a national target in due course.” Available at <http://www.scottish.parliament.uk/business/committees/environment/reports-05/rar05-05-vol01-01.htm>.

In the absence of major changes in policy and implementation in the areas of land use planning and transport, we have no confidence that the transport sector will contribute to the (at least) 80% reduction in greenhouse gas emissions required over the forty-one years. Under current policies, and given the size of emissions from the transport sector, there appears little prospect of meeting the UK Committee on Climate Change’s recommendation that emissions be cut by 42% by 2020.

The Scottish Government will require to be proactive in providing a framework for local authorities so that they will achieve significant reduction in emissions over time, whilst at the same time improving the look and ambience of our towns and cities and improving public health. This could include measures such as:

- Implementing road user charging - a policy which remains within the powers of the Scottish local authorities and the Scottish Parliament.7
- Converting the car and public transport fleet from fossil fuels to renewable power sources.
- Increasing commuter cycling to continental levels (20-30% of all trips).
- Reducing urban congestion by a combination of the above measures plus prioritising road space in favour of walkers and cyclists and reductions in inner city parking.

Recent developments in Denmark show the sort of initiatives that must be taken if reductions are to be achieved in a reasonable timescale. The Danes have just concluded a deal that will see the installation of battery recharging stations throughout the country. This will allow the gradual replacement of the car fleet by electrically-powered vehicles. It is initiatives of this sort that are needed in Scotland if we are to have any hope of meeting the challenging target set in the Bill. We still wait for similar boldness to emanate from the Scottish political classes.

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7 This was also a specific recommendation of the Scottish Parliament Environment and Rural Development Committee’s Report on Inquiry into Climate Change. Available at [http://www.scottish.parliament.uk/business/committees/environment/reports-05/rar05-05-vol01-01.htm](http://www.scottish.parliament.uk/business/committees/environment/reports-05/rar05-05-vol01-01.htm).
WRITTEN SUBMISSION FROM UNISON SCOTLAND

Executive Summary

- UNISON is a member of Stop Climate Chaos Scotland, which is campaigning for Scotland to have a strong, world-leading climate change Bill that helps influence UN talks in Copenhagen in December. This response complements the SCCS response, available at www.stopclimatechaos.org/scotland and lists ten key SCCS priorities.
- These priorities include: a target of at least an 80% reduction in greenhouse gas emissions by 2050; statutory annual emissions reductions of at least 3% year-on-year from the start; the inclusion of international aviation and shipping emissions from the start; a Scottish advisory body, a Scottish Climate Change Commission, established in the primary legislation.
- The public sector has a key role in leading by example. We and SCCS also want to see a duty on all public bodies, similar to the public equalities duties, to consider climate change in all their decisions, and to reduce emissions in line with the national target. This duty should include annual reporting, should be established in the primary legislation and implemented in line with the next funding deal for local government. All public bodies should be required to seek to negotiate a workplace environmental agreement with their recognised trade unions.
- The Bill should also be explicit that the principles of sustainable development – Living within environmental limits, Ensuring a strong, healthy and just society, Achieving a sustainable economy, Using sound science responsibly and Promoting good governance - are core to the purpose and delivery of the statute in relation to mitigation and adaptation.
- As part of a sustainable development approach, trade unions, in Scotland, at UK level and internationally, promote 'Just Transition' policies, seeking to manage the employment and training implications of the transition to a low-carbon economy in a fair way.
- With the STUC, UNISON supports planning the transition in Scotland via four inter-linked strategies to accompany targets for emissions reductions: strategies on green workplaces, transitional skills and Just Transition, and a low-carbon industrial strategy. We are keen to consider with the TICC Committee ways in which a Just Transition strategy framework might be given a statutory basis in the Bill.
- The global financial crisis must not be used as an excuse not to invest now in proper mitigation and adaptation measures. As the Stern Review said, the costs of not acting are far greater than acting now.

Introduction

This paper constitutes UNISON Scotland’s response to the Scottish Parliament Transport, Infrastructure and Climate Change Committee’s Call for Views on the Climate Change (Scotland) Bill.

UNISON Scotland welcomes the opportunity to respond. UNISON is Scotland’s largest public service trade union, representing more than 162,000 members working largely in the public sector in Scotland. Many of our members are at the forefront of protecting the environment and the quality of life for everyone in Scotland.

Our response is informed by the fact that UNISON has long supported sustainable development and green workplace policies as key trade union issues that also link with our international outlook on social justice. At UK level, the Trade Union Sustainable Development Advisory Committee, a joint TUC/DEFRA body subscribes to the view that climate change is perhaps humanity’s greatest challenge in the 21st century. It points out that:
‘Sustainability’ is not something we put in a separate box marked ‘green’. It is a core trade union and workplace issue. It directly impacts on jobs, in numbers, types, skills and locations. The employment and training implications of the transition to a low carbon economy are profound, as is the need to manage the changes fairly - through the so-called ‘just transition’.

UNISON Scotland is a member of the Stop Climate Chaos Scotland coalition and has worked closely with other members to call for a strong, world-leading Scottish Climate Change Bill. SCCS has submitted a joint response.¹ This document does not repeat that, but instead lists the 10 SCCS priorities, then comments on economic policies and climate change. We also make some further comments on the public bodies’ duty, green workplaces, forestry and waste.

Stop Climate Chaos Scotland

Stop Climate Chaos Scotland is a coalition of more than 30 organisations campaigning together to tackle climate change. The coalition members include environment and development NGOs, faith groups, trade unions, community councils, student societies, women’s organisations, a mental health charity, and many others. In Scotland, the members have a combined supporter base of over 1.5 million people.

The Stop Climate Chaos Coalition Scotland priorities for the Climate Change (Scotland) Bill are that it must:

1. Set out a framework that will achieve at least an 80% reduction in greenhouse gas emissions by 2050.
2. Establish in statute annual emission reductions of at least 3% year-on-year from the start, not just from 2020, compatible with a fair and safe cumulative budget identified by the advisory body (see 4).
3. Include emissions from all sectors in the framework and targets set out in the Bill, including those from international aviation and shipping, from the very start.
4. Establish a Scottish advisory body, a Scottish Climate Change Commission, in the primary legislation to support delivery of the Bill when it is enacted.
5. Ensure that at least 80% of the effort to cut emissions takes place in Scotland.
6. Establish duties on all public bodies to reduce greenhouse gas emissions in line with the national target.
7. Set in place robust, transparent reporting measures so the Scottish Parliament is well informed on progress in meeting targets and Government is held to account on mitigation and adaptation.
8. Ensure that strong enforcement measures are set in place in statute.
9. Ensure Scotland counts all its emissions and reports on those produced by products and services we consume as well as emissions produced domestically.
10. Be explicit that sustainable development is core to the purpose and delivery of the statute in relation to mitigation and adaptation.

Climate change and economics, local and global

The world is at a crossroads as politicians decide whether or not to fully commit to, quite literally, saving the planet for current and future generations. At the same time, a massive financial crisis has rocked economies internationally. To those who say we cannot afford to switch to a low carbon economy, we would argue that we cannot afford not to. Analyses from around the world, including the 2006 Stern Review, and the 2008 report from the UK Committee on Climate Change highlight that it is possible and affordable to cut greenhouse gas emissions to prevent runaway climate change, but that we must act urgently and it will cost less financially to do so now, than if we delay.

¹ The full SCCS submission, and key Briefing Papers, are online at: www.stopclimatechaos.org/scotland
These policy areas are inter-linked, as highlighted by trade unions and a wide coalition who are focusing on Jobs, Justice and Climate at a rally on 28 March in London. The aim is a message to the April G20 summit, including new US President Barack Obama, to ‘put people first’. Marchers want to highlight that even before the banking collapse, millions suffered poverty, inequality and the threat of climate chaos. Governments, business and international institutions have followed a model of financial deregulation that has encouraged short-term profits, instability and an economy fuelled by ever-increasing debt, both financial and environmental. Our children’s future depends on creating a low-carbon economy based on a fair distribution of wealth, locally and globally, with decent jobs and public services for all. We must act now on all these issues, before it is too late.

UNISON believes that the Climate Change (Scotland) Bill can be strengthened along the lines SCCS has suggested to help deliver that fair, low-carbon society. In doing so, we can have immense international impact, influencing post-Kyoto United Nations negotiations in December 2009 in Copenhagen. We have highlighted the importance of a ‘Just Transition’, managing the changes fairly. The International Trade Union Confederation has been making the case for Just Transition and green workplace policies in the UN climate change talks, most recently in Poznan in December 2008. Its proposals are recorded in a UN Framework Convention on Climate Change report on what intergovernmental organisations, NGOs, environmental groups, business and research institutions and other observers at the talks want to see in a new global treaty.

There are employment and economic benefits in switching to a green economy, including from investment in renewables, energy efficiency in industry and housing and improvements in public transport. Scotland should be grasping the opportunities, planning for change and investing in low-carbon technologies. We agree with the STUC proposal that this transition should be planned via four inter-linked Scottish strategies to accompany targets for emissions reductions.

- A green workplaces strategy
- A robust and comprehensive low carbon industrial strategy
- A transitional skills strategy
- A Just Transition strategy

Through such efforts, the Scottish Government, working with social partners, can put in place the right consultation mechanisms, training and innovation policies, along with the right financial support. This should help create the conditions for a ‘just transition’ encouraging green jobs, green enterprise and growth, as already seen in countries such as Germany and Denmark.

UNISON Scotland Response to the Call for Views Questions

For our response to questions 1- 7, 9-10, 12-14 and 16-20, please see the SCCS response. UNISON adds to the SCCS response on the following questions:

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

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2 Put People First march for Jobs, Justice and Climate: www.putpeoplefirst.org.uk
4 STUC written evidence to the TICC Committee 24 Feb 09: www.scottish.parliament.uk/s3/committees/ticc/papers-09/trp09-07.pdf
5 For further details, see the TUC pamphlet A Green and Fair Future (2008) www.tuc.org.uk/touchstone/justtransition/greenfuture.pdf
6 TICC Committee Call for Views: www.scottish.parliament.uk/s3/committees/ticc/inquiries/ClimateChangeViews.htm
First and foremost, we believe that a general climate change duty on public bodies should be in the Bill as primary legislation, enacted now, not at some possible date in the future.

We would want the Bill to establish a general duty on public bodies to consider the impact of climate change in all their decisions and to pursue, in a manner based on sustainable development principles, reductions in greenhouse gas emissions in line with national targets. This would also apply to adaptation work. This should be implemented in line with the next funding deal for local government.

Public bodies will only be able to contribute to climate change targets if these targets are included in their procurement and commissioning practices and this needs to be reflected in the Scottish Government’s procurement regulations and guidance. All public bodies should be required to report annually on compliance with their climate change duty/duties. They should also be required to seek to negotiate a workplace environmental agreement with their recognised trade unions.

We would also wish to see these duties apply to the private sector. However, we recognise that this may require the exercise of some reserved powers outwith the scope of this bill.

Clearly, on a ‘Just Transition Strategy’, we also believe that public bodies, private sector employers, trade unions and other stakeholders should have key roles as partners in developing it and the other three strategies outlined above, as part of each organisation’s overall work on emissions reduction. We join the STUC in asking that the TICC Committee consider ways in which a Just Transition national framework or mechanism to ensure long-term planning and representative decision making on environmental transition might be given a statutory basis in the Climate Change (Scotland) Bill.

We argued in our consultation response on the proposed Bill that public services have a vital role in leading by example in reducing greenhouse gas emissions, and that a climate change duty would be a similar legal provision to the various equality duties. Action by the public sector can have a major impact on behavioural change, as has been seen with recycling and as should be an important influence through food in schools, hospitals, prisons and other public sector catering. (UNISON has promoted ‘Food for Good’, a campaign for fresh, local, sustainable, healthy food across the public sector, and is pleased that the Scottish Government has appointed East Ayrshire healthy school meals pioneer Robin Gourlay to lead a group developing guidance for the public sector.)

We believe that bringing in a duty in the primary legislation would provide a number of important benefits, would build upon excellent examples such as East Ayrshire’s school meals initiative, and would underpin the commitments made by all Scotland’s councils in signing the Scottish Climate Change Declaration. By signing, they have agreed voluntarily to incorporate greenhouse gas reduction and climate change adaptation measures into new and existing strategies, plans and programmes, in line with sustainable development principles, and to report annually on their climate change response.

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7 UNISON Scotland Climate Change Bill consultation response April 08: www.unison-scotland.org.uk/response/scottishclimatechangebill.pdf
8 Scottish Climate Change Declaration, online at: www.sustainable-scotland.net/climatechange/documents/declaration08.pdf
While some local authorities and other public bodies are innovative and ambitious in their emission reduction plans, existing guidance and voluntary measures such as SCCD are not enough and do not currently apply across the full public sector. If they were enough, serious action would be happening already. Without a statutory duty, there is a real danger that the public sector will not contribute its share to the essential early reductions in greenhouse gas emissions to help put Scotland sufficiently on trajectory to meet its targets. As Cathy Peattie MSP pointed out in the Transport, Infrastructure and Climate Change Committee on 20 January 2009, work on equalities issues has required mainstreaming and legislation to make any significant progress. In 2007, the IPCC warned that global emissions must start reducing by 2015. The potential international leadership role offered by this Bill would be weakened without establishing this duty now.

If no duties are laid out at the start, the Scottish Government may have to be more prescriptive to ensure action is taken, through policies and regulation. A general duty across the public sector would be fairer and more flexible. How they deliver those duties can be based on what is appropriate for each organisation and local authority area. It would also help public bodies and relevant investors and stakeholders have confidence in planning, instead of the uncertainty of wondering what might be asked of public bodies in coming years. Scotland's Climate Change Business Delivery Group said that: “Local authorities and the private sector alike will benefit from the universal application of policy measures and setting expectations as early as possible”. At UK level, the need for a similar duty on public bodies to help deliver the Climate Change Act was not included and a need for it has been identified. The 2007 Final Report of the Local Government Association's Climate Change Commission said that much of the evidence it received recommended imposition of a statutory duty on councils in England and Wales to act on climate change. The Commission concluded unanimously that a statutory duty should be imposed on those authorities that after two years have not responded to climate change and it recommended to the LGA that it reconvene the Commission in late 2008 and late 2009 and then re-assess the case for a statutory duty. In our view, Scotland should not delay, and should have it from the start. When consulted, the majority of Scottish local authorities responded positively to the proposed duties.

The statute as drafted would just serve to delay implementation and require consulting these bodies all over again on the same question, which they have just responded positively to, thereby delaying investment and planning towards delivery of the national goal.

The Carbon Reduction Commitment, being introduced in 2010, will apply to large public bodies but will not set even those, let alone all public bodies, on a path to reducing greenhouse gas emissions in line with national targets. A public body duty will cover the full range of activities carried out by the body, including the extremely important one of procurement, which can be a very effective lever outside the public sector. In relation to local authorities, it could help fulfil outcomes in many Single Outcome Agreements, such as emission reduction or footprint reduction.

Annual reporting by public bodies will boost local accountability and we argue that it could be reinforced by the relevant Parliamentary committee calling in a selection of annual reports each year for scrutiny. In addition, innovative ways of involving local communities directly should be explored, such as local hearings. For example, an annual schools gathering where students could question appropriate councillors and officials on the report.

12 ‘A climate of change’ The final report of the LGA climate change commission: www.lga.gov.uk/lga/aio/20631
The Bill should give Ministers powers to bring in any further specific duties through secondary legislation. This would ensure that if new scientific evidence or policy changes require further action by public bodies, the necessary duties can be established by order.

Our main concern about the Bill’s proposals on the monitoring of the climate change duty/duties of public bodies, is that there must be sufficient expertise within the monitoring body (whether, for example, that is Audit Scotland, SEPA, another body or a combination) to properly assess progress on all relevant factors, including sustainable development.

**Green workplaces.** An important part of UNISON’s proposals for the Bill has been that much more should be done to encourage employers, in consultation and negotiation with their trade unions, to support change in the workplace. This includes action on energy use and conservation, waste and recycling, travel, water use and environmental education. Good practice is best delivered through a genuine partnership between employer and employees - as already exists on health and safety issues. Apart from the environmental benefits, the public and private sectors will benefit from a reduction in costs, greater job satisfaction amongst the workforce and a shared commitment to success.

Union environmental reps can act as a conduit between management and members/staff, feeding concerns, suggestions and responses in both directions, and working with the workforce and management to develop best environmental practice. They can help review or shape environmental policies and initiatives, and help ensure that such policies are properly understood, fit for purpose, and can be put into practical effect at each workplace. Those involved in the TUC/Carbon Trust Green Workplaces (GW) project have included shop stewards, H&S reps, and those new to union activism.

It is important that environment reps have the same legal rights and employment protection as other workplace representatives and we would urge the Scottish Government to support the case for this being made to the UK Government, as employment rights are reserved to Westminster. We would also like to see funds made available, on a basis similar to the successful lifelong learning model, to help trade unions resource workplace environmental programmes.

**Q11** The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation. What are your views on this proposal?

We wish to emphasise here, as in the SCCS response, our strong concerns that the forestry provisions are distracting from discussion of the overall aims and objectives of the Bill, the urgency of reducing emissions and how to meet targets. These provisions were introduced late in the day without appropriate consultation on the details. We do not believe the Climate Change (Scotland) Bill is the appropriate place for the Government to propose new forestry provisions and enabling powers and would expect full consultation and debate on such fundamental changes to be undertaken separately from this Bill.

UNISON is also extremely concerned that the proposal to lease substantial parts of the National Forest Estate to private companies threatens jobs. We share the concerns about the risk to jobs that have been raised by the Forestry Commission Trade Unions, who oppose the leasing proposal. The FCTU back the Bill’s targets on climate change and the expansion of renewable energy programmes. They acknowledge that the Scottish Government has promised no compulsory redundancies, but they warn that this commitment and staff terms and conditions could be at risk under any transfers and they conclude that several hundred good quality jobs could be lost in the forestry, timber processing, recreation and tourism sectors.
Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

- Waste prevention and management plans;
- Waste data;
- Deposit of recyclable waste;
- Procurement of recyclate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

What are your views on these proposals?

In addition to the SCCS response to this question, we would like to highlight UNISON’s Waste Management Charter for Public Sector Organisations ¹³ and our opposition to any use of PFI/PPP for new waste projects. PPP schemes don’t achieve best value for public funds. Planning of new public infrastructure, including waste management projects, should take into account the uncertainties we face about the coming impact of climate change. Lengthy, inflexible, costly PFI/PPP type contracts do not make sense, for schools, for hospitals or for waste.

The UNISON Waste Management Charter urges public bodies to: agree an internal waste management and recycling strategy, which also looks at procurement in an overall sustainable development strategy; consult and involve staff on development and implementation of the strategy; ensure it promotes prevention, minimisation and other options from the top of the waste hierarchy, along with internal and external awareness-raising; agree realistic but challenging targets for the strategy, with regular monitoring and evaluation; provide easily accessible, clear information on the organisation’s strategy, targets and progress on key indicators; use tools such as the Ecological Footprint in policy development, monitoring progress and raising awareness.

We also reiterate here a welcome for the introduction of waste prevention and management plans for businesses and public bodies. It is essential to bring businesses fully on board in this area. Concerted action by the public sector can make a major contribution to reducing Scotland’s waste, can set a good example for the private sector and can encourage employees to change their behaviour at home. Often now, workers find they are doing far more recycling at home than at work and want employers to take much stronger action. These proposals should help ensure public and private sectors tackle waste prevention, waste reduction and recycling in a focused, planned manner in line with all relevant legislation, guidance and targets and making use of sustainable procurement policies to effect improvements. Negotiated workplace environmental agreements will ensure the best chance of successful implementation of plans.

Conclusion

UNISON Scotland believes this Bill is one of the most important pieces of legislation that will ever be presented to the Scottish Parliament. With Stop Climate Chaos Scotland, we welcome the commitment to the target of at least 80% cuts in greenhouse gas emissions. We hope that the Scottish Government and the Scottish Parliament will wish to provide genuine international leadership and strengthen the Bill in the ways that SCCS has highlighted, to ensure that target can be delivered - and to send a strong signal to the UN climate change talks in Copenhagen.

¹³ UNISON Scotland Waste Management Briefing 2006 www.unison-scotland.org.uk/briefings/wastemanage.html
It is essential that at Scottish and local government levels, adequate financing is available to ensure the necessary actions are taken. It would be wrong to say that these are ‘extras’, which in a time of global financial crisis, cannot be afforded. The Stern report made clear that the benefits of strong, early action considerably outweigh the costs. Leadership is required to make this happen and to communicate clearly to the public the ways in which everyone can contribute to reducing greenhouse gas emissions and to adapting to the global warming already underway. Scotland’s politicians have the opportunity with this Bill to rise to the challenge and provide that leadership.
WRITTEN SUBMISSION FROM UNITE THE UNION SCOTLAND

Introduction

Unite - the Union represents around 200,000 working people and their families throughout Scotland. We are the UK and Ireland’s largest trade union with 2 million members in a range of industries including transport, construction, financial services, manufacturing, print and media, the voluntary and non-profit sectors, local government and the NHS.

As a Union with a significant membership in the wider energy sector - including workers in electricity, gas and nuclear power stations, offshore oil and gas production and opencast coal sites - we have a wide-ranging stake in the energy and climate change debate. Unite has continually articulated our belief that more needs to be done in a number of areas including renewable energy, energy efficiency, transport and the key role that our members can perform in the transition to a low carbon economy.

We also believe that existing low carbon-emitting energy sources including clean coal, nuclear power and carbon capture have a vital role to play in sustaining our energy demands and meeting our carbon emissions targets and wider environmental commitments.

Incorporated in this is response are a number of short responses to the areas of the interest Unite holds in this matter. For a fuller insight into Unite energy and environment policy please refer to our previous responses to Scottish Government consultations on these topics, which can be obtained from the union or via the Scottish Government’s website.

Emissions Reductions Targets

Unite - the Union believes a balanced energy strategy (incorporating clean coal, nuclear, oil, gas, and renewable sources), in tandem with improved transportation standards and changes in social behaviour, is crucial to facilitate the achievement of our wider emissions targets – in Scotland and the UK.

It is also essential that more support is directed towards established and emerging renewable technologies. This support must include incentivising companies and also in skills, training and retaining people in the sector to fulfil Scotland’s significant low carbon energy potential. Great faith has been placed by the Scottish Government in the renewables agenda to solve the low carbon question. However, significant gaps exist between potential and reality.

A report by the Carbon Trust (2006), for example, illustrates the massive potential for tidal and wave power for supplying a significant amount of power to the electricity grid. The Trust estimate that marine energy could provide up to 20% of the UK’s current electricity needs and become cost competitive with conventional and other renewables in the long term.

Marine energy has massive potential but there is still little operational capacity currently installed. At present there are two wave power devices in the UK – the Limpet unit of Islay and Pelamis on Orkney. Therefore, if Scotland, and the UK, is to realise the potential of marine technology then this will be dependent upon the right level of investment and support.

The position of Unite is further strengthened by comments made by the Minister for Finance and Sustainable Growth, John Swinney, at a STUC organised event on Energy and Climate Change in February 2008 when he predicted that the emerging renewables sector in particular wave and tidal power would not be mature nor commercially viable technologies for up to ten years. However, industry experts admitted at an Energy Conference organised by Unite and Scottish Engineering that while marine technology would play a major role in the future it was not going to make a substantial contribution for 20-30 years.
In relation to wind power, which we believe to be a potential major contributor to the energy sector, Unite has welcomed in principle the steps being taken to speed up the planning process (i.e. setting a target of nine months for new energy applications to be determined where there is no public inquiry). However, Unite retains concerns about the inconsistency in approach towards planning applications in the renewable sector. We note in particular the consent given to the wind farm proposals in Dumfries and Galloway and in Perthshire in contrast with the decision to refuse consent to Lewis Windpower for a wind farm at Barvas Moor in Lewis.

Furthermore there are outstanding issues in relation to the intermittency with wind power. On renewables, the House of Lords Economic Affairs Committee reported on 25th November 2008 concerns about security of supply. It concluded that wind turbines are the most readily available source of increases in renewable electricity but, as these only operate intermittently, they cannot be relied upon to generate electricity when it is needed.

Eon has also commented in August 2008 that due to the unreliability of wind energy particularly during the season of winter other forms of energy would be required to provide stability and the security of supply. Mike Farley of Doosan Babcock Energy has also recently highlighted a SKM report which stated that: “Combined Scottish wind generation output will be 10% or less for around 20% of the time (i.e. one in five winters on average will experience wind power levels of 10% or less at times of peak demand)”. This means one winter in five or one day in five we must completely (90% or more) backup the wind capacity with firm power.

We have been highly critical of the Scottish Government’s energy policy which in our opinion has placed ideology above the national interest. This contention is based on our belief that by rejecting at the outset a proven, reliable and low carbon technology in the form of nuclear power it not only prohibits a full appraisal of the options available but it more fundamentally does a disservice to the national discourse on the vitally important subject of energy supply and emissions targets.

Additionally, the aforementioned factors of the intermittency of wind, the immaturity of marine technology, and, uncertainty over the timing regarding planned large scale Carbon Capture Storage demonstrations (estimates presently suggest the first operational capacity being in 2020) further strengthens our belief in the major operational difficulties that the Scottish Government's present energy policy will face - as it stands – to deliver Scotland’s energy needs while fulfilling our ambitious climate change targets.

**Forestry**

In conjunction with our trade union partners in the Forestry Commission Scotland (FCS), Unite as part of the Forestry Commission Trade Union (FCTU) side has previously responded to the Scottish Government’s Consultation on Forestry Provisions in the Scottish Climate Change Bill.

We believe the National Forestry Estate (NFE) should continue to play a lead role in delivering Climate Change targets and we welcome the proposals for enabling legislation for Forestry Commission Scotland (FCS) to enter into Joint Ventures for development of renewable energy programmes. This is likely to provide significant income to meet Scottish Government targets five to ten years from now.

However, we are absolutely opposed to the proposal to lease substantial areas of NFE land for forestry purposes and the granting of cutting rights over this forest. It follows, therefore, that the Unions are also opposed to transfer of this leased land to any Trust. A copy of the full response to the Scottish Government on the National Forest Estate can be obtained on request from the unions involved in the Forestry Commission.
Energy Efficiency

Across the UK Unite members have worked with employers on energy efficiency projects. Unite drivers at Wincanton for example have been trained to use their vehicles to reduce fuel consumption and demonstrated that this could be done in a way that also made a significant financial saving for the company. The pilot involved detailed training of drivers without which fuel reduction would not have been achieved despite the introduction of sophisticated technology.

Other examples of Unite members’ role in improving energy efficiency include:

**CUMMINS** - Workers at this company have helped to establish an environmental committee to reflect the eco-credentials of the employer. The company manufactures wind turbines and aims to recycle all waste produced in the manufacturing process.

**PANASONIC** - Unite members have argued the case for flexible working as a means of reducing the environmental impact of their workplace. A petition was submitted to the company to make starting and finishing times flexible in order to reduce traffic congestion.

**FUJITSU** - At Fujitsu, our members participate in the company’s ‘GreenTeam’ initiative and have introduced environmental training for employees. Unite has also campaigned for CRT monitors to be replaced by flat screens to reduce electricity consumption, and, increasing video/teleconferencing usage.

The Energy Saving Trust for example predicts that by 2020, 45% of domestic electricity will be consumed by IT and electronics products. In Unite’s previously published report ‘How Green is Your Workplace’, a number of measures and technologies are highlighted which, if adopted, could improve energy efficiency. Examples include:

- Smart buildings technologies, which monitor and adjust lighting, heating and energy use;
- Broadband, which facilitates communications through email, video and teleconferencing, and VOIP (Voice over internet protocol); and
- Multifunctional devices such as i-phone, all in one printers with inbuilt fax and scanner and blackberries help reduce the proliferation of electronic devices and can cut the use of paper.

Unite is optimistic about what workers can contribute to the preservation of the environment and to reducing energy consumption. Incremental and, in some cases, innovative and dynamic changes in workplaces are occurring because our members are raising awareness of climate change and energy issues.

Transport

Encouraging a shift from the private car to bus and rail services will play a key role in helping to cut carbon emissions from the transport sector. In 2006, 67% of commuters travelled to work by car or van, 14% walked, 12% used the bus, 3% by train, 2% cycled and 2% used other modes of transport (source: the Scottish Transport Statistics (No. 26 – 2007 edition)).

It is, therefore, vital that we address the issue of road traffic in Scotland because it is forecasted to grow by between 22% and 34% over the period 2002-2011 and it is also the second fastest growing source of emissions according to the Transport Scotland report titled ‘Opportunities for offsetting carbon emissions on the Scottish trunk road network’ (2007).

The Department of Business, Enterprise and Regulatory Reform’s Energy Trends Brief (March 2008) highlights that the transport sector accounted for 24% of CO2 emissions in 2007 - 92% was from road transport. Transport emissions are 11.5% higher than during 1990. The total number of vehicles licensed in Scotland was almost 2.6 million in 2006 which is 32% higher than in 1996 with road traffic forecasted to grow by between 22% and 34% over the period 2002-2011 according to Scottish Transport Statistics (no.26 -2007 edition).
Therefore, encouraging a shift from the private car to bus and rail services will play a central part in reducing carbon emissions and energy consumption. It is for these reasons Unite is very supportive of the Regulation of Bus Services Bill consultation launched by Charlie Gordon MSP. Unite believes this Bill to be a key component to this debate and urge all political parties in the national interest to support it.

**Conclusion**

Unite retains a number of major concerns relating to the ability of the Scottish Government to deliver its climate change targets and delivering Scotland’s future energy needs – both of which are inextricably linked. The Scottish Government’s climate change target of an 80% cut in emissions by 2050 surpasses the aims of most countries.

However, the inconsistency in approach to renewables applications, in particular wind-power projects, the rejection of the future role of the nuclear industry, the lack of current investment in skills and training in key energy sectors, continued high rates of private cars for journeys as opposed to public transport, and, the present low levels of operation capacity in renewables industries means Scotland faces significant challenges if it is to fulfil its ambitious climate change targets while keeping the lights on.

Unite also wishes to state that we also have a series of consultation responses and documents which could complement this paper and provide greater in-depth analysis into the various facets of this debate e.g. energy and transport. Unite representatives would also be willing to supplement this paper by having further dialogue with the Committee via written and/or oral presentations.
Introduction

Waterwatch Scotland (WWS) is the national complaints handling authority for all domestic and non domestic water customers and consumer representative body for the water industry in Scotland.

Our role is to:
Investigate complaints
Represent customers’ interests and views
Influence policy
Inform and advise

WWS’ responsibility for second tier complaints handling means that it can take forward individual customer grievances against water providers. WWS can also make statutory recommendations to Scottish Ministers, the Scottish Government, Scottish Water and other industry regulators on customers’ behalf including: Scottish Environment Protection Agency (SEPA), Drinking Water Quality Regulator (DWQR) and the Water Industry Commission for Scotland (WICS). WWS can report on any matter that it understands to be relevant to the customer and in the customer’s best interest.

WWS also has a statutory remit to champion water efficiency within Scotland. WWS sees this as a key and significant component for Scotland to achieve climate change targets.

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

In principle, Waterwatch Scotland (WWS) supports the Bill’s reduction targets for 2050 and 2030. In particular, WWS would be keen to highlight the contribution that the successful implementation of water efficiency policy would make to an overall reduction in greenhouse gas emissions. However, in order to successfully achieve these targets, they must first be supported and championed by key policy makers within public and private sector in order to drive cultural change within domestic and non domestic settings, and must be enforced through legislation.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

In principle, WWS supports setting targets in batches as it provides a more measurable means of assessing progress and achievement of targets. WWS would be further interested in understanding what key activities are to be progressed within each batch, how batches are to be measured and supported locally and nationally.

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

In principle, WWS supports this approach.
Q.4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

No comment.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

No comment.

Q6 The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government's approach to obtaining independent, expert advice on climate change?

No comment.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

WWS supports this approach.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

WWS supports this approach as it places emphasis on public bodies to own and champion policy and measures that address climate change.
Q9 The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

WWS supports this proposal. A report produced by the Scottish Government will provide stakeholders with the opportunity to monitor progress being made to achieving targets set by the Bill and to flag up any issues foreseen.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

No comment.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

No comment.

Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

WWS fully supports this view. WWS is keen to promote the need for measures that will encourage behavioural change, especially with a view to championing water efficiency and the relationship between water use and energy consumption within both domestic and non domestic settings.

Q13 The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?

WWS supports the development and communication of policy and regulations to assess the direct impact that non-domestic buildings have on greenhouse gases, but also the indirect impact they have through associating water / energy use with responsible consumerism and awareness.
Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

WWS supports steps to highlight the relationship between carbon emissions and heating water. Emphasis on heat from renewable sources factored into this issue to change behaviour and promote responsible consumerism is welcomed.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:
Waste prevention and management plans;
Waste data;
Deposit of recyclable waste;
Procurement of recyclate;
Reduction of packaging;
Deposit and return schemes;
Charges for carrier bags.

What are your views on these proposals?

No comment.

Q16 What are your views on the adequacy of the Scottish Government's consultation in advance of publishing the Bill?

Consultation with industry stakeholders has been adequate.

Q17 Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

No comment.

Q18 Does the Bill raise any equalities issues you would wish to highlight?

No comment.

Q19 Do you have any comments on the impact of the Bill on sustainable development?

WWS supports the Bill in that it champions a focused and committed approach to identifying measures that will result in reduction of carbon emissions. WWS would support greater emphasis on WICS and WWS having a duty to support ScW in the implementation of sustainable solutions by statute.

Q20 Do you have any other comments on the Bill?

No comment.
The World Development Movement (WDM) campaigns for a world without poverty and injustice. We work in solidarity with activists around the world to tackle the causes of poverty. We research and promote positive alternatives which put the rights of poor communities before the interests of big business.

WDM urges the Transport, Infrastructure and Climate Change committee to take a global view of the importance of the Climate Change (Scotland) bill. Climate change is perhaps the greatest global injustice. It is the richest people in the world who have produced and who are still producing most of the greenhouse gases causing climate change. Yet it is poor people in poor countries – those who contribute little or nothing to the problem – who will suffer the most severe consequences. Each year the average Scot produces 9.3 tonnes of CO₂. The average Malawian produces just 0.06 tonnes per year. And yet Malawi is already suffering the measurable effects of climate change in increasing temperatures, unpredictable seasons, higher incidences of flood and more droughts; all of which threaten the lives and livelihoods of Malawians.

If we are to avoid passing the two degree threshold identified by the IPCC, and reduce the risk of runaway climate change, then we have just eight years to stabilize and begin to reduce global greenhouse gas emissions. It is absolutely vital that the UN negotiations on the successor to the Kyoto Protocol, taking place in Copenhagen later this year, are successful. We hope that, in writing its report on the bill, the committee will take into account the positive impact that a strong Scottish climate bill could have on those international negotiations.

WDM is a member of the Stop Climate Chaos Scotland coalition, made up of more than 30 organisations campaigning together to tackle climate change. The coalition members include environment and development NGOs, faith groups, trade unions, community councils, student societies, women’s organisations, a mental health charity, and many others. In Scotland, the members have a combined supporter base of over 1.5 million people.

WDM fully supports the Stop Climate Chaos Coalition Scotland priorities for the Climate Change (Scotland) bill, which are that it must:

1. Set out a framework that will achieve at least an 80% reduction in greenhouse gas emissions by 2050.
2. Establish in statute annual emission reductions of at least 3% year-on-year from the start, not just from 2020, compatible with a fair and safe cumulative budget identified by the advisory body (see 4).
3. Include emissions from all sectors in the framework and targets set out in the Bill, including those from international aviation and shipping, from the very start.
4. Establish a Scottish advisory body, a Scottish Climate Change Commission, in the primary legislation to support delivery of the Bill when it is enacted.
5. Ensure that at least 80% of the effort to cut emissions takes place in Scotland.
6. Establish duties on all public bodies to reduce greenhouse gas emissions in line with the national target.
7. Set in place robust, transparent reporting measures so the Scottish Parliament is well informed on progress in meeting targets and Government is held to account on mitigation and adaptation.
8. Ensure that strong enforcement measures are set in place in statute.
9. Ensure Scotland counts all its emissions and reports on those produced by products and services we consume as well as emissions produced domestically.
10. Be explicit that sustainable development is core to the purpose and delivery of the statute in relation to mitigation and adaptation.
WDM's additional evidence relates to point five, above, on domestic effort and carbon trading.

WDM has many reservations about the way that carbon trading currently works. Our main concerns are over its ability to deliver large enough cuts in climate change emissions, the impact that some of the projects are having on developing countries and the signal that it would send to the rest of the world were Scotland not to limit carbon trading in the bill.

WDM urges the Transport, Infrastructure and Climate Change committee to support SCCS’s demand to ensure that at least 80% of the effort to cut emissions takes place in Scotland.

Carbon trading and the Clean Development Mechanism

1. Carbon trading currently works primarily through the EU’s Emissions Trading Scheme. A cap is set for the total amount of CO₂ which can be emitted from large industries in Europe, such as power stations and factories. Permits equal to this cap are then distributed to companies. The cap, and thereby the number of permits, are reduced over time. Companies can buy-and-sell the permits between themselves, meaning companies can choose whether to cut their emissions or pay someone else to do so.

2. However, companies can also buy permits from companies operating in developing countries, through the Clean Development Mechanism (CDM), rather than purchasing permits to reduce emissions in Europe. The EU energy and climate package states that from 2013-2020 at least 50 per cent of reductions in the Emissions Trading Scheme can be made through buying Clean Development Mechanism credits, rather than reducing emissions in the EU.

3. Carbon trading as it currently operates is carbon offsetting. Buying carbon credits allows the EU and UK not to cut emissions domestically, but to pay for offsetting in developing countries instead. This prevents the creation of a low carbon economy in the EU and UK.

4. To prevent the worst impacts of climate change rich countries like the UK have to cut their own emissions, and in addition assist developing countries in curbing the growth in, and ultimately reducing emissions. Support to developing countries to cut emissions needs to be additional to action in the UK and EU, not instead of action in the UK and EU.

5. The UK Committee on Climate Change has said: “rich developed economies need to start demonstrating that a low-carbon economy is possible and compatible with economic prosperity, in order to gain developing country commitment to long-term emissions reductions, and need to start driving the technologies and energy efficiency improvements which will make a low-carbon economy possible. They can only do this by employing measures which drive down emissions in rich developed economies rather than relying solely on purchased credits.”

6. However, there are also further problems with how the Clean Development Mechanism works, which we address below:

The Clean Development Mechanism does not necessarily reduce emissions in developing countries

7. Under the CDM the largest number of carbon credits has been generated by projects claiming to reduce the potent greenhouse gas HFC-23, rather than CO₂. One study has found that the value of credits given to HFC-23 projects at current carbon prices is 4.7 billion euros. However, an estimate of the cost of technology needed to capture and destroy the same amount of HFC-23 is 100 million euros. Around 4.6 billion euros has been generated in profit by HFC-23 generating plants, which could then further expand their operations with the reinvestment of this profit.
8. For example, one Indian chemical company, SRF, made 87 million euros from the sale of carbon credits in 2006/07. Ashish Bharat Ram, managing director of SRF, claimed: "Strong income from carbon trading strengthened us financially, and now we are expanding into areas related to our core strength of chemical and technical textiles business."

9. A Joint Committee of the UK Parliament has said that: “the economic incentives offered by the CDM [Clean Development Mechanism] appear actually to be encouraging the building of refrigerant plants in the developing world, simply in order that the HFC by-products from the plant can be incinerated, and the credits generated from this sold at a large profit.”

10. The Committee on Climate Change has said: “there remain concerns as to whether offset credits can ever be as certain a form of emission reduction as domestic reductions. While the procedures for the approval and monitoring of CDM projects are being continually improved, any system of credits for reduction against a hypothetical business-as-usual scenario, is inherently less robust than a cap and trade system where reductions are required in the certifiable total of all emissions."

11. A report by International Rivers Network found that three out of four CDM projects were already up-and-running by the time they were approved to generate CDM credits, strongly suggesting that the projects would all have happened anyway. David Victor from the Californian University concludes from his research that: “It looks like between one and two thirds of all the total CDM offsets do not represent actual emission cuts.”

The negative impacts of CDM funding

12. Carbon credits are produced on the basis of having a positive climate change impact, so it is natural to assume that projects are also socially responsible. Yet carbon credits are sold by private companies which are normally unaccountable to the communities in which they seek to implement their projects. Unfortunately, there are already examples of carbon credit projects exacerbating social harm.

13. The Indian state of Gujarat is one of the most industrialised states in India. Between 2006 and February 2008, 19 projects in Gujarat qualified to receive carbon credits under the Clean Development Mechanism. Of these, 13 (68 per cent) are to reduce HFC-23 emissions from factories (see above on HFC-23 projects). In total, the 19 projects are claimed to have reduced emissions by 12.5 million tonnes of CO2eq.

14. The Gujarati NGO Paryavaran Mitra says that some of the industries funded by CDM produce toxic or hazardous local pollution. The reinvested profit from CDM allows these industries to expand their operations, producing more local pollution, without any regulation of the impacts. Mahesh Pandya from Paryavaran Mitra says: "It is unjust that the rich are allowed to emit whilst paying for more pollution for the poor."
WWF Scotland welcomes the opportunity to provide evidence to the Transport, Infrastructure and Climate Change Committee on this important legislation, the Climate Change (Scotland) Bill. Almost 20,000 people submitted responses to the Scottish Government’s consultation on the Bill backing WWF calls for a strong Bill last year. This year, more than 5,000 individual actions have been taken by people across Scotland actively supporting WWF’s key recommendations for strengthening the Bill, for example by writing to or visiting their own MSP.

Climate change is the biggest threat facing humanity and we are presented with a closing window of opportunity in which to tackle it. This Bill has the potential to be the strongest climate change legislation in the world and act as both a catalyst for further international action and demonstrate what a developed nation can do in response to climate change. The Bill has the potential to provide a strong framework, but it needs to be strengthened in a number of critical areas if it is to actually lead, deliver and ensure Scotland plays its full part in tackling climate change.

WWF Scotland is a member of the Stop Climate Chaos Scotland (SCCS) Coalition, therefore positions are shared with this coalition of more than 30 organisations campaigning together to tackle climate change. As WWF supports all of the written evidence submitted by the Coalition, rather than duplicate the evidence which has been developed across the membership, WWF’s evidence complements it with supplementary evidence in some key areas.

Stop Climate Chaos Scotland is a coalition of more than 30 organisations campaigning together to tackle climate change. The coalition members include environment and development NGOs, faith groups, trade unions, community councils, student societies, women’s organisations, a mental health charity, and many others. In Scotland, the members have a combined supporter base of over 1.5 million people.

The Stop Climate Chaos Coalition Scotland priorities for the Climate Change (Scotland) Bill are that it must:

1. Set out a framework that will achieve at least an 80% reduction in greenhouse gas emissions by 2050.
2. Establish in statute annual emission reductions of at least 3% year-on-year from the start, not just from 2020, compatible with a fair and safe cumulative budget identified by the advisory body (see 4).
3. Include emissions from all sectors in the framework and targets set out in the Bill, including those from international aviation and shipping, from the very start.
4. Establish a Scottish advisory body, a Scottish Climate Change Commission, in the primary legislation to support delivery of the Bill when it is enacted.
5. Ensure that at least 80% of the effort to cut emissions takes place in Scotland.
6. Establish duties on all public bodies to reduce greenhouse gas emissions in line with the national target.
7. Set in place robust, transparent reporting measures so the Scottish Parliament is well informed on progress in meeting targets and Government is held to account on mitigation and adaptation.
8. Ensure that strong enforcement measures are set in place in statute.
9. Ensure Scotland counts all its emissions and reports on those produced by products and services we consume as well as emissions produced domestically.
10. Be explicit that sustainable development is core to the purpose and delivery of the statute in relation to mitigation and adaptation.

In December 2009 Copenhagen will host the UN climate change talks to forge a new global deal intended to deliver the emissions reductions we need to prevent dangerous climate change. The timing of Scottish Climate Bill means it has the opportunity to show what is possible and lead other nations down the path to a safe climate; if it falls short of this it risks setting a dangerous precedent at a time when the world is looking for leadership.

1. The 2050 Target

WWF supports the SCCS position that the Bill should include a 2050 target of at least an 80% reduction in all greenhouse gas emissions.
There is an increasing body of scientific evidence that shows this must be the minimum level of our ambition\(^1\). Scientific research on climate change published since the deadline for the latest assessment report from the Intergovernmental Panel on Climate Change (IPCC) is revealing that global warming is accelerating, at times far beyond IPCC 2007 Fourth Assessment Report forecasts.

- The Arctic Ocean is losing sea ice 30 or more years ahead of the projections presented in the Fourth Assessment Report (Stroeve et al, 2007).
- Floating tide-water glaciers in the Antarctic Peninsula are losing ice faster and are making a greater contribution to global sea level rise than reported in the Fourth Assessment Report (Pritchard and Vaughan 2007).
- Since 1990, global sea level has been rising one and a half times faster than forecast in the IPCC’s Third Assessment Report (published in 2001) (Rahmstorf et al 2007).
- The actual emissions growth rate since 2000 has been greater than any of the scenarios used by the IPCC in either the Third or Fourth Assessment Reports\(^2\).

2. **Annual targets of at least 3% reductions per year**

WWF Scotland supports the SCCS position that the Bill must require statutory annual greenhouse gas emission reductions of at least 3% year-on-year from the outset, not just from 2020. The rate of emissions reduction determines the total volume of greenhouse gases that Scotland will emit between 2010 and 2050.

WWF has carried out some preliminary analysis of the various emissions scenarios provided to the Committee by the Scottish Government.\(^3\) The different volumes of greenhouse gases are set out in the table below.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Meets the UKCCC Interim Target 2020</th>
<th>Meets the UKCCC Intended Target 2020</th>
<th>Total emissions 2000-2050 MtCO(_2) equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario 1</td>
<td>×</td>
<td>x</td>
<td>2,010</td>
</tr>
<tr>
<td>Scenario 3(^4)</td>
<td></td>
<td>x</td>
<td>1,990</td>
</tr>
<tr>
<td>Scenario 4</td>
<td></td>
<td>x</td>
<td>1,940</td>
</tr>
<tr>
<td>Scenario 5</td>
<td></td>
<td>x</td>
<td>1,895</td>
</tr>
<tr>
<td>Scenario 6</td>
<td></td>
<td></td>
<td>1,870</td>
</tr>
<tr>
<td>Manifesto Promise</td>
<td></td>
<td></td>
<td>1,826</td>
</tr>
</tbody>
</table>

It is apparent from this analysis that only Scenario 6 and delivering on the SNP Manifesto Promise would be sufficient to hit the ‘Intended Target’ of a 42% reduction by 2020 recommended by the UK Committee on Climate Change. However, if the Climate Change Bill is to limit Scotland’s emissions to a safe and fair cumulative budget, calculated as approximately 1,470 MtCO\(_2\) equivalent between 2000 and 2050\(^5\) the manifesto commitment of annual reductions of at least 3% must be the absolute minimum emissions reduction required by the Bill. Anything less than this will mean the Scottish Bill fails to deliver on the First Minister’s commitment that “in every respect the legislation will be more ambitious than the Labour Government legislation [at Westminster]”.\(^6\)

In addition to dictating the maximum volume of emissions allowed by the Bill annual reductions of at least 3% from the very start are also vital to ensure the Bill delivers on the scientific requirement for urgent action now. The climate change models used, for example, by the IPCC, the UK Committee on Climate Change, The Hadley Centre and the Tyndall Centre all describe how global emissions must peak in the next 5 – 8 years and then begin a steep reduction curve. If the world is to avoid the worst consequences

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\(^4\) Scenario 2 is almost identical to Scenario 3 and so is not covered separately in this analysis.

\(^5\) See SCCS briefing [http://www.stopclimatechaos.org/files/docs/SCCS-Briefing2-3pc-annual-targets_F1.3.pdf](http://www.stopclimatechaos.org/files/docs/SCCS-Briefing2-3pc-annual-targets_F1.3.pdf)

of climate change Scotland, and all other developed nations, must commit to immediate reductions of at least 3%.

The importance of early and significant annual reductions was identified when Lord Turner and David Kennedy, the Chair and Chief Executive of the Committee on Climate Change, gave evidence to the Environmental Audit Committee on the 4th February. Mr Kennedy said “the 50 per cent global emissions reduction with 2016 peaking requires a four per cent annual emissions reduction globally”.

3. Emissions from international aviation and shipping

WWF Scotland supports the position of SCCS that all emissions for which Scotland is responsible, including international aviation and shipping, are included in the Bill from the very start. This is probably the most important area where Scotland can show international leadership. As it was introduced to the Scottish Parliament the Bill simply provides that Ministers may include these emissions and even then, it would require secondary legislation to do so.

Scotland has reported on its emissions from both international shipping and aviation since 1990 according to the most robust and accurate methodology set out by the relevant IPCC working group. While this methodology will almost certainly be refined over time such potential future revisions should not be seen as justification to exclude these emissions from the very outset. Indeed, methods of data collection for any other source of emissions, such as land use, may be amended over time and the Bill has the capacity to adopt such changes without excluding the source from the start.

When accounting for emissions from international aviation and shipping the Bill must make allowance for the extra impacts that aircraft emissions have compared to ground emissions; burning 1kg of aviation fuel at ground level has less climate change impact than burning that fuel in an airplane engine at altitude.

### The importance of including an aviation multiplier

Emissions of nitrogen oxides, water vapour and particulates at altitude generate a number of chemical processes that combine to amplify the climate change effect of aviation. The following table provides a summary description of the range of figures applied as an ‘emissions multiplier’ to ensure a more complete description of the contribution aviation makes to climate change.

<table>
<thead>
<tr>
<th>Reference</th>
<th>Suggested multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPCC 1999⁷</td>
<td>2 - 4</td>
</tr>
<tr>
<td>RCEP Special Report on Aviation and Climate Change (2002)⁸</td>
<td>3</td>
</tr>
<tr>
<td>UK Treasury ⁹</td>
<td>2.5</td>
</tr>
<tr>
<td>UK Government written answer to PQ ¹⁰</td>
<td>2</td>
</tr>
<tr>
<td>Department of Transport (2008) ¹¹</td>
<td>1.9</td>
</tr>
<tr>
<td>EU TRADEOFF research programme ¹²</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Although the final figure from the EU TRADEOFF research programme represents the best scientific understanding, the calculation of an aviation multiplier remains the focus of scientific research. In particular it is necessary to establish a better understanding of the role of aviation in generating contrails and cirrus clouds both of which have a warming effect on the atmosphere. The Bill should include the aviation multiplier but also allow it to be amended to reflect improvements in understanding.

4. Focusing on domestic reductions

WWF supports the view of SCCS that the Scottish Climate Change Bill must require that at least 80% of the effort to cut emissions should take place in Scotland.

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¹² The EC TRADEOFF project (Aircraft emissions: contributions of various climate compounds to changes in composition and radiative forcing – tradeoff to regulate atmospheric impacts) involved ten European scientific organisations, including Manchester Metropolitan University. The project completed in 2003 (Sausen et al, 2005).
The question of what proportion of the emissions reductions should be achieved in Scotland, rather than be met through international offsetting, is fundamental and will determine whether Scotland becomes a low carbon economy or remains dependent on fossil fuels. Currently the Bill contains no legal requirement that any of the emissions reductions should be achieved in Scotland.

The Bill must require that domestic emissions reductions form the vast majority of the total emissions savings. We can not expect the existing EU ETS cap and trade system to provide sufficient incentive to achieve the vitally important transformation of Scotland’s energy sector. It is clear that the carbon price under the ETS will not in the short to medium term be high enough to drive all the investment required to reduce Scotland’s emissions in time. In the meantime, decisions made now before the carbon price has matured could ‘lock’ Scotland into long-lived, high-carbon infrastructure for decades.

WWF’s own analysis has shown there must be a decarbonised power sector by 2030 if other technologies in the transport and heating sectors are to contribute their full potential to emissions reductions. This conclusion has also been made explicit in the recent report by the UK Committee on Climate Change which also highlighted that this would not be delivered by the ETS on its own and there is a pressing need for market mechanisms to be ‘buttressed’ with domestic policy.

The table below describes the actual reduction in Scotland’s emissions with varying levels of access to international credits. It is clear that if Scotland is to actually reduce its emissions by at least 80% by 2050 it must limit the use of offsetting.

<table>
<thead>
<tr>
<th>Reduction target for 2020</th>
<th>% domestic reduction effort</th>
<th>Actual emissions reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td>80</td>
<td>40%</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>25%</td>
</tr>
<tr>
<td>42%</td>
<td>80</td>
<td>33%</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>21%</td>
</tr>
</tbody>
</table>

5. Reporting

WWF believes it is critical that this Bill establishes a strong scrutiny process so that the Scottish Parliament is able to hold the Scottish Government to account on delivery.

It must be a robust and transparent process, as outlined in the SCCS evidence, informed by independent advice from a Scottish advisory body, see the evidence on the Scottish Climate Change Commission below and in the SCCS evidence as well.

6. Consumption

WWF believes Scotland should count all its emissions and reports on those produced by products and services we consume as well as emissions produced domestically.

The Scottish Climate Change Bill includes a target to reduce our emissions by at least 80% by 2050. This target is to be based on Scotland’s territorial emissions, all those emissions produced within Scotland plus those from our share of international aviation and shipping. This is the correct target, however, these are not the total emissions Scotland is responsible for; our consumption of goods and resources generates emissions that are not counted under a production-based reporting system.

Scotland interacts with many different countries, importing and exporting goods around the world, the net effect of which has been to shift our production-based emissions abroad. A requirement to report on

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13 A joint report by WWF, the RSPB and the ippr entitled ‘The 80% Challenge’, shows that the 80% reduction target is technically feasible, economically affordable and sustainable, [http://www.wwf.org.uk/filelibrary/pdf/80percent_report.pdf](http://www.wwf.org.uk/filelibrary/pdf/80percent_report.pdf) The report also shows that a decarbonised power sector is central to efforts to reduce emissions. This is because low carbon technologies in the power sector are more mature than in others and because other solutions – such as electric heating and electric vehicles – will contribute more with a clean energy supply.
consumption-based emissions, or our carbon footprint, alongside territorial emissions, would provide a clear understanding of our impact on global carbon dioxide emissions.

This information can be used to ensure that while territorial emissions fall, Scotland does not ‘off-shore’ its responsibility for greenhouse gas emissions to other countries. After all, we import cars, televisions, and food which have created carbon emissions in their production somewhere else in the world. Only by understanding our global impact can we reduce it.

7. **Scottish Climate Change Commission**

WWF believes that the Bill should establish a Scottish advisory body, a Scottish Climate Change Commission, in the primary legislation to support delivery of the Bill when it is enacted.

It is critical that Scotland has an advisory body that can advise on the distinctive Scottish targets, is well informed on Scottish data, understands the policy and institutional landscape of Scotland, is plugged into Scottish networks (e.g. academic, public, voluntary and private sector) and is visible to the people of Scotland. This should not be delayed, but set in place through the primary legislation – the Climate Change (Scotland) Bill – itself.

The preferred model is that outlined in the Stop Climate Chaos Scotland submission, a Scottish Climate Change Commission that retains some independence from Government and supports Parliament in its scrutiny of delivery of this legislation.

8. **Duties on public bodies**

WWF believes the Bill should establish a general duty on public bodies to ensure they address the impact of climate change in all their decisions and to pursue, in a manner based on sustainable development principles, reductions in greenhouse gas emissions in line with national targets. This should also apply to adaptation work.

Public bodies are in a unique position to help reduce Scotland’s greenhouse gas emissions through their service provision and in making their own operations more energy efficient. Local authorities working with their community planning partners can also have significant influence over the emissions from their communities, though land-use planning, community planning and community leadership. And, of course, local authorities will be in the front-line in adapting and responding to climate change impacts.

While some local authorities and other public bodies are innovative and ambitious in their emission reduction plans, existing guidance and voluntary measures are not enough – as can be seen by the recent publication of progress against the Scottish Climate Change Declaration, now two years old. Time is of the essence, and a duty should be given now to the public sector, giving them the flexibility and powers to act

9. **Energy Efficiency**

WWF welcomes the recognition the Bill gives to the role energy efficiency will play in driving down emissions and closing any future energy gap. With immediate measures it would be possible to reduce our total energy consumption without restricting economic growth. As currently drafted, there are several areas where this section of the bill could be strengthened:

- The bill should refer to ‘improving’ rather than ‘promoting’ energy efficiency wherever possible, maximising devolved powers in this area while respecting what is reserved. At the least, language from the Housing (Scotland) Act 2006, section 179 (duty of Scottish ministers to prepare strategy for improving the energy efficiency of living accommodation) could be echoed here.

- The Energy Efficiency Action plan should be published as soon as possible given that such a plan has now been promised for six years. The Plan should include targets on energy efficiency, and progress reported in terms of reduced energy demand, reduced emissions, and increase in microrenewables as part of the Annual Report set out in Part 3 – Reporting Duties.
The Bill offers the opportunity to enable a range of fiscal incentives to help achieve the rapid uptake of energy efficiency measures. Such incentives include local tax incentives and loan schemes.

The Bill should include enabling clauses to enhance Energy Performance Certificates for domestic buildings (as it does for non-domestic). Existing homes account for a third of Scotland’s carbon emissions. 85% of today’s homes will still be homes in 2050. It is clear that existing homes must be part of any solution to address Scotland’s climate emissions. WWF Scotland’s Carbon Countdown for Homes report calls for a Scottish retrofit strategy which can achieve at least 35% reduction of emissions from homes by 2020 and 80% by 2050.\(^\text{14}\)

We welcome government’s stated commitment to introduce a requirement for a Renewable Heat Action Plan at the second stage. The plan should include targets, based on a proper assessment of Scotland’s renewable heat potential. In addition to targets, strategic drivers will be needed, such as those in the German Heat Act which introduces an obligation to use renewables for heat requirements, market incentives and provision for local heat grids.

WWF is a member of the Steering Group for the Member’s Bill on Microgeneration and Energy Efficiency and has welcomed the Parliamentary support for provisions proposed within that Bill to be addressed in the Climate Change (Scotland) Bill.

Conclusion

WWF Scotland is pleased to support the Stop Climate Chaos Scotland evidence, which contains further detail on the ten key issues outlined by the Coalition. See [www.stopclimatechaosscotland.org](http://www.stopclimatechaosscotland.org) for more information or [www.wwfscotland.org.uk/holyrood](http://www.wwfscotland.org.uk/holyrood) for more information on WWF’s work on the Climate Change (Scotland) Bill.

\(^{14}\) [http://assets.wwf.org.uk/downloads/retrofit_1.pdf](http://assets.wwf.org.uk/downloads/retrofit_1.pdf)
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

The impact of climate change matters to me for my children and my children’s children. The devastating impact on whole communities and nature has to be recognised and reduced by taking strong action now.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

• Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

• All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

• Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

• Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mrs Patricia Abel
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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters to me because I am concerned about the devastating impact it will have for people and nature around the world. The resulting migration will stress all our social services and systems and endanger world peace.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Dr Thorsten Ackermann
Dear Convener of the TICC Committee

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Miss Amanda Addison
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Unlike the economy, Climate Change may not be reversible, so we have to do what we can now. I plan on living a healthy life for as long as possible and I also at some point plan on having children. I'm 25 now and I want to say to my kids that I tried. I tried to make Governments change their minds and start to wean themselves off oil. I tried to help people around me see what a devastating effect Climate Change is currently having and will continue to have on the world. I tried to open the Government's and people's eyes to see that this is the only world we have got, so we can to take care of it so we can live on it. I may tell my children stories of faraway worlds and alien life forms, but that's all they are - stories. We have nowhere else to go, this is our home. Earth will sort itself out eventually, I have no doubt. However, if we continue the way we're going, we may not still exist. This isn't so much as save the planet, as save us. I want more than anything to not just say to my children that I tried, but to say to them that I tried, we all tried and we succeeded.

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Yours sincerely
Miss Regina Alcock
Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

The targets appear extremely ambitious and blind obedience to them may create problems as a side effect i.e. windfarms onshore detract from our wild and beautiful scenery in some areas which will affect the tourist industry. Wave and tidal energy should be encouraged due to its dependency and lack of visual intrusion.

Q2 The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

My views are similar to Q1, a poorly thought through strategy could harm other industries if we try too hard to obey unrealistic targets.

Q8 The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

Good but any duties should be realistic and achievable both by the public and private sectors alike.

Q10 Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

Agree but as long as appropriate advice is taken from scientists/conservationists etc and does not have draconian effects on established industries.

Q11 The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

To allow the Forestry Commission to help tackle climate change makes common sense as they are well equipped to do so. Adding the means to be more creative in joint ventures would reinforce this ability. Leasing should not be attempted and the land left under FC management where they can make the best contribution to tackle climate change.
Q12 The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

Agree fully, building standards should be akin to the best Scandinavian measures for insulation, community heating schemes etc. We do need to change our attitudes to heating/keeping warm, there are many things that can be done publicly and personally.

Q14 The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

I agree but our renewable power plants should use all the energy they produce and not allow heat to escape up the chimney ala the EON plant at Lockerbie. Care to be taken not to wildly pursue unpopular sites i.e. have a planning strategy for these plants.

Q15 The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:
Waste prevention and management plans;
Deposit of recyclable waste;
Procurement of recyclate;
Reduction of packaging;
Deposit and return schemes;
Charges for carrier bags.
What are your views on these proposals?

Fully agree, again public attitudes need to be changed to create a community that cares for itself. Unfortunately probably the most successful way is to charge i.e. carrier bags. SG should consider assistance to home grown companies to get involved in there own recycling schemes.
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Yours sincerely,
Mr Graeme Allan
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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tacking climate change is important to me as I am concerned about the devastating impact it will have to future generations. It is important that the Scottish Government has a clear plan of how it will achieve 80% reduction in carbon emissions by 2050. It is all very well to state this target but there must be a plan of how this can be achieved. The government must ensure that the power companies continue to invest in the renewable technologies such as wind and wave power. This could be achieved by feed-in tariffs. This is a legal requirement on energy suppliers to agree to buy clean energy from generators at a fixed price above the wholesale price for 15-20 years. This system has been used very successfully in European countries such as Germany.

The government must also continue to support research into new technologies such as carbon capture. It is only with the application of several ‘clean’ technologies that we will be able to meet this target whilst still having enough power.

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We need to make changes now - the Scottish Government need to act now to make this happen. Please don't let us down.

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Miss Kirstie Anderson
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Tackling climate change is I believe the single most important threat to people in Scotland and around the world. Rapid, significant and concerted, even sometimes unpopular, action can be taken in respect of the credit crunch threat - climate change demands an even stronger stance as the long-term consequences are yet more severe. Without action now, future generations will be paying a vast environmental debt which far outweighs anything owed due to the present financial situation.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mr Eric Annandale
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

It is crucial that climate change is tackled now. Not only because of the devastating effect it will have on people and nature all over the world but also because we do not have the right to hand on a damaged and diminished planet to the generations to come. I am proud that Scotland is preparing to step forward and show the way. What follows is not my own words, but expresses my views better than I can.

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The climate change bill should be about making changes now and action should be taken immediately so that the impact of human induced climate change can be kept to a minimum and so that the world does not have to suffer catastrophic weather because of procrastination by the richer countries of the northern hemisphere who have contributed most to making the problem in the first place. Scotland can, and should take a lead.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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• Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

• All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

• Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

• Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Ms Ruth Atkinson
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

This is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet. It is very exciting that we have the opportunity here in Scotland to enact the most progressive climate change legislation in the world.

I believe that tackling Climate Change is the key issue now. We know that already it's consequences will be huge. Reducing emissions is not just about changing the way we generate power. We need to empower people to reduce their own consumption. It doesn't make sense to exclude international aviation and shipping emissions form the targets, why not include them from the start? Starting the targets from now with a 3% reduction year on year will start to make an impact immediately, why wait until 2020?

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

- Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

- All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

- Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

- A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

- Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

- Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

- All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.
I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely

Dr Elizabeth Auty
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters to me because I am concerned about its devastating impact on people and nature across the globe.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

- Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

- All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

- Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

- A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

- Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

- Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

- All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr Nigel Bagshaw
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

The impact of climate change is quite clearly already evident. It is crucial that we do all we can to reverse the effects and maintain a healthy earth for generations to come.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

• Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

• All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

• Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

• Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Miss Katie Nicoll Baines
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I strongly believe that it is crucial that the strongest action is taken to combat the effects of climate change which could be utterly devastating in the not too distant future. I really feel that the window of opportunity that may exist to enable a reversal in this process shrinks by the day and that failure to produce a suitable climate change bill that can address this problem would betray our future generations to an unprecedented degree.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at the very least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

- Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

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- Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

- A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change. Personally I find the idea of carbon trading a wholly ridiculous concept.

- Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

- Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

- All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Ms Anne Bankier
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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• All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr Lang Banks
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Any bill to tackle climate change must have realistic targets that are binding within the lifetime of the current parliament. Action is needed now as we are already seeing the effects of human made climate change around the world. Scotland is not immune from migration issues or changes in climate zones caused by climate change.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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• All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr Rodrigo Barnes
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Unless we act with the greatest urgency to avert the worst consequences of climate change, there will be collapse of ecosystems worldwide, very unpredictable weather patterns, widespread extinctions because evolution cannot keep pace with rapid changes, and great human suffering and loss of life. We must have the strongest Climate Change Bill possible, which must include strong, enforceable targets set for every three to five years, starting NOW, leading to at least an 80% cut by 2050 - preferably more - and the Bill must include curbs on emissions from aviation and shipping. (I wrote this before reading the campaign letter. Although it repeats much of what I have said, I'm leaving my contribution in, to show how strongly I agree. I agree entirely with the rest of the letter, too, and am very deeply concerned about this severe threat to survival of life as we know it.)

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mrs Sara Barry
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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• All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Mr Reade Beaudoin
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

It is probably the most pressing issue facing humanity today. Weather affects everything, as if you needed reminding.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

• Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr Julian Begg
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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- Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

- A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

- Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

- Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

- All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr Cameron Bell
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I think that we all need to tackle climate change because the potential consequences of inaction are so frightening. I want to be able to tell my children that we tried.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

- Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

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- Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

- A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

- Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

- Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

- All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr Kenneth Bell
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate Change cannot be stopped but just one individual, it needs EVERYONE to do their part - individuals, businesses, energy suppliers, governments. I work in the countryside, educating people and conserving habitats and it is paramount that climate change is dealt with on a world wide scale. Developed countries such as Scotland need to show we are dedicated to tackling global warming. If the big developed countries do not make a massive difference, how can the developing countries be expected to cut carbon emissions! They will only spend money on this issue once it is clear that the developed world are taking it seriously. MAKE SCOTLAND PROUD

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely

Miss Paula Bell
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters to me because I am concerned about the devastating impact it will have for people and nature around the world. I sincerely hope that the Scottish Government heeds the advice and recommendations of experts in the field, who are calling for stringent measures to mitigate climate change.

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Ms Nadia Bessos
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Yours sincerely
Ms Alexandra Birch
1. The Scottish Climate Change Bill is welcomed, including the commitments to reduce greenhouse gas emissions by at least 80% by 2050, and to set interim targets. These are both necessary but not sufficient for starting to make Scotland’s contribution to the global process of reducing the impact of climate change.

2. It is vital that these commitments are backed up by duties within the Bill, so that there is the prospect of delivery. To do this, the Bill must itself:
   - Be comprehensive in scope
   - Impose duties on all public bodies to contribute, with provisions to provide support, and sanctions against non-delivery
   - Make provision for a strategy setting out how the commitments and targets will be achieved
   - Make provisions for public, rigorous and independent scrutiny
   - Avoid making provisions for emissions trading and off-setting which enable evasion or displacement of the objects of the Bill
   - Be set unambiguously in the context of contributing towards sustainable development.

Comprehensive in scope

3. The most significant contributions to greenhouse gas emissions in Scotland arise from:
   - The built environment: conditioning the environment of buildings, and moving people, goods and information between them
   - Energy production, including generation and distribution
   - Agriculture and food.

4. However, as improvements are made in reducing emissions from these sources, the proportion of emissions from international aviation and shipping are likely to grow. These too should be included with the emission targets.

Duties on all Public Bodies

5. Public bodies have significant impacts directly and indirectly on greenhouse gas emissions, including the sectors identified in paragraph 3. While the Scottish Government can put forward legislation and provide resources, it cannot achieve reduction in greenhouse gas emissions alone. It is vital that the Bill imposes duties on public bodies to contribute to the Scottish targets, and does not leave this to subordinate legislation.

6. There is a special responsibility on local government, which has a key role in delivery. This arises through its responsibilities including, inter alia, for buildings, transport, town and country planning, waste management, and procurement. It also arises through its role in Community Planning Partnerships, and its remit for governance of its area. There should be duties not only for each Council to reduce its own emissions, but also a requirement for it to produce strategies to show how the emissions from its area will be reduced too.

7. An effective role model is provided by the success in improving municipal waste recycling. This has only come about through a combination of legislation (EU Directives transcribed into UK and Scottish requirements), coupled with regulatory requirements and targets, financial support from Scottish Government, and a threat of fines for non-compliance with the targets.

The need for a Strategy

8. The Bill should require the production, monitoring and regular up-dating of a realistic strategy, or route map, to show how the greenhouse gas emission reductions will be met, and provision made for adaptation. This strategy should not be confined to the energy efficiency of buildings alone.
9. At present a variety of agencies in Scotland have signed up to desirable and ambitious commitments, such as Scotland’s Climate Change Declaration, but many have little clear idea of how these will be delivered. While we do not have a command and control economy, without a strategy it will be impossible to mobilise the scale of activity required to meet the targets of the Bill. In practice this will need to extend to supporting and monitoring demonstration projects, and devising ways to ensure the replication of success.

10. An illustration of what happens without an effective strategy map is the UK commitment to all new houses being carbon neutral by 2016. The evidence on the ground is that there is as yet no significant UK development which is carbon neutral, and no prospect of the commitment being met. Even the few very worthwhile and pioneering developments underway have largely unresolved problems of additional costs, technical constraints and behavioural change implications.

Independent Scrutiny

11. It is vital that the Bill incorporates provision that the targets, duties and requirements of the Bill are subject to scrutiny which is public, authoritative and independent. The UK Climate Change Committee does not have the capacity to address the separate legislative, institutional and cultural context in Scotland.

12. The Bill should establish a Commission, which should be answerable to the Scottish Parliament. For reasons set out below, that body should be a Sustainable Development and Climate Change Commission for Scotland. Scrutiny should not be left to a Non Departmental Public Body, with members appointed by and answerable to Ministers. Such bodies find themselves in the ambiguous role of “critical friend”, where the requirement to be a friend inhibits effective independent critical scrutiny.

Avoid evasion or displacement

13. In drafting the Bill, it will be necessary to be cautious and even sceptical about reliance on any provision for carbon trading or off-setting. It is true that the real price of carbon, i.e. the cost of the environmental damage it imposes, should be factored in, so that market prices are adjusted to internalise the externalities caused by greenhouse gas emissions. However, the risk is that measures have the character of religious indulgences, paying for the burden to be carried elsewhere and/or by someone else, and otherwise allowing business as usual to continue.

14. As a corollary, it is essential that in the reporting of greenhouse gas emissions, account is taken of the outsourcing of much of Scotland’s material consumption: that the goods we import generate emissions elsewhere.

Sustainable Development

15. Finally, the Bill should have regard for the intimate relationship between sustainable development and climate change, which are two sides of the same coin. Tackling climate change is not a separate matter, or one only affecting the environment, but it has intimate connections to economic wellbeing and social justice, i.e. it is an integral part of sustainable development. For this reason, the Commission set up to scrutinise progress on climate change should also scrutinise progress on sustainable development. These two should not be treated separately.

16. To illustrate the close connection:
   - Trying to reduce emissions from buildings will be socially unjust if it does not take place together with, and as part of, tackling fuel poverty by providing affordable warmth for those on lower incomes;
   - There is no tension between the long term need to tackle climate change and the short term need to tackle the recession. Both need investment in renewable energy, energy efficiency, public transport, urban and rural regeneration, and are fully consistent with a green jobs strategy, which has the potential to provide a myriad of jobs and training opportunities.
17. Public bodies in Scotland already have a statutory duty to contribute to sustainable development as part of Best Value. This is imposed by s1 of the Local Government in Scotland Act 2003, and on the wider public sector through a requirement for Accountable Officers flowing from the Public Finance & Accountability (Scotland) Act 2000. Although not yet effectively scrutinised by Audit Scotland, some Councils and other bodies are making progress. This should be built on, avoiding duplication and aiming to secure joined-up governance by ensuring that the duty to tackle climate change, advocated in paragraph 5 should be conjoined with these existing duties.

Tim Birley is a former senior civil servant. He was a Scottish Office Inquiry Reporter; a Deputy Director with the Scottish Development Department; then Head of Rural Affairs and Natural Heritage Division in The Scottish Office. Since 1995 he has been an independent adviser and facilitator working with public, private and voluntary bodies taking forward sustainable development.
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

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Climate change is a big enough problem that we should all be very scared indeed. I would say there are enough studies showing that the cumulative effect of individuals is more of an issue here than big companies and a well-rounded bill has the power to change the behaviour of both for the better.

The environment should be priority one for all politicians, because our planet is the stage on which everything else takes place ... and we don't have another one.

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Yours sincerely
Mr Michael Black
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

We must act now to create a strong legislative framework with short, medium and long term targets. There is no escaping the truth of what is happening and those countries that set ambitious goals now, along with staged targets, will find it much easier in the years to come. Historically Scotland has failed to take the lead on environmental issues and has lost out economically as a result. The Scottish Government should follow its example on Zero Waste and set an aspirational target for Zero Fossil Fuel for energy use as well as the 80% reduction target. This will attract the right kind of investment to Scotland. Annual reduction targets of around 3% must commence within the next 5 years to be credible. This gives up to five years to refine our GHG accounting to an accurate level for year on year measurement purposes. Scotland is waiting to be a world leader again - don't fail us.

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Climate changes concerns everyone as the effects have an impact to all the people and to the nature all around the world not just in one place. In order to preserve a planet for future generations to live in it is important to change the attitude of people make them see that every person has an impact on the climate change and it is everyone responsibility to make sure to live in a more responsible way.

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if we don’t do something about the climate change then what is the future for both mankind and animals

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- All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mrs Susan Bonar
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

My house will be swamped as sea level rises, but I also think we are putting our children’s future in jeopardy if we haven’t secured a clean source of energy for their future.

Tackling climate change is the most important thing we can look to do to secure our children’s future, and I believe the most important of any of the work that the Scottish Parliament can do. (not to mention keeping the Greenland icecap out of my kitchen!) I feel that tackling climate change now will also provide in the short term construction phase much needed jobs.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

• Serious action to reduce emissions - starting now. The time for action must be now, starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

• All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

• Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Dr Susan Bowie
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Miss Lindsay Bratton
WRITTEN SUBMISSION FROM ANTHONY BRIGHTMAN

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate Change is vital to all of us because of the devastating impact it will have for people and nature around the world. We ignore it or simply pay lip service to it at our peril.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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- Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

- All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely

Mr Anthony Brightman
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

It is important our leaders understand the huge public opinion on climate change, we need the Scottish Government to create a good example to the rest of the world and not be hoodwinked by corporate greed. Fossil fuel power is NOT the answer whether or not we can hide the pollution, we should not be taking from the earth, but instead be looking at wind, solar and hydro power for our needs, we owe it to our children. Look to your conscience, not your pocket!

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mrs Jennifer Broadhurst
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I am very concerned about the way we treat our planet and it matters to me hugely that each and everyone of us try to tackle climate change in every way we can.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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Yours sincerely

Miss Annabel Bromley
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate Change bothers me a lot, because unless fundamental worldwide action is taken, I believe that (due to positive feedback effects kicking in) this planet will quite rapidly become untenable by human life. Instead each generation should leave the planet in a viable state for their successors - our use of fossil fuel as a basic building block of our way of life is not sustainable due to its contribution to climate change. Developed countries, having largely caused the problem, need to start setting their houses right so as to demonstrate conviction and example to developing countries. Therefore Scotland must have a strong climate change bill that leads to rapid and effective action.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mr Clive Brown
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

It is important to tackle climate change because of the devastating impact it will have on people and nature around the world if nothing is done to slow this process down.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Ms Elaine Burns
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate Change matters to me because I am concerned about the devastating impact it will have for people and nature around the world.

I am about to have a child and it concerns me greatly that we continue to plunder the world’s natural resources and leave every ecosystem in decline. Every day all sorts of chemicals including hormones and antibiotics are washed into the sea. We are leaving tonnes of waste that will take hundreds of years to decompose. Frankly it's disgusting.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mrs Rachel Burns
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I think tackling Climate Change is important because the changes involved are bound to have an adverse effect on the World's future unless decisive action is taken.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely

Mr Ewen Cameron
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I want my grandchildren to have a world worth living in. Even moderate predictions of the effects of climate change could jeopardise this. My priorities are; first have a really strong Climate Change Bill, and secondly to mobilise public opinion so that we really all, here and world wide, make life style changes fast' as if it is a war effort.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely,
Ms Johanna Carrie
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters to me because I am concerned about the devastating impact it will have for people and nature around the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Ms Mandy Carter
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

It is better to find that we took action that wasn't needed than to find out we didn't do enough and now it's too late. Precautionary principle doesn't apply to climate change. Act now and do more.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr C Childe
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate change is a global problem that we have caused and a problem that we need to take responsibility for. If we do not change what is happening the effects will be devastating worldwide.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

- Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

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Yours sincerely
Miss Georgie Christie
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters to me because I am concerned about the catastrophic impact it will have for people and nature around the world. We need to act now to protect life on earth.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely,
Dr Sally Clark
WRITTEN SUBMISSION FROM SARAH CLARK

Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I feel it is very important to tackle climate change in order to protect people and nature from the devastating impact it will have. I would also be proud for Scotland to be world leading in tackling climate change.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Miss Sarah Clark
Dear Convener of the TICC Committee

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Yours sincerely
Miss Charlotte Clarke
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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I believe the current Climate Change bill is lacking in any real substance and must be tightened up by the Scottish Government. In particular, a more solid and costed business case must be presented for the various options being looked at.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Mr Victor Clements
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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling Climate Change matters to me because there is no going back once the damage is done. It will have a devastating effect on people and nature around the world. I want to be remembered as the generation that helped the planet, not harmed the planet. There is still time to heal what has gone before...but we have to ACT NOW.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mrs Morag Cloughley
Comments on the Climate Change Bill

I strongly welcome the introduction of the Scottish Climate Change Bill and the principles and objectives behind it. There is a clear opportunity to not only “think global” about the issue of climate change, but also to “act local” in introducing legislation to drive environmental issues in Scotland. In particular we are in a position to show an example to other countries of our commitment to reducing climate change in an effective and coordinated fashion.

I wish to be assured that the main features of the Bill are not diluted through the Committee stages and indeed there are areas which I would like to see strengthened or consolidated. I have noted these here:

The long term targets of at least an 80% reduction in all greenhouse gas emissions by 2050 and 50% for 2030 must remain as headline targets.

Annual targets to achieve the headline targets in 2030 and 2050 need to be at least a mandatory 3% year on year and starting in 2010. The existing targets in the Bill are not specific enough for the period up to 2020 and could result in a weakening of the programme. Evidence from SPICe research briefings show that annual targets of less than 3% from 2010 could seriously erode the Scottish headline targets.

Emissions from international aviation and shipping must be included in the targets. Ministers have made this commitment, yet the Bill indicates that emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should be amended to include all emissions.

The setting up of a Scottish Climate Change Committee is welcomed and this should be instituted immediately. It should be independent and contain a wide range of interests from the public, private, voluntary and community sectors. It should be given a key role in the scrutiny process for assessing progress towards headline and annual targets.

The suspicion exists that excessive carbon trading could dilute the real and practical efforts to reduce emissions in Scotland. The legislation should limit the amount that can be bought from overseas to 20%. A SPICe briefing paper indicates that there are installations based in Scotland who are already involved in the main existing emissions trading scheme (EU ETS). However, I understand that information from trading installations in Scotland is currently confidential. Steps are required to ensure these figures can be taken into account in monitoring.

The Bill contains reporting mechanisms on progress on tackling emissions in Scotland. These are essential in holding Ministers to account. Reporting should be in the public domain, with serious commitment to achievement of the targets set. The Scottish Climate Change Committee should be given powers in the reporting and scrutiny process.

All policy documents and publicly funded projects should be subject to scrutiny at the time of inception, possibly as part of Strategic or Local Environmental Assessments, to test for emission increase or potential for reduction. These should also be monitored and be subject to reporting and scrutiny.

All public bodies should have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a there should be a duty within the Climate Change Bill to ensure they take the appropriate action to deliver their fair share. The public sector should demonstrate leadership.

The Bill should consider sectoral reduction targets, or at the very least, scrutiny of particular sectors from where heavy emissions are recognised. This need not be comprehensive, as some sectors are small or difficult to measure. Transport and energy are two which seem eminently suited to rigorous monitoring and scrutiny.
On the **Forestry provisions**, it makes sense to seek ways of increasing woodland cover in Scotland and using land to foster renewable technology. I support the proposal for the Forestry Commission to work with developers, and particularly communities, to bring forward renewable energy development. Proposals to sell land and cutting rights to the private sector are not supported, but I would welcome joint-ventures over new planting schemes and renewable developments, so long as there are adequate safeguards over existing employment, land management and fostering public access to woodland areas.

In progressing with the Climate Change legislation, **the context within which it operates must be considered**. In particular, the Scottish Government's National Performance Framework, Strategic Objectives, and National Outcomes provide the key to the Scottish Government’s agenda to make Scotland a more successful country. The underlying physical, social and economic objectives are vital for Scotland to become a place which is wealthier, fairer, smarter, healthier, safer, stronger and greener. The Climate Change Bill should acknowledge its position in this wider context, so that actions and targets take into account the wider societal interests and sustainability.

Thank you for considering these comments. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently.

Yours sincerely

Alexander Cook
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

This is an issue that affects absolutely everyone and must be acted on as soon as possible.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

• Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

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Yours sincerely
Mr Colin Crabbie
The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

This is yet another over-the-top response by politicians to the theory of global warming and is yet another tax raising exercise. That politicians want to parade their green credentials and set targets higher than any other country is mad. Scotland has only 0.2% of global CO2 emissions. Meanwhile China and India will continue with their economic plans regardless of us.

People cause pollution. The world population is 6.6 billion and will be 9.5 billion by 2050. The UK will increase from 61 million to 70 million by 2028 and 78.6 million by 2081. Yet not a word about population controls.

The Al Gore film, which started all this and the “hockey stick” graph, has been discredited. The whole renewables industry has only come about by taxpayers’ subsidies.

The Bill requires that the Scottish Government set annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

By all means set targets but state that unless others set similar targets then bets are off. If others fail (as I expect) then we should reduce our target correspondingly.

The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

Not a chance in hell

The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

Scottish carbon credits are a waste of time when other countries are building coal-fired power stations at 2/3 a week or marketing the £1000 car. The rich only get richer.
The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

We have no manufacturing left so why take on the responsibilities for others??

The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government's approach to obtaining independent, expert advice on climate change?

I would welcome an INDEPENDENT expert advice not one who is in bed with the climate change zealots.

The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland's emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

The voters need to know what is happening and I suspect how far behind we are from unrealistic targets.

The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

Seems like a growth industry is being set up with thousands more jobs in the public sector which we cannot afford.

The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced. What are your views on this proposal?

If you warned about a new ice age, as some scientists are predicting this would be useful.
Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

Fine if you can also control the volcanoes that would be helpful.

The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

Pie-in-the-sky.
As the rain forest is cut down to grow the ill thought out EU biofuels directive planting a few saplings will do ziltch.

The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioral change.

What are your views on this proposal?

The first bit of sense coming out of this sham consultation

The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government’s thinking in this area.

What are your views on this approach?

Good but start of with Edinburgh Council who leave their new office lights blazing overnight. Evening News letters 9 February.

The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

Part of our requirements should be from renewables but there is a gap and the lights WILL go out if we do not invest in nuclear facilities
The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:

- Waste prevention and management plans;
- Waste data;
- Deposit of recyclable waste;
- Procurement of recyclate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

What are your views on these proposals?

All that means is more council snoopers. In West Lothian there are 18 litter wardens costing £492,000. Income from fines £5,200. Value for money?? I think not.

What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

You will get the climate change zealots organising separate responses to fix the result and you will say that it has got unanimous approval. Not true too many people disagree with the global warming pundits but are too lazy to put pen to paper and hence allow a false result

Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

Have not heard of this

Does the Bill raise any equalities issues you would wish to highlight?

I do not understand what you mean by equalities. Race?? Diversity?? Women/men

What possible good is this??

Do you have any comments on the impact of the Bill on sustainable development?

No we need productive jobs not more pen-pushers

Do you have any other comments on the Bill?

Yes you must ask those numerous scientists who are challenging the theory and include their findings in this report/consultation. There are too many scientists, politicians and paid employees who are paid lots of taxpayers money so they will continue to beat the global warming drum for fear of their jobs. Ask those not paid by government, or rather taxpayers’, money and you will get a truthful answer.
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change should be the top priority for the government as eventually there is going to be a devastating impact for everyone and we all have a duty to protect our beautiful wildlife for future generations.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

• Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

• All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

• Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

• Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely

NIKKI CURRIE AND FAMILY
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Yours sincerely

Mr Neil Dawson
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate change will have a devastating impact on the environment, and us, the people who depend on it. The cost, both economically, spiritually and morally, of not acting now, and emphatically, would be an impossible burden for our children to inherit. Technology will be a significant player in helping reduce emissions, but behaviour change is an immediate priority, at all levels of society, and including corporate responsibilities overseas.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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• All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

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Yours sincerely
Dr Robert Dawson
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

Tackling climate change urgently, comprehensively, and authoritatively, is imperative if the greatest global threat to our planet is to be diffused effectively before it is too late.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mr David Deeson
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters to me because I am concerned about the devastating impact it will have for people and nature around the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Miss Deborah Dent
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I am particularly concerned about the effects climate change will have on some of the poorest people and on the plants and animals that we are so dependent on. This bill offers governments the opportunity to change the way we live so to promote healthier societies both in Scotland and in other countries.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Miss Laura Digan
Some reflections on issues arising from Questions 3, 4 and 5

Setting a target of an 80% reduction in Scotland’s greenhouse gas emissions is sound in that it is based on solid peer reviewed science and is a goal that should certainly be pursued.

The establishment of interim targets and basing those on a 3% per annum reduction from 2020 is virtuous to the extent that it sends clear signals in advance to business, industry and the populace at large. Its appropriateness, however, depends on the control framework to be established – nationally and internationally.

Greenhouse gas emissions in Scotland split broadly equally between the domestic, the commercial and the industrial sector. Again rough equally they arise from transport, heating and electricity production. The control framework for emissions must therefore address this broad range of activities and should aim to be responsive, economically efficient and enforceable in each of these areas. If the year on year targets are to be met reductions across will require to be closely co-ordinated.

Control measures may be based on behaviour change, direct regulation or market instruments. Behaviour change would be the most desirable route to follow – in that the populace would support it and it would require less detailed regulatory and policy intervention. However progress in securing such change has been slow and I therefore concentrate on regulation and markets – nonetheless any progress that can be made to reduce energy consumption by behavioural change will make the task easier.

Currently the framework for control is patchy and has different embedded carbon values e.g. the EUETS, the climate change levy and the Renewables Obligation each have a different embedded carbon values. Other sources such as heat have no carbon value. This is arguably inefficient policy making – and can lead to perverse price signals.

Government’s record in designing complex policy instruments (and industries response) has been patchy. For example the Renewables Obligation has consistently undershot the targets resulting in sizeable ‘buyout payments’ being recycled to operators and the desired level of renewable energy not being secured even when prices are rising. Initial allocations under the EUETS were such that the carbon price in the first compliance period fell to near zero and many industries received what in effect were sizeable windfalls leading to a ‘lobbying culture’ in which promises of action are ‘exchanged’ for future permits (e.g. the operation of the New Entrant Reserve).

Stern, in his review of costs and options, indicated that the cost of making an 80% reduction was affordable and he presents therein details of the cost of savings for various measures. The review suggests that savings be made on the basis of cost alone, without technological or geographical restriction. This is also the underlying logic of emissions trading as envisioned by the Kyoto Protocol.

Emissions Trading as established by Kyoto also allowed as a principle the sharing of burden between signatories (JI) and credit for reductions made in non Annexe 1 countries. Implicit in trading is that reductions be made where most cost effective and that technology transfer can be facilitated – in effecting smoothing out step by step achievements over time and amongst participants. Major emitters such as US, Australia, China and India are supportive of the principle of trading and there is a body of thinking that suggests that developing countries will not accept binding targets without some element of wealth and/or technology transfer – indeed a figure of 0.7% of developing country GDP has been mooted as an opening negotiating position. Scotland needs to consider in designing the detail of the Climate Change Bill that it will have to fit with likely future international frameworks – and hopefully will facilitate them.
The placing of limits on the use of carbon credits could therefore be argued to make it more difficult to secure international agreement on post Kyoto measures. It also will increase global compliance costs that in the absence of such trade would result in Stern’s cost estimates to be low. Using a geographical basis rather than a cost basis for reductions could therefore be thought likely to be economically inefficient and a barrier to the agreement of flexible international agreement.

Placing strict non-tradable geographical limits is also likely to result in different carbon abatement costs in different regions. This in turn is likely to lead to industries moving to areas where targets are currently lighter or compliance costs cheaper e.g. iron and steel to countries with loose targets, aluminium and paper to areas with cheaper carbon free hydro power etc. The smoothing and flexibility impact of trading is in effect lost because of the need for short term stepwise compliance rather than a move to broader targets.

Direct regulation has been proposed by some commentators as an alternative means of ensuring that the 3% per annum targets can be met. However this would require robust legislation and regulators with extensive knowledge of industry costs, abatement options etc. (a much tighter regime than any of us have seen thus far). Emissions trading on the other hand is argued to be more likely to be certain in effect in that abatement costs will rise or fall, driving compliance measures. (Whereas regulation requires regulators to always get it right).

In addition different regulatory standards, requiring products to be made by different processes in different countries (unless regulation could be harmonised globally) would have significant impacts on free trade.

Scotland is a small country with a comparatively small number of major emitters most of whom operate in open markets (electricity on a UK basis, whisky, paper and oil refining on an international basis). Plant size for many operators is large and often a measurable percentage of total Scottish emissions. Abatement measures are usually a step change – the changing of a method of firing, the closure of a plant or the fitting of carbon capture and storage. It would be a very significant task to ensure that these could mesh together (with transport and domestic heating) to result in something close to a 3% per annum target which is consistently met without sizeable over or undershoot - take as examples the closure of Torness, the opening of a new carbon capture ready coal fired power station (with capture actually fitted later) or a cessation of refining operations at Grangemouth.

In the absence of banking and borrowing or burden sharing, the setting of a 3% per annum reduction is therefore going to be very difficult to achieve by pure regulation. This is equally true of trading unless that is allowed to operate on an international (or at least EUETS wide) scale. These points suggest that because of the size of our country and the scale of major processes then setting a Scotland specific emissions budget is likely to be very limiting and economically inefficient in comparison to the flexibility and certainty of working within a tight international trading framework.

As noted above the great variety of policy measures designed to limit emissions, each having a different embedded carbon value is a barrier to economic efficiency. A control framework based on regulation would be likely to exacerbate this situation unless the regulator could second guess abatement costs and issue licenses accordingly. The logic behind emissions trading without international limits is that the market would discover a cost and abatement would take place wherever it is most cost effective (and this is Stern’s assumption). If this were adopted, Scotland’s emissions might rise, not fall and we might see a quite different range of technologies implemented (for instance Stern suggests abatement using nuclear power is much cheaper than many renewables). Economic purists would argue that this is how it should be – actions being driven by cost without devising complex regulation and a variety of technology support measures etc. This also would fit with the concept that over time all products and services, on a global basis should contain a carbon value – hence avoiding the need for continued Government intervention.
Turning briefly to the situation with regard to heat and to transport, some analysis of abatement possibilities also points to large step changes being common. Changes in emissions arising from heat production are likely to arise from a switch to Combined Heat and Power in industry (triggered by plant refurbishment) and by increases in gas price in the domestic sector. Securing a target of an 80% reduction will require heat and electricity to be produced in a largely carbon free fashion if some level of aviation use is to continue (as carbon free alternatives to aviation fuel are not currently regarded as feasible in the 2050 timescale).

Transport emission reductions too are likely to be driven largely by technology and that technology is likely to be driven by international policy – EU vehicle emission standards, the inclusion of aviation in the EUETS etc. and/or by major infrastructure projects such as rail electrification. This too points to it being difficult to see how Scotland as small country can meet fixed shorter term targets in a cost effective fashion.

In summary, then, setting fixed targets and restricting Scotland's emissions budget in terms of trade will result in the design of control frameworks becoming very difficult. It is quite arguable that with full flexibility Scotland could realistically set targets that are tougher still, going beyond the 80% currently proposed.

If the control approach is to be based on regulation then extensive legislation and policy instruments will be needed (many of which may not currently be possible in terms of devolution, EU legislation, GATT rules etc.). If an approach based on trading were to be adopted, then that would be highly distorted by these restrictions – and would result in different embedded carbon costs for Scottish produced goods and services. The more flexibility, the less the cost, the less the need for complex regulatory intervention, the more likelihood of compliance and the ability to set tighter targets still.

In conclusion, therefore, we need to think carefully about the kind of control frameworks we feel are preferable and the fit with international emission control mechanisms before finalising the approach – and that desired approach has to be embedded in the final wording of the Climate Change Bill.

Fred Dinning is a Fellow of the Institute of Engineering and Technology and of the Energy Institute. He was Energy and Environment Director with the ScottishPower Group until retiring at the beginning of 2006 where he was involved in energy policy issues since privatisation, both in the UK and US. He was a founder member of the UK Emissions Trading Group, represented the UK Electricity Industry on Emissions Trading in Brussels. He represented the electricity industry at a number of the COPs. During his career spent a considerable period working on the economics of generation planning and in roles covering most areas of electricity technology.

He is currently a Board member of the Scottish Environment Protection Agency, Chair of the Carbon Trust's Consultant Accreditation Panel and is Chair of the Advisory Group to the Energy Joint Research Partnership of the Edinburgh Research Partnership (a co-operation between Edinburgh, Heriot Watt and Napier Universities). He was also Convenor of the Church of Scotland Church and Society Council's sub group looking at energy/environment issues and sits on WWF Scotland's Advisory Council.

This response is made in a personal capacity reflecting his own experience and opinion and not those of any of the organisations listed above.
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I'm particularly keen that aviation and shipping are included directly in the Bill from the start. This seems the most ground-breaking aspect of the Scottish Bill in international terms and could really move things along in the run up to the Copenhagen meeting.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

• Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

• All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

• Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

• Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Dr Richard Dixon
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

- Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mrs Kelly Doig
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Please take this opportunity to give a clear signal to the people of Scotland that we have a leadership willing to deal with the difficult but essential issues.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mr Mike Donaghy
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters to me because I am concerned about the devastating impact it will have for people around the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Dr Julia Dorin
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change is of huge importance to me because rising temperatures and climate chaos are putting the futures of our children and grandchildren at risk, increasing global poverty and threatening the ecology of our planet. I am especially concerned about the Scottish Government’s decision not to build any more nuclear power stations in Scotland, given that nuclear power is carbon free and can provide a constant, reliable supply of electricity. If the Scottish Government is serious about meeting it’s climate change targets, it’s reliance on coal power must be reduced.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mrs Griselda Dow
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

In my opinion we now have a short window in which to tackle climate change and if we do not, we have lost any hope to ensuring that the planet continues to be productive, healthy and beautiful for people and wildlife. At the same time, in my opinion, we should begin to consider the needs for optimising population levels in order that we do not overstretch the capacity of limited renewable resources.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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- All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Ms Penny Edwards
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I am frustrated that I am doing everything I can to reduce my own environmental footprint (shopping locally, buying low-impact local products where possible, using train instead of flying, choosing not to own a car but use bike & public transport instead etc etc), but don't see the same will from our authorities. Many of my 'green' actions are all the more difficult because they aren't 'main-stream' and therefore not well catered for.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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• All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr Larry Egar
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

We need a Climate Change Act with teeth that can deliver results, not a meaningless pile of paperwork worded to make politicians look good. It must include at least a 3% reduction in emissions year on year now, not in a decades time. Emissions from all transport should be included from the outset, that means from international aviation and shipping as well. All emissions, including consumption based emissions must be included, so we are doing what we “say on the tin” and not simply being good at home but then importing goods and services derived from poor practices abroad. The more Governments that implement good practices now, the more that will be inclined to follow and may be encouraged if they wish to gain trading opportunities.

To achieve this there needs to be commitment, which requires empowered people, so set up a Scottish Climate Change Commission now - why wait! In support of the Commission, Parliament should hold Scottish Ministers to account, making them deliver results, not more debate. To lead by example, have all public bodies deliver the emission reduction targets set out in this Bill from the start - we know the problem is not going to get better by itself so take definitive action and be part of engineering a global solution.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I want to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. I want the Scottish Parliament to deliver strong climate change legislation that will be implemented urgently and be a leading nation setting an example for other developed nations to follow.

Yours sincerely
Mr David Ferguson
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate change is the single biggest threat facing the planet and as the prime driver of global warming is human action it is our responsibility to take action to reduce the impact of our lifestyles. The Scottish Climate Change Bill is a measure that must therefore be supported.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr Mark G N Ferguson
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

Please ensure that the Bill is robust with annual, measurable targets commencing in 2010 and penalties for non compliance.

Many thanks.

Yours sincerely

Mr Michael Ferrigan
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Quite simply, our and future generations prosperity and well-being depends on the strongest possible leadership from our Parliament on climate change. The Parliament has a unique opportunity to rise to this challenge through doing all it can to produce the strongest possible Scottish Climate Change Bill. I wish you well in deliberations - all our futures depend on you.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mr Ian Findlay
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

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Yours sincerely
Ms Lorraine Finnie
Dear Convener of the TICC Committee

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

My friends and I have just become aware of the details of the proposed bill, and that today is the last day for comment. We hope that the strongest possible form of the bill will be adopted, allowing Scotland to lead the world in proactive response to climate change.

Specifically we look for annual targets to start now, inclusion of aviation and shipping emissions, provision for robust oversight, reporting, and accurate counting, limits on carbon trading, and inclusion of all public bodies in responsibility.

My friends hope to be able to send their own messages today, but in case they can't get to a computer, asked me to give their names as well as mine. They are: Vanessa Stuart, Michael Stretch, Jackie Adkins, Trish Fenton. We hope you will take our view into consideration!

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Ms Ruth Fishkin
WRITTEN SUBMISSION FROM VINCE FITZPATRICK

Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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• All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr Vince Fitzpatrick
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

We need to find sustainable ways to run our country and to curtail our abuse of the world's resources. It is unacceptable that we assume it is OK to use more than our fair share to the detriment of people in other parts of the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

• Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

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Yours sincerely
Mrs Gina Ford
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

In the midst of an economic crisis, it's easy to shelve action on tackling climate change. Meanwhile climate change continues unabated and the consequences look very grim.

The probable timescale of change is frighteningly rapid. For example, the artic may be ice free (during the summer) in as little as 20 years! That would cause extinction of many artic species, most notably, the noble polar bear. The thought that our grandchildren will be burdened with such loss is extremely depressing and shameful.

Another concern is the acidification of seawater, due to changes in ocean currents and atmospheric CO2. This would apparently lead to further CO2 emissions from the ocean floor resulting in stagnation and certain death of marine food sources.

Given the timescales and the severity of the changes, delaying reductions in Scottish emissions is undefendable and counter productive.

We all need to change our lifestyles to reduce carbon usage now, not in 5 or 10 years.

We need radical political leadership to enact financial burdens (taxes) on consumption (energy, car use, flights and even imported food) and to subsidise cleaner alternatives (lpg public transport, micro-renewables, research on domestic energy efficiency). This is the only way we, the public, will change our behaviour.

In addition, we must contribute and campaign for international measures such as agreeing a model to reduce aviation and shipping emissions and to control damaging land use policies (i.e. palm oil plantations).

Finally, the climate change policies have to be robust, with penalties and incentives to ensure they are effective and not simply a redundant wish list, like the UN charter. Where there is a will, there is a way!

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- All emissions are addressed from the start.
- A limit on carbon trading.
- Robust reporting

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Dr Irene Fortune
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change NOW is crucial to the healthy survival of our beautiful planet. As a loving mother and grandmother I want to ensure that future generations will be able to enjoy the countryside, coasts and seas pollution-free and full of the land and sea creatures which enhance our lives so much. I have been to the Arctic and the Antarctic- such pristine environments - but my heart is here in Scotland.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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• All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mrs Mary Fraser
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

It is vital that nation's like ours lead the way towards making a meaningful reduction in greenhouse gases. Too much time has been lost in political bargaining, and strong leadership is needed to forge a way ahead at Copenhagen later this year.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050 and hope the Bill is strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely

Mr Jamie Fry
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I personally think it is of major importance to tackle the issue of climate change because of the impact it is having on our planet. When I choose to have children, I would like to be confident that there will be magnificent animals and beautiful scenery for them to experience. The way the world is headed just now, in my own lifetime, these things will be gone. This MUST change!

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Miss Stephanie Gardiner
Dear Convener of the TICC Committee

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Yours sincerely

Mr Jonathan Geary
Dear Convener of the TICC Committee

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Yours sincerely
Miss Carra Geddes
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

After two centuries of polluting the atmosphere with greenhouse gases the time has come when we must all attempt to reduce our carbon footprint - failure to act will result in catastrophic climate change affecting all living things. Scotland has an opportunity to be a world leader in showing how dependence on fossil fuels can be reduced by the use of alternative sources of power generation.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mr John Gordon
Dear Convener of the TICC Committee

I would be grateful if the Committee would consider my views in relation to the Climate Change (Scotland) Bill.

I believe it is important for Scotland to take a strong stance on climate change, and act quickly to help protect our environment. This is a great opportunity for the Scottish Parliament to show a commitment to effective action to improve the future of our country and indeed the world.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Ms Anna Goss
WRITTEN SUBMISSION FROM HARRY GOUDIE

Climate change happens all the time. I don’t believe that we are experiencing man made climate change and therefore there is nothing we can do to influence it.

However, if I am wrong, and we are causing climate change then we have to address the problem at source and that is human population. If you reduce the world population by half then you will reduce emissions by half and that should fix your climate change problem!

The questions that you should be asking are:

1. Is there a climate problem?
2. Are we causing a climate problem?

Please don’t spend yet more money on something that probably does not exist or on something that is beyond our power to change.

Harry Goudie
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

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Miss Stephanie Graf
Dear Convener of the TICC Committee

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Yours sincerely
Mr Ross Graham
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate Change is important for many number of reasons:

a) Protecting threatened habitats and species
b) Ensuring we manage our lives sustainably so that future generations can benefit
c) Allowing those within developing countries not to be affected by materialistic westernised ways, and suffer direct consequences from our actions
d) For ensuring the wellbeing of the planet

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• Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Miss Amy Gray
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

The World Health Organisation tell us that are already over 160,000 climate change related deaths per annum, the vast majority in the world's poorest countries. It is the people in those countries who already suffer the most devastating impacts of climate change and will increasingly do so whilst we live in relative comfort having created the climate change problems through our earlier development. Tackling climate change NOW is essential and we in Scotland can lead the world with a strong Climate Change Bill.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

• Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Ms Claire Green
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling Climate Change matters to me because I am concerned about the devastating impact it will have for people and nature around the world, and I believe developed, high carbon polluting countries such as Scotland have a responsibility to change their lifestyles and reduce their emissions as much as possible.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely

Mr Hugh Green
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

We must tackle climate change because the impact it will have on people, plants and creatures around the world will be absolutely devastating.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mrs Oriole Hall
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

There is not an alternative. Please do all you can to prevent climate change.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely

Mr Colin Hamilton
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

One person cannot change the world but collectively we as a nation can lead the way for others to follow. Climate change is real it is here we the people of Scotland must set an example to the rest of the nation and the world. Scotland has always been at the forefront it is in our interest to preserve nature once gone it is gone forever, where are the dodos? extinct!! Climate change will devastate more than one species us included it is time for reform now!

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mrs Antosa Hamilton-Isherwood
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

While variation in global climatic conditions is by no means unusual based on geological evidence of prior periods of climate change, the current phase of global warming is unprecedented in its speed. The speed of this dynamic breaches what can be accommodated through normal ecosystem adjustment mechanisms, and as a result there is a clear danger (and growing evidence, such as the sharp decline in Scottish Puffin breeding success) of severe damage to ecosystems and the environment on a global scale.

Much remains unknown about other consequences that could be unleashed by rising global temperatures, including disruption of the Gulf Stream, or destabilisation of gas hydrates. In view of these consequences society needs to act swiftly and effectively in halting and reversing the factors contributing to global warming, of which reduction in CO2 emissions is one important element.

Some of the required changes require a major change of direction in areas like transportation and power generation, but there are a large number of small changes that can be made at the individual level. In many cases these individual changes require minimal effort. Unfortunately, this alone does not assure that they will take place, and politicians must therefore drive this process, in some cases through large scale policy actions aimed at issues like transport, but in others by leading by example. The Scottish Climate Change Bill will form the central pillar of these efforts and I would appeal to you to ensure that the Bill, through its targets and policies, tackles these issues in a serious, inclusive and convincing way.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr IAIN HANNAH
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters to me because I am concerned about the devastating impact it will have for people and nature around the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely

Mrs Carol Harley
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate change must be tackled now - time is running out. I want Scotland to play its part in leaving a future for my children.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mr Adam Harrison
Dear Convener of the TICC Committee

Dear MSPs,

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

The world, vested interests and the innocently ignorant apart, is realising that we must act and act soon to save our planet from the catastrophic effects of global warming. Scotland has an opportunity to be a world leader in tackling climate change and we should be proud to do so. It might also appeal to the Scots’ natural inclination towards thrift - something that is resurfacing in these difficult financial times. Please take this opportunity to make a real difference to the future of life itself.

Thank you.

Yours sincerely,

Ms Sally Harrower
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate change affects everyone and everything. The long term effects will be catastrophic to Humans and many other forms of life. The effects are already being seen and will continue to get worse unless significant changes are made to the way we live. The Scottish Government must take the lead in making those changes.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Dr Piers Hart
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

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Yours sincerely
Mr Stuart Hay
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill. It is vital that serious reductions in harmful emissions are made each year, starting now. Please don't allow powerful special interest groups to use "the economy" as a fig leaf to resist the changes we all need to be making as of now.

I and many other people I know are already modifying our behaviour: people will not be prepared to go on doing this if they see others - including industries - being allowed to footdrag and negating their own efforts.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mr Nick Haycock
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

- Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

- All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

- Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

- A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

- Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

- Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

- All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr Michael Hellicar
Dear Convener of the Ticcc Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I've looked at the Climate Change Bill and note the following points:

Re - 58 Deposit and return schemes
(c) ensure that some or all of such packaging is recycled.

I'm just wondering what is the point of a deposit and return scheme if only some of the packaging is recycled. Surely the requirement would be for most to be re-used where appropriate, or recycled then re-used by the manufacturer where appropriate. Surely it is generally better to recycle at the point of use (unless the manufacturer has set up a system specific to their product), otherwise the only benefit of returning packaging to a manufacturer would be to re-use it.

Re - 59 Charges for supply of carrier bags

There doesn't seem to be any differentiation between types or size of carrier bag. Are paper bags or bags made from natural/readily bio-degradable materials to be treated the same as bags made from non-renewable resources? Are crates and boxes used for carrying goods included?

Things I would have expected to see in the bill...

Energy self-sufficiency for Scotland could and should be achieved as soon as possible. Scotland could be world leaders in new energy and needs urgent investment in wave, hydro, and wind power (renewable resources we have aplenty).

Action on other disposable "one-use" products - e.g. plastic cups, disposable nappies, polystyrene packaging.

Some Cradle to Cradle thinking.

Action on product labelling, regarding environmental impact of product life cycle, to give consumers a more enlightened choice.

The updating of recycling facilities and transparency of information regarding what happens to recycled material, and who benefits financially from re-use of materials.

Requirement for new buildings to be zero carbon - the technology is available now so there is no need to delay on this.

Substantial investment for public buildings to be more energy efficient - (or even energy producing)

Water metering and use of grey/rain water.

My overall impression of the bill is that it seems rather half-hearted and narrow, and does not reflect the urgency and importance of this issue.
I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

• Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

• All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

• Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

• Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

I am a partner in a fledgling environmental design/retail company.

Yours sincerely

Mrs Rosalind Henderson
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate change is one of the most important issues facing humanity right now and Scotland should lead the way in tackling it by introducing a strong Climate Change Act.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

• Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

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• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Ms Judy Hills
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Please tackle climate change.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely

Mr Kenny Hogg
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters to me because I and very worried about the effect this will have on the human race. I also believe that you will not even read this section and will send your standard blurb researched political response. Which indicates the level of concern you have for your constituents worries.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mrs Christina Hollinshead
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate change and peak oil are both linked - if both issues are not tackled we will all starve. The BBC documentary "A Farm for the Future" explains it beautifully and can be watched on the BBC iPlayer at http://www.bbc.co.uk/programmes/b00hs8zp for the next 25 days or so.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Ms Erica Hollis
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

This is a really important issue we need to be addressing, we are wrecking the planet and need to urgently do something about it if we are going to be able to live normally. We need to conserve the environment and the animals that live in it, the earth was fine before we started living on it but because of our selfish ways its getting destroyed. Please don’t reply to me by letter as many politicians already have because paper requires trees to be cut down which wrecks the environment!!!

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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- All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Miss Laura Hopkins
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is now an even more critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet. Here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050 but the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change. In my view it is vital that the current financial and associated political "crisis" is seen as an indication of need to strengthen this legislation rather than as an excuse to weaken it.

Therefore I hope you can make sure Scotland gets a strong Climate Change Act that ensures that:

- Serious action to reduce emissions starts now. Delaying a requirement for at least 3% reductions in emissions until 2020 means action may well be too late.
- All emissions are addressed from the start including that from international aviation and shipping.
- Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies.
- There is a limit on carbon trading.
- There is a robust reporting system to help Parliament hold Scottish Ministers and Government to account.
- As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.
- All public bodies have a duty to deliver the targets set out in this Bill from the start.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Tim Hughes
WRITTEN SUBMISSION FROM MICHAEL HUI

Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackle climate change matters to me as I want to ensure my children and the generations beyond can live in the same if not better world than we are at present. I think it is the best legacy we can leave them.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr Michael Hui
In response to the consultation I'd like to make the following points:

The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

The minimum 3% reduction p.a. should apply from 2010 onwards.

The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

International shipping and aviation should be included from the outset.

Yours
Roger Humphry
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

"Tackling climate Change matters to me because I am concerned about the devastating impact it will have for people and nature around the world".

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Ms Sandra Hutton
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters to me because I am concerned about the devastating impact it will have for people and nature around the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mr Tim Jacobs
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

There is a huge opportunity to enact the most progressive climate change legislation in the world. Reading the new scientist this week reminded me that significant changes to the climate are already stored up. If we do not act decisively NOW we won't be able to introduce remedies in the future. The ambitious Bill needs to set stringent annual targets to reduce CO2. It doesn't have to be suffering hairshirtism but an opportunity to build our communities for a resilient creative and supportive future. Take action and bask in the glory of getting credit from future generations. A truly great legacy. So more funding for alternatives to energy guzzling activities. Just two examples: Promote cycling walking and keeping it local. A comprehensive programme of energy efficiency measures with a team of auditors holding people's hands through the process. Give us the targets and lets get a plan of action organised. warmer more efficient homes and happier people for a start!

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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• Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies.

• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas.

• Robust reporting to help Parliament hold Scottish Ministers and Government to account.

Scotland counts all its emissions, as well as direct emissions we should also be reporting on consumption-based emissions

• All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am playing my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr Mark James
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters to me because I am extremely concerned about the devastating impact it will have for people and nature around the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

- Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

- All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

- Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

- A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

- Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

- Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

- All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Miss Gayle Jamieson
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I believe that if we do not act quickly and decisively, the rate of climate change will have devastating consequences on the planet, and therefore the human race and many other species. It is already happening!

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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- Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

- Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

- All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours Sincerely
Mr Bryan Jeanes
WRITTEN SUBMISSION FROM PAULINE JEWETT

Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I am very concerned about the natural world and the potential impacts to native species, and in particular marginal species. The dangers of not acting urgently are too great and inaction is no longer an option.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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- A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

- Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

- Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

- All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate
change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely

Miss Pauline Jewett
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

From my perspective as a doctor (an Edinburgh GP), I am very concerned that runaway climate change will have serious effects on health world wide, due to increasing problems with food production, water shortages, and a change in the pattern of some infectious diseases, which will have the worst effects on the world’s poorest people, who have also made a negligible contribution to rising CO2 emissions in the first place. On the other hand, thinking more locally, measures to encourage people to leave their cars at home, and walk or cycle short journeys, (I cycle 5 miles each way to work, and feel all the better for it!), would significantly reduce CO2 emissions, and have a great benefit on the incidence of obesity, diabetes, heart disease, cancer and depression.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Dr Guy Johnson
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

It is vital that politicians look beyond their individual and their party’s short term interests and take action now to tackle the causes of climate change if we are to pass on a world which is worth living in to future generations.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely

Mr Alan Jones
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I am concerned about climate change because it is vital to the quality of life of present and future generations.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely

Dr Gus Jones
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

It is vital that we do all we can to tackle climate change because of the impact it is already having in Scotland and around the world, and the massive impact it will have in the future.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely

Mrs Tessa Jones
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

The Scottish Mace includes the words integrity and wisdom - we have amazing clean energy potential - wave, wind, hydro electric even solar-- we could lead the way for the rest of the world by cutting emissions.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr Robert Kay
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters to me as I am concerned about what kind of world my children are growing up in. I want my children to grow up knowing what the Arctic circle is, what the North Pole is, what polar bears are, etc. The way things are going now, they only ever read about them in a History class. We need to have change and fast so that all our children and grandchildren grow up knowing all about nature in its full glory. Please help tackle climate change!

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Ms Fiona Kelly
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Working towards stopping man-made climate change is vital as it is totally unacceptable for us to continue living a lifestyle that is destroying our planet - putting people and wildlife at risk.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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- All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Miss Laura Kelly
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters to me because I am concerned about the devastating impact it will have on nature and animals all around the world. I am particularly concerned about the impact this is having on polar bears and their declining habitat.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely

Ms Laura Kemp
Dear Convener of the TICC Committee

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Get it sorted!

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• All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely

Mr Daniel Kirby
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Developed countries contribute the most to the whole thing- we need to contribute the most to clearing it up.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

• Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

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• Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

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Miss Clare Kirtley
Dear Convener of the TICC Committee

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Yours sincerely
Mrs Claire Laing
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Reducing emissions is an easy step we can take right now and continue reducing year on year. The benefit to our atmosphere and for biodiversity will be immeasurable.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely

Ms Dianne Laing
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change is of utmost importance and as such should be our number one priority. Climate change will affect everyone, and everything on the planet. If we don’t act now, it will be too late. We need to ensure the climate change bill is strong enough to make the differences that are needed now to save the world for the future.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Miss Tamara Lang
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Doing something about climate change is important because of the very serious impact it has for nature and for many of the poorest people in the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mr Paul Latham
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling Climate Change is essential for the well-being of future generations as well as for Scotland and its natural heritage. Unless a substantial commitment is made and followed through we are facing something much worse than recession.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely

Mr Lukas Lehmann
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I really care about tackling climate change because I care about my children and their future. Just like any other parent, I want them to enjoy a good quality of life, and know the wonders of our planet - be it wildlife, the rainforest or the Arctic. I would find it very hard to explain to them why we didn't take action when we could.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Ms Elizabeth Leighton
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate Change matters to me because I am concerned about the devastating impact it will have for people and nature around the world. There are a lot of pressing issues in the world at the moment, but I believe climate change should be at the top of the agenda because it concerns the very world we live in and whether the human race will survive the next century without any devastating consequences.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Miss Emma Levy
WRITTEN SUBMISSION FROM DAVID LIDDELL

Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Making efforts to recycle more efficiently, making less use of my car and cycling instead, purchasing local produce when possible and being more energy conscious - these are all ways that I am personally trying to help our climate.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mr David Liddell
Please find my comments below:

The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

Such an ambitious target by Scotland alone is a nonsense - if indeed the theory of global warming is real (which it is by no means proven (quite the contrary) any emissions reduction MUST be achieved on a global basis - after all Scotland is only currently responsible for less than 0.2% of world CO2 emissions!!

The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

Any such target set for such a long period ahead MUST have interim targets - if only to be used to compare with the achievements of other countries

The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

See response 2 above

The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

Purchase of so called carbon credits is a nonsense - remember that this has to be done on a global basis!!

The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

Again - what's the point of doing this as stand alone Scottish effort?? Recall that UK heavy industry emitting the highest CO2 levels have already been "exported" so the net impact on global emissions is ZERO.
The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government's approach to obtaining independent, expert advice on climate change?

Certain things simply CANNOT be done on a local and parochial manner

The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland's emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

Why just parliament - the populace needs also to know

The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

"Guidance" alone will never be enough to achieve the targets the bill sets

The Bill places a duty on the Scottish Government to produce a report for Scotland, setting out its objectives in relation to adaptation to climate change, proposals and policies for meeting them and the timescales within which they will be introduced.

What are your views on this proposal?

Not only objectives need to be set surely - the HOW to must also be spelled out - a wing and a prayer hope is not enough

Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

Not a clue

The Bill will allow modification by order of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change. The immediate intent of the Scottish Government is to take forward proposals relating to renewable energy development on the National Forest Estate and the release of capital from the National Forest Estate for woodland creation.

What are your views on this proposal?

Surely all the FC can do is grow more trees!!??
The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

Regardless of ones beliefs re global warming this is a good idea - the earth's resources are, after all, limited

The Bill confers powers on the Scottish Ministers to make regulations providing for the assessment of (a) the energy performance of non-domestic buildings; and (b) emissions of greenhouse gases produced or associated with such buildings. The provisions are enabling in nature and the Policy Memorandum provides further information on the Scottish Government's thinking in this area.

What are your views on this approach?

No comment

The Bill places a duty on the Scottish Government to take such steps as it consider appropriate to promote the use of heat from renewable sources. The Scottish Government has indicated this provision will enable it to introduce measures it deems appropriate to incentivise the production of heat from renewable sources.

What are your views on this proposal?

Depends on what is defined as renewable sources - these must be defined

The Bill sets out measures aimed at improving waste and recycling. The Bill gives powers to the Scottish Government to make regulations in the following areas:
- Waste prevention and management plans;
- Waste data;
- Deposit of recyclable waste;
- Procurement of recyclate;
- Reduction of packaging;
- Deposit and return schemes;
- Charges for carrier bags.

What are your views on these proposals?

No comment

What are your views on the adequacy of the Scottish Government’s consultation in advance of publishing the Bill?

No idea - don't know the extent of the consultation

Do you have any views on the Strategic Environmental Assessment which was carried out by the Scottish Government out on the consultation proposals?

Never heard of this assessment - see 16 above
Does the Bill raise any equalities issues you would wish to highlight?
Some people can resort to use of renewables but others can't by virtue of their location - e.g. I do not have a stream/river on my property so cannot resort to hydro

Do you have any comments on the impact of the Bill on sustainable development?
No

Do you have any other comments on the Bill?
No
Dear Convener of the TICCC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate change is happening. There is enough scientific proof of this to know that a tough stance must be taken in order to reduce CO2 emissions.

The Climate Change Bill must take the view of the worst possible scenario and address emissions with immediate effect, imposing strong financial sanctions on companies who fail to reduce emissions to the level required.

Scotland needs its own Commission which should be set up immediately so Scotland can begin to act with accordance with its particular needs.

There needs to be a limit on the amount of emission reductions that Scotland can buy from overseas, to ensure Scotland Industries do everything they can to reduce their emissions without relying on a buy-out clause.

Finally I believe all public bodies should have a duty to deliver targets from the beginning of the Bill.

As a professional working in the environmental industry I am extremely concerned about climate change and believe that this Bill could go a long way in helping mitigate emissions, but only if it is executed in the correct way and a strong stance is taken.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Miss Katy Littler
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I believe that climate change is the single most important issue facing the planet today, as it's potential repercussions will affect all aspects of life for people and the natural world all over the globe - no-one, nothing, nowhere will be spared from it's effects.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

- Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

- All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

- Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

- A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

- Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

- Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

- All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr Justin Littlewood
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters to me because I am concerned about the devastating impact it will have for people and nature around the world. I see the beautiful polar bears on TV and I think of how they may not be around in years to come. How can we teach our children to care for the world and about sustainability if the government does not act on it! I am a primary teacher and there is only so much I can teach the kids and get them to do. I can only help change the attitudes and actions of a few but you have the ability to make a huge difference.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

• Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

• All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

• Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

• Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.
I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely

Miss Charlotte Longmuir
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate Change matters to me because I am concerned about the devastating impact it is currently having for people and nature around the world.

Also, I am very concerned about the level of consumption of products, and think we need to move towards a subsistence or sustainable economy.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

• Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

• All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

• Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

• Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Ms Adean Lutton
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters to me because I am concerned about the devastating impact it will have for people and the natural world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

• Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

• All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

• Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

• Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Miss Rebecca Lyon
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change is important in so many ways. People in the UK are already experiencing some aspects with the freak weather and warmer summers but it’s people in developing countries that will suffer the most - small changes in temperature can wreck people’s livelihood and if we can stop this happening then we should. Another reason is that in the end it will save us money. If we force industry to become cleaner quicker and try to persuade members of the public to do their bit, we will all be better off healthwise and financially. Obviously the issue of endangered species is very important, I do not want to grow old knowing that actions we have taken or have not taken have led to amazing, important animals being made extinct!

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

- Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

- All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all major emissions are included from the start.

- Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

- A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

- Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

- Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.
• All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Miss Louise McCafferty
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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• All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

• Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

• Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr Graeme McDermott
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

It is vitally important that the Scottish government sticks to it’s word and adheres to the original criteria as outlined in the Climate Change Bill. I do my bit to reduce my environmental impact but the government really needs to implement changes to help people like myself and others to further reduce national emissions. There is only so much one can do ALONE! The plight of many species such as the polar bear rests in our hands and this is one of the most worrying and alarming outcomes of global warming. Please implement a STRONG climate change bill for Scotland so we can help our planet and the species that inhabit it.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

• Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

• All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

• Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

• Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.
I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mrs Claire MacDonald
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate Change is the biggest threat to the world as we know it. It will have an enormous effect on both humans and animals, creating catastrophic disasters to all.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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• All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

• Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

• Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Miss Fiona Macdonald
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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• All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

• Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

• Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr James MacGillivray
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

We all know why it's important to tackle climate change so I won't bother reiterating that here. The question facing us is: will we do enough about it to make any difference? Our parliament has an historic opportunity to take a lead on this most pressing issue, and I urge you to do the right thing, to make the difficult choices, and to take a principled stand. Give us a climate change bill the Scottish people can be proud of; one that boldly pushes forward, an example to the rest of the world.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

- Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

- All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

- Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

- A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

- Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

- Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

- All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Dr Donald Macintyre
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

Alarmed as I am about the devastation climate change will bring to our planet in the near future, I am pleased to see that the Scottish Parliament is on its way to making its Climate Change Bill an Act at the end of 2009. However, I believe that the aims of the Bill could be made much stronger.

The Bill currently proposes that we delay our annual reduction in carbon emissions target of 3% until the year 2020, and that emissions from international aviation and shipping will only be included after more consultation. Climate change is happening now and I am anxious to see Scotland take immediate action to reduce its emissions. What is there to be gained by delaying until 2020? It is essential that we act now if we even have a hope of protecting our planet and its endangered species from climate change.

I would also like to see a Scottish Climate Change Commission set up in the very near future which will advise and support the delivery of the emissions reduction targets in Scotland. Furthermore, it is vital that we impose a strict limit on the amount of emissions reductions that Scotland can buy from overseas if we want to ensure that Scotland does its fair share in tackling climate change. What is the point in purchasing more emissions reductions than are only absolutely necessary? This will only offset our efforts to reduce our carbon footprint. Finally, I would like the Bill to ensure that Scotland also considers consumption based emissions, as we are responsible for emissions produced when goods made in another country are then exported to Scotland.

Ultimately, time is of the utmost essence and the most crucial message I hope to convey here is that we must act now to reduce our impact on climate change. If the above steps are taken in strengthening the Climate Change Bill, I believe that our country will stand a much better chance of meeting its emission reduction targets and thus will be much more effective in tackling climate change.

Thank you for your time and I very much hope that my views will be taken into account.

Yours sincerely,
Miss Jilly McKay
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

This, probably more than any other Bill the Scottish Parliament are considering, is very important to me. I’ve been hearing about climate change for about two decades now and I still don’t see enough action being taken by Governments around the globe. I trust that my own Government will seek to change that and lead the way with a strong and robust bill. No watering down the commitments please!

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

• Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

• All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

• Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

• Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Miss Gillian Mackie
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate change affects us all and as you have the power, and the responsibility, to look after us and our future generations, you must act now.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

- Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

- All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

- Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

- A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

- Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

- Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

- All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr John McKinlay
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

For too long the issue of climate change has been largely ignored by our MP’s. It is vital that we tackle this issue now before it is too late.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mr Cameron McLatchie
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters to me because I care about the kind of world that my children (and any children they may have) are going to live in when they grow up. It's vital that we do something now to mitigate the worst effects of climate change. Delaying reducing emissions till 2020 is just leaving things too late, action must be taken now. Please let my children and your children and all the children of the world have a future in a world worth living in and please let Scotland take the opportunity to lead the world on this issue.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mrs Gillian McLean
Dear Convener of the TICC Committee

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"Tackling climate Change matters to me because I am concerned about the devastating impact it will have for people and nature around the world". I am concerned for my children and future grandchildren, that they may not see the world as we see it today, or have the pleasure of our wildlife as we do.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mrs Linda Macniven
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters to me because I am deeply concerned about the impact it will have on the life support systems that are vital to every living organism on this planet.

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Yours sincerely
Mr Charles Macpherson
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

We all know with certainty now about the impact of climate change on our world. Please make the Scottish bill count. The onus should be put on house builders to provide eco friendly homes. Our very powerful supermarkets should be forced to reduce packaging and air miles in the food that they sell. The home owner would therefore be much more encouraged if they could see efforts being made by the rich and powerful.

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Yours sincerely
Mrs Marilyn Ann McPherson
Dear Convener of the TICC Committee

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Tackling climate change is important not just for people and wildlife in Scotland now but for future generations. I am concerned about the impact on those in developing countries who have no say in our unsustainable consumption habits.

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Yours sincerely
Mrs Betsy MacQueen
WRITTEN SUBMISSION FROM NKIRUKA MADUEKWE

Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

TACKLING CLIMATE CHANGE IS AN ISSUE THAT NEEDS IMMEDIATE ATTENTION AND SHOULD BE DEALT WITH. IF WE DON'T DO IT NOW, WE CAN'T LEAVE A GOOD ENVIRONMENT TO THE NEXT GENERATION. IT IS NOT JUST ABOUT US BUT OUR CHILDREN.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Miss NKIRUKA MADUEKWE
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Yours sincerely
Mr J. Paul & Ana Maria Maguire (Mr & Mrs Maguire)
WRITTEN SUBMISSION FROM SANDY MAIN

The Climate has ALWAYS changed, so if any (supposed ) change which are currently being experienced, may or may not be due to man’s activities.

What is undoubtedly true is that there are TOO MANY People on Earth, and with the World Population rising by 220,000 a Day, action is urgently required to bring some redress and relief to a completely overstretched and exhausted World.

Sandy Main
Dear Convener of the TICC Committee

Please consider my views on the Climate Change (Scotland) Bill.

Climate change is the most important issue that anybody can tackle over the coming years as it dictates whether people have a future or not. They say money makes the world go around, and so far, all I can see is that money is bringing the world to a halt. Greed is the driving force for many and it stripping the resources from our planet and eventually all forms of life too. What we are doing is very badly wrong and it needs people now to stand up and be accountable and make important real changes for the future rather than a few soundbites to pacify the publics growing unrest on the way the world is being raped of everything good.

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Yours sincerely
Mr David Mansfield
Dear Convener of the TICC Committee

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Yours sincerely
Mr Aidan Marshall
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

We should try to lead the way by making Scotland the first country in the world powered by green power and that tries to help people and the animals affected by these changes. The world belongs to the wildlife we have to fit around them not the other way around.

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Miss Kirsteen Marshall
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

• Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

• All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

• Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

• Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mrs SUSAN MARTIN
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate change is important to me because I care about the generations who will follow me into this beautiful world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

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• All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely

Miss Eileen Mauchline
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

The Scottish Parliament should take a lead and show the world that we are an intelligent nation which realises that procrastination can not be allowed to happen over matters of global urgency such as climate control. We should not accept any watering down of legislation to appease the flat-earthers who will no doubt use the current credit crunch crisis as an excuse to do nothing.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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• All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

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• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

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• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr Ross Meikle
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters to me because I am concerned about the devastating impact it will have for people and nature around the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely

Miss Colleen Middleton
Dear Convener of the TICC Committee

Can you please accept this as my response to the Climate Change (Scotland) Bill.

Climate change matters to me because we are only caretakers in this world and if we are selfish enough to continue on the path of carrying on regardless there will be nothing for future generations to pass on. We must have a clear strategy now and the Bill must ensure that we act now and in an effective manner.

Most people in Scotland are aware of the gravity of Climate Change but it should be everybody and not most people.

Yours sincerely
Miss Alison Mitchell
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

We should aim to support innovative approaches to dealing with environmental change. We should strengthen the balance of life on this planet for every creature - especially with recent decline. It would be good if Scotland could set a benchmark in standards. We need to think about adapting our current ways of operating and introducing eco-friendlier methods. We are an adaptable society now due to the nature of evolution - therefore people should be willing to embrace change. This should start from the top-down and communication is critical. If we could also better our economy/job market on this front then this would also be an advantage.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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- All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

- Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

- A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

- Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

- Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

- All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

William Clark Mitchell
Dear Convener of the TICCC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters to me because I am concerned about the devastating impact it will have for people and nature around the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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• All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

• Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

• Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Miss Vivienne Moir
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Do we really need to say anymore???

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

- Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

- All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

- Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

- A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

- Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

- Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

- All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr Miguel Molina
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate change is an increasing threat, both to ourselves and most wildlife. I hope that you will demonstrate the leadership today that is needed to adequately protect our environment.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

- Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

- All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

- Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

- A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

- Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

- Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

- All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.
Yours sincerely

Dr Paul Graham Morris
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters to me because I am greatly concerned about the devastating impact it will have on people, biodiversity and ecosystems, particularly in developing countries where people are most vulnerable to climate change impacts.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

• Serious action to reduce emissions - starting now. The Bill must require at least 3% annual reductions in emissions (in line with the SNP Manifesto commitment), starting immediately and not in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

• All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. This is not acceptable.

• Scotland has a Scottish Climate Change Commission that understands the Scottish context, data and policies. The Commission should advise and support delivery of the emissions reduction targets in Scotland, and support their scrutiny in the Scottish Parliament.

• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change. Where Scotland does purchase carbon credits, purchases should be made from projects that contribute to sustainable development, and ideally projects that have a climate change adaptation element or help build livelihoods in developing countries (e.g. Plan Vivo projects).

• Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

• Scotland fully quantifies its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy. I am continually frustrated with the Kusnets curve argument, that we have developed to a point where we have started to decarbonise our economy - this is simply not true where we are continuing to consume goods whose impact is not included in our calculated footprint.

• All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and setting an example to the private sector.
I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely

Miss Alexa Morrison
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change is no longer a choice, it is now an obligation that we must fulfil if we have any consideration towards the future of our planet. It only takes one country to step forward and lead the way before others will undoubtedly follow. We have this chance to prove to the rest of the world that we are no longer willing to sit back and relinquish responsibility for countless years of over indulgence and misguided excess.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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- All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

- Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

- A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

- Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

- Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

- All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.
I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely, Jonathan Morton

Mr Jonathan Morton
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate Change matters to me because I am concerned about the devastating impact it will have for people and nature around the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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• Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

• Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely

Ms Shona Munro
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Adopting a strong and effective climate bill gives the Scottish Parliament the opportunity to help build a sustainable future, not only for the children of Scotland, but also for children in developing countries around the world. These countries are likely to be the hardest hit by increasing levels of climate insecurity, yet their carbon emissions are among the lowest in the world.

Let's lead the way, and show what a committed, caring country can achieve as we develop a blueprint for all our children's futures.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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- Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

- A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

- Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

- Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

- All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely

Mr Ben Murray
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

As Chief Executive of South Georgia Heritage Trust, working to support conservation projects in the British territory of South Georgia has made it clear to me that Scotland’s carbon emissions are contributing to climate change. This is having a devastating global impact, wiping out many species and endangering the future of the polar regions.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

• Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

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Yours sincerely
Mrs Alison Neil
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters to me because it is not just a small problem we can put aside and hope it will disappear. It is a global issue that affects all wildlife and people around the world. I believe if Scotland takes a stand, not only will it show larger countries that we can take a stand too, but it will encourage other small countries to do the same thing.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However, the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Miss Iona Nelson
DEAR CONVENER OF THE TICC COMMITTEE

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Let's see Scotland lead the world for once, and set the standards others should aspire to.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely

Mr Paul Nicholson
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

To dramatically reduce greenhouse gases, urgent action is required. I believe that the correct action in the short term is to maintain the nuclear generating capability (or even increase it) to provide breathing space until more renewables can be brought on line. Eric Nisbet

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mr Eric Nisbet
Dear Convener of the TICCC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Because the results will not be seen in any way soon, is no reason to do nothing.

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Yours sincerely
Mrs Elsa Nutt
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I try to encourage my church to be aware of Climate Change and act responsibly, if we do not act there will be a devastating impact on all life.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Miss Margaret Nutter
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I have spent my life enjoying wildlife and beautiful scenery around the world, I really worry about the chances of my children and grandchildren doing the same. Climate change is having a devastating effect around the world and needs to be tackled with the strongest measures available.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mr William O'Hare
Dear Convener of the TICC Committee

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Filipa Oliveira
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

This is a problem that is affecting all of us right now and if we don't act soon then our children and our children's children may not have much of a life to live at all.

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Yours sincerely
Mr Donald Orr
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling Climate Change matters for securing a future for my children and future grandchildren - who are we to decide to be so selfish as to ruin the natural world - for all who live here (human, flora and fauna) - for our short lives, without any thought or consideration for our actions, both now and in the future!

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely

Mrs Lissa Orr
Dear Convener of the TICC Committee

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Yours sincerely
Miss Rebecca Osborn
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

We must tackle climate change because, the damage we create now will leave an indelible mark on future generations. Our planet simply cannot sustain the current levels of CO2 emissions and the use of fossil fuels as a sole means of creating energy. There are many alternative methods and emerging technologies for generating energy from alternative sources, ie natural energy such as wind, sun and water. These sources were granted on earth to sustain life and can be utilised in effective manner to generate “green” energy.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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- All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, and will be the best in the world and a blueprint for other developed nations.

Yours sincerely
Mr Jonathan Pacitti
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change is one of the most important challenges facing us in the 21st century. I want to see Scotland doing its part in making a difference so that we can be proud of our country for its efforts in helping change the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

• Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

• All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

• Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

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Yours sincerely
Ms Elsa Panciroli
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Pretty soon it is going to be too late. What’s left of the human race, after the short-sighted lack of action, will remember the Governments and people of today as a pack of greedy near-do-wells, just like the bankers, who didn’t care about anyone themselves. Remember we don’t own the world we are merely keeping it in trust for future generations. Show you care by taking action NOW.!

Once the Methane from melting permafrost gets into the atmosphere the heating up from greenhouse gasses will be unstoppable.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr Richard Pascal
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling Climate Change matters to me because I am concerned about the devastating impact it will have for people and nature around the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mrs J Paterson
Re the Greenhouse gas emissions reduction target-

Targets should be set even higher and should begin as early as possible so that the incremental effect begins to work immediately. To delay radical change makes achievement of the aims unrealistic.

Implementation of the measures needs to be rigorously enforced- this applies to all areas that the Bill covers.

George and Heather Paul
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

We must take strong action NOW to reduce our output of CO2 and radically change our lifestyle in order to do it.

This will need courage and consensus from the government, as there will be no votes to be gained.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely

Mrs Margaret Peacock
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

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I am more than willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely

Miss Aimee Penman
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters to me because I am concerned about the devastating impact it will have on people and nature around the world. While I try to do my best to reduce my carbon footprint, and that of my family, I know that it depends on governments to make a real difference.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mrs Ute Penny
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate change is the only real issue which matters in the long run. Without a planet to live on, all else is insignificant.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Miss Catherine Peters
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

We need to tackle climate change so that our children have a planet to live on, and to spare them the resource wars that will come if we do nothing. But before then green technology is the way out of this recession, and not developing that technology will lead to a much worse recession next time as environmental degradation destroys our economies.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mr Allan Price
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I, along with a large number of my friends, are becoming cynical about our government and believe they are only paying lip service to their support for action on climate change. Where is the immediate action that the Stern Report and US’s Jim Hanson say is imperative if methane release from the melting permafrost in the Arctic is to be halted? The government's credibility is now at stake.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely

Mr Bob Pringle
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

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Yours sincerely
Miss Sarah Pritchard
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Global warming is very important.

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Mr Gideon Rathinaraj
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

It is really easy to set targets, the bill should also set out how they are to be achieved. This can be done by setting out what will be done to use the massive potential in wave and tidal energy that Scotland has. In this way a world beating piece of legislation can help to achieve world beating results.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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• All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr David Rennie
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate change is likely to have many devastating impacts on the environment, the natural world and mankind. These will cause misery and death for many millions of people, maybe in Scotland and the rich West but almost certainly for poor people particularly in the third world. Annual targets for the reduction of greenhouse gas emissions are needed for Scotland to make a meaningful contribution to addressing mankind’s greatest problem.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

- Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

- All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

- Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

- A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

- Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely

Mr Euan Renton
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

We are at a crucial point in the history of humanity. Rapid moves to tackle climate change and move to a zero-carbon economy must be the driver for all decisions of the Scottish Parliament.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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- **Robust reporting to help Parliament hold Scottish Ministers and Government to account.** The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

- **Scotland counts all its emissions.** As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

- **All public bodies have a duty to deliver the targets set out in this Bill from the start.** Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am already playing my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Dr Philip Revell
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

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Yours sincerely,
Mr Ruairi Revell
Dear Convener of the TICC Committee

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Miss Kirstin Reynolds
WRITTEN SUBMISSION FROM SALLY RICHARDS

Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mrs Sally Richards
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I am greatly concerned with climate change, as we will all ultimately be affected by it. Putting forward a strong climate bill is definitely a great start, and seeing strong policy and governing towards this is the first step. I believe that a top down method of management is the biggest way to get movement in this area, as we are breaking decades of human nature and habit, to try and move towards a greener and more understanding future.

Let's make the change, make real progress, and tell our children that we did everything we could. We saw the "bend in the road", took our foot off the gas, and put our foot firmly on the brakes. Let us not look back in shame, but with pride and unity.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Miss Kelly Richardson
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate change is the major long term issue for this government to tackle. Please give a lead to the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr Peter Rickard
WRITTEN SUBMISSION FROM TREVOR RIGG

Q3 The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

I am concerned that the draft Bill proposes putting off annual reductions of at least 3% until 2020. Time for action is now, so the Bill must require immediate action of at least 3% reductions in emissions per year (in line with the SNP Manifesto commitment) from the start, not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

Q4 The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

There must be a limit on the amount of emissions reduction that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reductions and plays its fair part in tackling climate change.

Q5 The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

Ministers have made a commitment to include international aviation and shipping from the start, but the Bill as drafted does not provide those assurances. It says emissions from aviation and shipping will only be included after more consultation and legislation. The Bill should be clear all emissions will be included from the start.

Q7 The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

Trevor Rigg
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate Change matters to me because I am concerned about the devastating impact it will have for children, adults and nature around the world. I find it somewhat frustrating that, despite cries from the public as well as the scientific information provided by researchers within this field, we still have to procrastinate and deliberate about installing vital legislation which will inevitably protect our future on this planet. I understand that drastic targets are daunting and that no party wish to commit to the 'first step' for fear of public disapproval, however there is no point in protecting a ideology or economy that without our environment would cease to exist in the first place. Based on the opinions voiced to myself from members of the public, as I work within the environmental sector, I can assure that committing to these targets will be interpreted as a bold move made by a government who cares not only for today's economy but also for the future generations who will ultimately be left with the repercussions of our choices we make today. It is for them, the future generations, I feel the most for, as where we are still dealing with the consequences of the wrong environmental decisions made during the industrial revolution, they will have to face a vast decrease in their quality of life as conditions change, possibly leading to displacement of the greater population.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

• Serious action to reduce emissions - Starting Now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

• All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely

Mrs Mari-claire Riley
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

We need to preserve the habitats of our world to make sure our wildlife continues to survive.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Miss Kerry Roberts
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

It's important to tackle climate change NOW as we are all reassessing our values. People are concerned on the energy they use because of prices and are therefore more likely to LISTEN to changes they can personally make which will also have a much bigger impact on the world around them. Children are being educated and are taking these ideals home, and this will grow to become the norm. Children often question the decision we as adults make, when they often seem to be more in tune with the planet than the adults that are motivated by money and greed. The time is right - THE TIME IS NOW

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Yours sincerely

Catriona

Ms C ROBERTSON
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters to me because I am concerned about the devastating impact it will have for people and nature around the world. I’d like my little baby daughter to enjoy the world as we know it - possibly better than we know it now - and you can control this.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mrs Angela Rose
Our experience in the Glasgow Carbon Rationing Action Group (CRAG) has shown us that reducing personal carbon emissions by 50 to 75% below the national average can be achieved at zero cost by simple albeit significant lifestyle changes. We have made these changes voluntarily. Others will require incentives. However, our experience leads me to believe that rapid and dramatic decarbonisation is possible and that it need not rely on expensive and uncertain techno-fixes.

Q1 The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

The clear message from the scientists is that there is no more time to lose.

“If there’s no action before 2012, that’s too late. What we do in the next two to three years will determine our future. This is the defining moment.” Rajendra Pachauri, Scientist, Economist and Chairman of the Nobel-winning International Panel on Climate Change, November 2007.1

“Arctic ice is in its death spiral.” Mark Serreze, NSIDC Climate Scientist, 27 August 2008.2

“What happens in the Arctic actually does not stay in the Arctic.” Richard Spinrad, NOAA Deputy Chief, October 2007.3

“A 50% reduction would stabilise atmospheric CO₂, but only for less than a decade. After that, atmospheric CO₂ would rise again as the land and ocean sinks decline owing to well-known chemical and biological adjustments.” IPCC Fourth Assessment Report Working Group I.4

The 2050 and 2030 targets are inadequate. A growing body of scientific evidence indicates that atmospheric greenhouse gases are already at unsafe levels5,6. In this case, the only reasonable course of action is to start reducing global emissions straight away and to bring them back to safe levels as soon as possible. Scotland is uniquely placed to lead the global race out of carbon.

Scotland can take a lead within the UK…

Unfortunately, as the Bill currently stands, by 2020 Scotland is likely to be well off the pace, even in comparison with the rest of the UK. The UK Climate Change Committee has recommended two reduction targets for 2020: 34% in the absence of a global climate agreement and 42% if an agreement is struck. To achieve these targets, Scotland would have to make cut emissions at an annual rate of 2.7% and 4% respectively over the period 2011-20207. Currently, the Bill permits Scotland to make no significant cuts in emissions until 2020. To reclaim poll position within the UK context, the Scottish Government would have to amend the Bill to incorporate annual cuts of at least 4% from the first year of implementation. …and globally by setting credible targets.

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2 http://www.reuters.com/article/environmentNews/idUSN2745499020080827?sp=true
The 2050 target is in line with the UK Climate Change Committee’s recommendation that an 80% cut from 1990 levels is the UK’s fair share of a global cut from 2000 levels of 50%. However, the 80% target is flawed on three counts.

Firstly, it is tantamount to abandoning efforts to limit global warming to the danger threshold of 2 degrees as defined by the IPCC and recognised by the European Union and the UK government. This is because the Climate Change Committee has calculated that a 50% global cut (including an 80% UK cut) results in a better than evens chance of exceeding 2 degrees of warming. The IPCC 2007 report states that in order to limit global temperature rise to 2 degrees, emissions must peak by 2015 and fall by 85% by 2050. This is consistent with a cut in Scottish emissions of 95% by 2050 from 1990 levels. To achieve this degree of decarbonisation, the Scottish Government would need to amend the Bill to incorporate annual cuts of at least 7% from the first year of implementation. Such a move would be essential in order to restore Scotland to a position of global leadership in climate change policy.

The Scottish Government must communicate the irrationality of pursuing the current UK proposals and make the moral and economic case for far more ambitious action.

The second problem with the 2050 target is the unacceptable tolerance of risk and excessive aversion to the costs of mitigation that it implies. The Climate Change Committee has estimated that the economic cost of following its proposed trajectory would by 2050 amount to 1-3% of GDP globally and 1-2% of GDP in the UK. These losses translate to a reduction in annual rates of income growth of less than 0.1%! It is nonsense to assume that present and future generations would be unwilling to pay more than this to ensure an inhabitable world for their children and grandchildren. The Scottish Government must clearly communicate the dire consequences of taking insufficient action at this critical juncture and make the moral and economic case for the far more ambitious action that is required in order to safeguard all our futures.

The Scottish Government must persuade itself and others to be responsible in the way it employs the scientific evidence to set policy.

The third flaw applies as much to the notional 95% target as it does to the currently proposed 80% target. Both targets are drawn from IPCC models that adopt the best estimate value of 3 degrees for climate sensitivity. Climate sensitivity is the expected increase in global average temperature as a result of a doubling of atmospheric greenhouse gas concentrations. The IPCC itself suggests that “policymakers may want to use the highest values of climate sensitivity (i.e. 4.5 degrees) within the ‘likely’ range of 2 to 4.5 degrees set out by the IPCC...to guide decisions.” This would seem reasonable given that current models do not yet include the faster than expected Arctic ice melt and its potential impact on sea levels and on the degradation of arctic land and sea-bed sinks.

If the more responsible climate sensitivity value of 4.5 degrees were to be adopted, atmospheric concentrations of greenhouse gases would have to be stabilised at no more than

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9 Refer to Figure 1.11 in Chapter 1 of UKCCC 2008 Report.
11 This assumes global emissions in 2000 of 44.7GtCO₂e (as per Fig SPM3 of IPCC 2007 AR4), a global population of 9.2 billion in 2050 (as per http://www.un.org/News/Press/docs//2007/pop952.doc.htm), Scottish emissions of 68MtCO₂e in 1990 and a constant population of 5 million.
12 Refer to p2 of Executive Summary of UKCCC 2008 Report
380ppmvCO\textsubscript{2}e in order to limit temperature rise to 2 degrees. This is lower than the current concentration of atmospheric CO\textsubscript{2} alone. Returning to these levels will take decades, even if we were to drastically cut emissions overnight. According to the IPCC, “complete elimination of CO\textsubscript{2} emissions is estimated to lead to a slow decrease in atmospheric CO\textsubscript{2} of about 40ppm over the 21\textsuperscript{st} century.”\textsuperscript{18} The Bill’s targets must reflect this more precautionary approach.

A simple and equitable framework for decarbonisation must be implemented at the earliest opportunity.

The most important policy move following the enactment of the Bill will be to introduce a meaningful carbon price into all economic transactions. Current policies are failing. This could be done through a carbon tax or an auctioned cap. Crucially, the revenues must be recycled equitably into the pockets of the population at large to provide compensation for the inevitable price rises in carbon intensive goods services and also to facilitate the massive behavioural change that will be required. The Scottish Government should urgently consider how a Cap and Share-type model might be implemented in Scotland.\textsuperscript{19}

**Summary**

The clear message from the scientists is that there is no more time to lose. Scotland can take a lead within the UK and globally by setting credible targets. The Scottish Government must communicate the irrationality of pursuing the current UK proposals and make the moral and economic case for more ambitious action. It must persuade itself and others of the need to take a much more precautionary approach to climate policy. To claim to be showing international leadership, it must at the very least adopt an annual rate of reduction of 7\% from 2011. This translates into targets for 2020, 2030, 2040 and 2050 of 52\%, 77\%, 89\% and 95\% respectively below current levels. To ensure public support for rapid decarbonisation, the government must implement a simple and equitable framework at the earliest opportunity.

\textsuperscript{18} IPCC Fourth Assessment Report, Working Group I, 2007, Frequently Asked Question 10.3 “If emissions of greenhouse gases are reduced, how quickly do their concentrations in the atmosphere decrease?” available at [http://www.ipcc.ch/ipccreports/ar4-wg1.htm](http://www.ipcc.ch/ipccreports/ar4-wg1.htm)

Dear Convener of the TICC Committee

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I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Miss Jayne Russell
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

We are presently having to face considerable challenges due to recession. Climate change is, however, and will continue to be a far greater challenge for our future. We need to take the strongest action possible.

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

The erratic weather patterns of the last few years and their impact on Scottish wildlife show how much we are already affected by climate change. We cannot afford to do nothing and we have the resources and potential to do much in the way of renewable energy. Don't let the (temporary) credit crunch postpone the impetus to act against (urgent) climate change.

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Miss Claire Samuel
Dear Convener of the TICC Committee

I have just this week started my climate-related research in the University of Glasgow. I am writing to express my ardent wishes concerning the Scottish Climate Change Bill. I think it's vitally important that:

-the Bill requires at least a 3% reduction in emissions from the very beginning, not from year 2020 (as it will be too late by then)

-the Bill addresses the emissions from international aviation and shipping, from the very beginning (for the same reason as above)

-the Bill sets a limit on the amount of emissions reductions that Scotland can buy from overseas (to preserve its effectiveness)

-that all emissions are counted, including consumption based (as changes in our consumption habits are inevitable, if the global warming is to be tackled at all)

I trust you will do your best to preserve all life on the only planet we have!

Yours,

Paula Sankelo
MA, MSc
PhD student, the University of Glasgow
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling Climate Change seriously is literally 'vital', because of the devastating impact Man's actions are having on people and nature, around the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mr Mike Schilling
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling Climate Change is very important to me because I am concerned about the devastating impact it will have for people and nature around the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Ms Lesley Scott
Dear Convener of the TICC Committee

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Tackling Climate Change matters because I am very concerned about the impact it will have not only for nature around the world but for the future generation and being a grandmother this is quite worrying wondering what we are going to leave for our children.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mrs Linda Scott
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

We are systematically destroying our planet for our own selfish needs. We need to stop now before it’s too late.

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Miss Sharon Scragg
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- All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr Jan Semotam
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Apart from the disastrous effect on wildlife and the ecology, by ignoring the potential effect of climate change we are, quite literally, committing suicide. We simply have no alternative to this world and Scotland now has an "opportunity", once again, to demonstrate awareness of this and a willingness to remedy it.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

- Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

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Yours sincerely
Miss Gina Sergent
WRITTEN SUBMISSION FROM JUDITH SHAKESPEARE

Dear Convener of the TICC Committee

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Miss Judith Shakespeare
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Mr Fraser Shand
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Yours sincerely
Ms Jacqueline Sharp
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change is the most important issue for the world. The Scottish Parliament should use all endeavours to take positive action to address this. I am concerned about the devastating impact it will have for people and nature around the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Mr Gordon Shaw
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

We now have an urgent duty to act.

Back in the summer of 2008, we were told by the Green New Deal group that we had 100 months to save the Earth. By this it was intended that we needed to act in order to mitigate as far as possible irreversible changes to our climate, and ultimately to mankind's way of life. The clock is now ticking and action so far has been painfully limited.

We need government leadership, accurate and convincing public information and legislation in order to make this happen. This needs to be forthcoming, and this year's Scottish Government budget is a prime example of how it has not been forthcoming.

Already there are problems in developed countries, such as Australia and in developing countries such as India and China. If a developed nation like Scotland does not take the action and lead the way showing how it is possible to thrive whilst acting in an environmentally sensitive way, these developing countries will not see the need to act either.

Our countries have caused the damage over the last 200 years of industrialised civilisation, and we must now lead the way in showing how to repair this damage so that others can follow.

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Mr Lee Shelton
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters a great deal to me. I firmly believe that, if it is left unchecked, it will have a devastating impact not just globally and environmentally, but also upon the foundations of our own economy and society.

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Yours sincerely

Mr Ben Shepherd
Dear Convener of the TICC Committee

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Yours sincerely

Mr Peter Sheridan
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Recent actions by the Scottish Parliament, for instance in diluting the Green Party proposal to increase spending on insulation, suggest there is little appetite to really grasp the importance of both climate change and peak oil. These two issues mean we have to think beyond "business as usual", and an effective Climate Change Act is essential to starting the change.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mr Martin Sherring
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After all, as millions of years of evidence suggest, the Earth can and will eventually survive anything that is thrown at it, the question is can mankind say the same?

Yours sincerely
Miss Lorraine Simpson
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

As a university student studying Geography and Environmental Science at Dundee University, I am very aware of the environmental impacts that are present.

It is imperative that something be done to tackle climate change both to maintain and preserve a clean environment and to put more emphasis on the actions that should be taken to combat these problems. I urge you to take action in order to reduce environmental damage.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Steven Sinclair
Dear Convener of the TICC Committee

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• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

• Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Ms Mairi Skinner
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

We must be willing to tackle the anthropogenic causes that are resulting in our climate warming up at rates unknown in the past. We must protect the planet we live on and the plants and animals that inhabit it. Please help us to protect and conserve what we have before it is too late.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

- Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Miss Jennifer Smith
WRITTEN SUBMISSION FROM KATRINA SMITH

Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Miss Katrina Smith
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

We need to care what happens to people and animals and our world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mrs Michelle Smith
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

As convener of Balfron Church Eco-Congregation Team I have long been trying to encourage people to take seriously the way that our lifestyles are squandering the earth's resources. However each individual can have very little effect. It needs concerted efforts by governments in the developed countries. I would like Scotland to take a lead in this, (and also to build up the expertise to become world leaders in the provision of renewable energy from tidal and wave power.) I know that this involves cutting back on unsustainable practices I may have become used to, but I will be all the more happy to do so if the law means that I am not alone, and the tax system encourages such changes.

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Yours sincerely
Mrs Margaret Sparkes
WRITTEN SUBMISSION FROM ROBERT SPARKES

Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

We have a limited time left to cut carbon emissions before the world's climate reaches its "tipping point", after which it becomes too late. If we don't act decisively now, we'll get sea level rises to wipe out most big cities (including Edinburgh) and unsupportable mass migration to Europe. Millions will die of starvation and/or floods and there'll be major world wars to maintain/seize territory. We need to act NOW.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mr Robert Sparkes
Dear Convener of the TICC Committee

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Yours sincerely
Mrs Rachel Steele
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate change is the one issue that will affect every aspect of life on this planet and that no species, continent or country will be exempt from no matter how poor or wealthy they are. Governments are understandably concerned with economics when considering climate change legislation: but a catastrophic degree of global warming - which is just around the corner - will clearly trigger economic crises on a far grander scale than anything we are currently witnessing. If we and the many species with whom we share the planet are to have a future, this must be prevented.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Miss Catherine Stevens
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate change is the single greatest threat to future of the human race and to delay in taking action is to disregard completely the health and well being of our children!

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely

Miss Barbra Stuart
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters to me because I am concerned about the devastating impact it will have for people and nature around the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Miss Dani Stewart
WRITTEN SUBMISSION FROM JULIE STONEMAN

Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

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Yours sincerely
Ms Julie Stoneman
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

With crucial climate talks in Copenhagen later this year, Scotland is uniquely placed to influence the world in tackling climate change.

Yet the Climate Change Bill needs to be strengthened in 4 particular areas in order to be world-leading:

The Bill should

1) include our fair share of international aviation and shipping emissions on the face of the Bill
2) ensure annual targets are set with regard, and at a level, that ensures a cumulative budget for Scotland between now and 2050 is met
3) include sufficient incentives and sanctions for public bodies to make cuts
4) ensure the majority of emissions cuts are made in Scotland and not bought in from elsewhere

In addition I support Stop Climate Chaos demands below:

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Mr Francis Stuart
Dear Convener of the TICC Committee

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely

Mr Ninian Stuart
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate change has already started to cause devastating damage throughout the world and only know are we starting to say that we should start doing something about it, but by setting targets forty years ahead we are leaving it far too late.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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Yours sincerely
Mr Cosmo Sutherland
Dear Convener of the TICC Committee

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Yours sincerely
Mr Stuart Tait
Dearest Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I think it is important to tackle climate change, not simply because it will be good for the planet but also good for Scotland.

It would put a great deal of focus on our tiny country and in a world where it is cool to be green, there can't be any negatives in pushing the country towards a trendsetting position.

We keep being told that Scotland has the natural resources to provide over 100% of the energy required by the Countries population. We have huge potential in Wind, Wave and Tidal energies. Should we not take the chance while the oil industry is flagging and the engineering resource is still within the country boundaries to shift our focus and become the main player on the World stage when it comes to 'Green Energy'.

Scotland could go from being at the forefront and a central member of the Oil business to a forward thinking and the World leader in Green Energy, employing thousands and boosting the economy in a way that the Oil industry does presently.

The country is headed into a recession and if the Government is correct and 'buying' the country out of the recession is the way forward, then surely buying into infrastructure projects is the most cost-effective route? Unlike roads etc there would be a long-term return, recuperating money over the long term and attracting focus from all corners of the world and this energy provision won't 'run-out' like oil, therefore energy prices will be secure, a benefit for every member of the Scottish population.

This is our chance, once again to shine on the world stage, we should take it!

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Yours sincerely
Mr James Taylor
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

As a Grandparent, I very much want to ensure that my Grandchildren will have a world to inherit. I strongly urge the Scottish government to urgently tackle climate change for the sake of the next generation of children, wildlife and the environment in general.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mrs Margaret Taylor
Dear Convener of the TICC Committee

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Yours sincerely
Mrs Yvonne Taylor-Robertson
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I would like you, who represent us, to set the example in acting responsible. We are not talking about a theoretical future. We are talking about a future your children, if not yourself, will experience. A future made up of violent storms over here, and possibly a third world war triggered by tensions around precious resources such as water. Please think as a human being, not as a fixed-term elect. Your children will owe this to you.

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Yours sincerely

Mr Yann Tessier
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I believe that politicians and others who are closely involved with climate change have a huge responsibility to the public at large. We must ensure that urgent action is taken to mitigate the impacts that climate change would otherwise have on our society. Future generations will not forgive us if we fail them at this critical time.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Mrs Anne-marie Tierney
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Yours sincerely
Dr Barbara Tinto
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate Change matters to me because I am concerned about the devastating impact it will have for people and nature around the world.

It is our responsibility to ourselves, each other and the planet to take whatever steps we can to reduce global warming and I think that the Bill needs to be stronger. The problems of Global warming and climate change are immediate, they are critical right now and action needs to be taken right now, not x years down the line.

With this bill we have the opportunity to make a difference immediately. Lets grasp that opportunity fully, and not work in half measures. Pass a bill that will make a real difference, that will give us the best possible chance of helping the world and not just a token gesture.

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- Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

- Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

- All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Ms Margo Van Greta
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I think it's important for us to tackle climate change effectively now because I have a nine year old daughter, and I don't want to have to explain to her in 10 years time why millions of people around the world are suffering because of our country's selfishness and cowardice.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

- Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely

Ms Sue Walker
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I consider that tackling the causes of human induced climate change both radically and positively is the most important issue facing humanity today.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

• Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

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• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Ms Alice Walsh
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

We are entering a critical time in our battle to avert dangerous levels of climate change as the IPCC have stated that we have a rapidly closing window of opportunity to act. Climate change is the most serious issue that faces humanity and we must take urgent action if we are to secure our own wellbeing and the wellbeing of other life on Earth. I am extremely proud that Scotland is leading the way, putting in place world-leading legislation. But I am deeply concerned that the Climate Change Bill will fall short of both our ambitions and what experts tell us is necessary.

This legislation can be both strengthened or weakened as it goes through the Scottish Parliament and I expect those that were elected to represent me to do all they can to strengthen this legislation. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However I urge that the Bill is strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous levels of climate change.

I wish to see a Scotland a strong Climate Change Act that ensures:

• Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

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• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

• Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

As a founding member of our Transition Town group I am already playing my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Ms Morag Watson
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Please - do it properly and do it now - include all emissions, and start reductions immediately. This is more important than politics and more important than short-term economic troubles.

Wouldn't it be nice for Scotland to lead in something again, especially something critical to the future of the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

• Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely

Miss Susan Watt
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate change has to be tackled head on because of the dire consequences for the future if we do not do something positive NOW!

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr Barbara Weir
Dear Sir

Climate Change (Scotland) Bill

It seems to me that the more people there are in our population, the more emissions there are. This is simple arithmetic. If our population increases by 10%, then emissions increase by 10% also.

For example, if we have approximately 5,200,000 people now, each emitting approx 5.4 tonnes C02 per year, the aggregate emissions are 28,080,000 tonnes C02.

If we allow the population to drift up by 10% to 5,720,000, at the same rate of production per individual, the aggregate becomes 30,888,000 tonnes C02.

But if we consider that emissions of 28,080,000 tonnes C02 form a target not to be exceeded, emissions per individual must be reduced to 28,080,000 / 5,720,000 which equals only 4.9 tonnes per individual per year.

If we allow our population to drift upwards, it will become more and more difficult to meet our targets of maximum aggregate emissions. We will fail in our obligations.

Population size is surely related to aggregate emissions as voltage is to electricity, or the height of a water tank to water flow from a tap. And of equal fundamental importance.

It is clear a population control policy should form part of the Climate Change (Scotland) Bill.

I am surprised to find no mention of this in the ‘Bill as it stands. I very much hope this will be remedied as a matter of urgency.

Yours sincerely

Eric J. White (M.Sc)
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change should really be at the forefront of all minds right now. Whereas your Government may not be around in years to come, the human race, hopefully, will...let's ensure this planet can sustain the life-forms on it - its the only one we have.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Miss Gillian White
Dear Convener of the TICC Committee

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Adam Whyte
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

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Yours sincerely
Mr Tharindu Wijetunga
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate change is undoubtedly one of the biggest threats to our way of life. It is also a very imminent threat to countless species of wildlife, many of which are already feeling the effects of a warming atmosphere and sea temperatures. It is important to develop as a nation, but we must do this in a very much more sustainable way than we have up until now. We must be more efficient and less wasteful, especially when it comes to energy expenditure. I strongly urge the Government to make the climate change bill as strong as possible so as to lead the world in terms of legislation to tackle climate change.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Mr Gregg Wilkie
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

To tackle climate change means to tackle the constant threats to our world's beauty and vitality. Climate change could have a devastating impact on everything we know - the world today is something which we depend on to survive - let us try to preserve it as much as is possible now.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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Yours sincerely

Miss Jaimi Williamson
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I would be proud to be part of a world-leading nation visibly supporting the ambitious targets necessary to protect our planet for every creature that is part of our diverse eco-system.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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Yours sincerely
Ms Sarah Williamson
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Issues on which the Committee is seeking views:

The Bill creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting a 50% reduction target for 2030 and an 80% reduction target for 2050.

What are your views on the 2050 target and a 2030 interim target proposed in the Bill?

1. I am very seriously concerned that the ’80% target by 2050 is inadequate.

It seems to generally accepted now that we must not go beyond a threshold of 2 degrees of warming above 1990 levels in order to avoid ‘dangerous’ warming.

This target is based on a stabilisation level of 450ppm-500ppm. IPCC 2007 shows that this is not guaranteed to keep global temperatures below a 2 degrees increase. It gives only a 50:50 chance.

In a 2007 paper written by James Hansen of NASA in the Philosophical Transactions of the Royal Society, it says we cannot go beyond 1.5 to 1.7 degrees of warming above 1990 levels.

The speed of ice melt has been underestimated by the IPCC and the loss of reflection (albedo) from the poles will add further to warming.

He also states that ‘If you leave us at 450ppm for long enough it will probably melt all the ice - that’s a sea rise of 75 metres. What we have found is that the target we have all been aiming for is a disaster - a guaranteed disaster’ (Guardian).

His suggested safe stabilisation level is 350ppm which means a considerably more serious target. I have not been able to calculate the appropriate target but George Monbiot has recently suggested a cut of 25% by 2012. This indicates that an appropriate target would be much more serious and underlines the importance of early cuts.


There is a website relating to 350ppm here http://holyrood350.org/

Though I appreciate this is a very difficult problem, particularly in a democratic system, we absolutely must avoid runaway climate change because the human and economic costs are immeasurably more serious than economic and political concerns about measures to avoid it. By the time most of the electorate are convinced of this, it will be too late to do anything about it.

2. Secondly as the NGOs say, the Interim target is a useful milestone in principle, but the 2030 target set is not on the trajectory that would have been achieved with at least 3% emission reduction targets annually from the start. This would have meant a 60% rather than 50% reduction by 2030, significant in terms of what needs to be achieved.
It is a more inadequate target within an inadequate target. Furthermore, early cuts are more valuable in terms of reducing climate change because climate change is accelerating due to positive feedbacks. The melting ice and loss of albedo is just one of these.

3. We must take into account ALL of Scotland’s emissions. International aviation is the fastest growing source of climate change emissions. If it is excluded, and passenger numbers grow as predicted, research carried out by the World Development Movement shows that aviation in Scotland will account for more than 100% of our 2050 greenhouse gas allowance, making a mockery of emissions reductions achieved in other sectors.

There is no problem determining which emissions are Scottish. There is no need for alignment/agreement with the UK bill because Scottish emissions from aviation and shipping are known. We know what we are responsible for so we can include it in the Scottish bill.

In principle you just have to add up half the emissions from every journey to and from Scotland.

What can Scotland do to reduce these emissions?

As a nation, we could do more to promote tourism within Scotland, encourage people to holiday at home and reduce demand for flights outside the country. This would not just be of benefit in terms of emissions reduction, but of benefit to Scotland’s economy and heritage as well.

Scotland has policy levers to promote and encourage use of other methods of transport such as train links to the major cities across the UK and Europe. By using Scotland’s planning powers to rule out future runway expansion and airport infrastructure, the Scottish Government can play a key role in curbing the growth in demand to more sustainable levels.

http://assets.wwf.org.uk/downloads/scottish_climate_change_bill_briefing_3___aviation___shipping.pdf

4. Lastly there must be no carbon trading, they must be all be Scottish emissions.

The Bill requires that the Scottish Government sets annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050. It is proposed that these annual targets will be set in batches, the first being for the years 2010 to 2022 inclusive.

What are your views on the setting of targets in batches from 2010 to 2022?

in early years, targets must be absolutely strict - at least 3% and any overshoot should not be taken to reduce the requirement in other years. Early cuts will be more effective than later ones.

This should only be relaxed in later years if the massive cuts have been achieved in earlier years and then current science indicates that this is reasonable (which is highly unlikely).

The Bill provides that from the year 2020, the annual emissions targets must be set so that each is at least 3% lower than the target for the previous year. Prior to 2020, the Scottish Government has indicated that it intends to set annual targets which build towards delivering emissions reductions of at least 3% each year.

What are your views on this approach or any possible alternative approaches?

WWF Scotland state ‘the time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.’
A report for the Australian government last year states that the developed nations including Britain, the US and Australia, would have to slash carbon dioxide emissions by 5% each year over the next decade to hit the 450ppm target.

There is an objection that winters could be cold or mild and summers mild or hot, which makes it difficult to keep to statutory annual targets, and consequently we should allow average targets of 3%.

In answer to this I would say that, in early years, targets must be absolutely strict - at least 3% and any overshoot should not be taken to reduce the requirement in other years. Early cuts will be more effective than later ones.

This should only be relaxed in later years if the massive cuts have been achieved in earlier years and then current science indicates that this is reasonable (which is highly unlikely).

To overcome this difficulty about winters and summers, the target should be sufficiently in excess of 3% in order to absolutely guarantee a minimum of 3%.

This is necessary in order to ensure the target of at least 80% by 2050 is reached. The bill is meaningful if its terms ensure the target of at least 80% reduction by 2050 is achieved. An exact or average 3% reduction a year would not achieve the target. Targets must be achieved - not just set.

The important thing about the target is the reduction in total emissions. The target assumes a steady reduction in emissions.

The Bill introduces the concept of a “net Scottish emissions account” as a point of reference against which the target for reducing greenhouse gases can be measured. It is defined as the net Scottish emissions plus or minus any carbon units credited to or debited from the account. Any units purchased may be used to offset Scottish emissions. Any carbon units generated in Scotland and sold to customers outside Scotland, count as emissions made in Scotland.

What are your views on the proposals in the Bill relating to the net Scottish emissions account, and should there be a limit on the number of carbon units which Scotland can purchase?

Scotland counts all emissions, including consumption based emissions. All emissions that we are responsible for should be considered - including those made in another country when goods are produced but are then exported to Scotland.

No carbon trading should be permitted at all. No buying emissions from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

The Observer Sunday 18 January 2009

Plans to include carbon trading schemes in talks about future climate agreements were a desperate error, he said. "It's just greenwash. I would rather the forthcoming Copenhagen climate talks fail than we agree to a bad deal," Hansen said. Only a carbon tax, agreed by the west and then imposed on the rest of the world through political pressure and trade tariffs, would succeed in the now-desperate task of stopping the rise of emissions, he argued. This tax would be imposed on oil corporations and gas companies and would specifically raise the prices of fuels across the globe, making their use less attractive. In addition, the mining of coal - by far the worst emitter of carbon dioxide - would be phased out entirely along with coal-burning power plants.
The Bill defines “Scottish emissions”, in relation to a greenhouse gas, as being emissions of that gas which are attributable to Scotland. The policy memorandum states that “Scottish emissions” are defined as being those greenhouse gases which are emitted in Scotland or which represent the Scottish share of emissions of gases from international aviation and international shipping.

What are your views on this definition of Scottish emissions?

Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

Ministers have made the commitment to include international aviation and shipping emissions in the targets from the start, but the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should be absolutely clear that all emissions have to be included from the start.

The Scottish Government has indicated that initially it intends to seek independent, expert advice on climate change from the UK Committee on Climate Change. The Scottish Government states in the policy memorandum that if it determines that the UK Committee on Climate Change does not meet all the advice needed for Scotland, the Bill contains provisions which will allow the Scottish Government to establish a Scottish Committee on Climate Change or to designate an existing body to exercise these advisory functions.

What are your views on the Scottish Government’s approach to obtaining independent, expert advice on climate change?

It is welcome that the Bill does make provision for a Scottish advisory body on climate change, that is able to advise and steer progress in Scotland with an awareness of Scottish policy, institutional, geographical, social and economic context. A Scottish body is needed now, not some time in the future. The independence of this body and ability to inform and support Parliament need consideration - a Commission model as proposed by Stop Climate Chaos may be more appropriate.

The Bill places duties on the Scottish Government requiring that it reports regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill. The Bill sets out details of these reporting requirements.

What are your views on these proposed reporting arrangements?

Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

The Bill contains powers to allow the Scottish Government, by regulations, to impose duties on public bodies in relation to climate change, to issue guidance to those bodies relating to their climate change duties and to require that they report upon the discharge of those duties.

What are your views on this proposal?

All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.
Muirburn is the act of controlled burning of vegetation on open semi-natural habitats such as muir (Scottish word for moor) or moorland, and includes the burning of plants such as gorse, heather and grass. The Bill contains an enabling power to allow the Scottish Government to vary the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

What are your views on this proposal?

Stop Muirburn completely

Grouse-shooting popularity boosts global warming - New Scientist 12 August 2006 by Fred Pearce:

"In terms of carbon storage, the moors can be thought of as Britain's rainforests," says Adrian Yallop, an ecologist at Cranfield University in Bedfordshire. Yet gamekeepers are burning the moors at an unprecedented rate to encourage the growth of heather, a prime habitat for grouse. The burning threatens to release billions of tonnes of carbon locked into the peat bogs underpinning the moors. "Where burning occurs, the hydrology changes and the peat is open to decomposition and erosion. This strips the moor of carbon as surely as setting fire to the Amazon forest."

The Bill requires the Scottish Government to produce an action plan setting out current and proposed measures to improve the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change.

What are your views on this proposal?

These should include measures firstly to stop leaks of hydrofluorocarbon coolant from air conditioning and secondly stop the use of this as soon as possible as it has 2000 the capacity of CO2 for global warming

Do you have any comments on the impact of the Bill on sustainable development?

Dealing with climate change must take precedence over development. The present situation is clearly so far from sustainable as to make discussion of 'sustainable development' pointless.

We have to move quickly to a way of life that addresses climate change. This is not compatible with economic development. We need economic retreat.

Do you have any other comments on the Bill?

Climate change science by definition a changing situation and it takes too long to prepare the scientific and papers and IPCC reports and too long for governments to act on them when they emerge. The IPCC last report in 2007 on which the bill is based uses papers going back to 2004. Our response to climate change must take changing situation into account and our targets should involve all sectors and keep up to date with present science and allow an adequate margin for error. We cannot wait for adequate action any longer.

Aside from targets, government must urgently go through every area of government policy and cut emissions as the highest priority. It is critically important not to wait for international agreements.

Even made as strong as possible in its detail this bill is inadequate.

I suggest you need a coalition government (advised by climate scientists) as in the 2nd world war to take electorally unpopular action to seriously address climate change.
Also required are population control measures, as civilised and equitable as possible. Jonathon Porritt sensibly suggests do not have more that 2 children. Measures must not unfairly affect the less well off.

Please also look at http://holyrood350.org/

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Gordon Wilson
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

• Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

• All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

• Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

• Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

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Yours sincerely

Mrs Janet Wilson
Dear Convener of the TICC Committee

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Yours sincerely
Miss Laura Wilson
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

We need to tackle climate change because of the devastation it is already causing, from the Arctic (polar bears dwindling for lack of ice floes to travel on to find food) to Pacific islands where rising sea levels are threatening their very existence. This will continue but we must limit the extent by reducing the human part in it - the huge carbon emissions caused by industry as well as domestic use.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely

Ms Marion Wilson
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

If we do not all act now, then we may well destroy the planet for our children and all future generations - as well as for all other life on the planet......who are we to decide to take what we want without care for the consequences? When will we as supposedly being civilised, to destroy the marvel that is our planet? Even if our actions or lack of - do or do not affect the planets climate - it is better to be safe than sorry. It is better not to risk upsetting the delicate balance that is the care of nature, we need to be a part of the balance - not apart from this balance.

The time for action is here, it is now. We have already damaged the planet beyond belief, however it is never too late. We are a nation of forward and indeed great thinkers - so we need to act - even if it is alone - to become a shining beacon in the darkness that is approaching......an example to the rest of the world - that they might follow......we must lead by example and NOW!!!

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.
All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Kind Regards
Mr Scott Wilson
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate change will have a devastating and lasting effect on the flora, fauna and of course people around the world. We need clear and meaningful legislation to reduce greenhouse gases and emissions. Global warming will have a much greater impact on this world than the current financial crisis. The climate bill must be stringent enough to make a real difference.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

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Yours sincerely
Ms Sheila Wiseman
Dear Convener of the TICC Committee

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Miss Monika Wojcieszek
Dear Convener of the TICC Committee

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Please be bold and visionary when tackling the bill on climate change.

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Yours sincerely
Mrs Stephanie Wolfe-Murray
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

It is imperative that we pass this legislation to reduce CO2 emissions. We cannot afford not to, especially as latest scientific evidence suggests that 80% reduction is too little to avert large rises in temperatures.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

I hope you can make sure Scotland gets a strong Climate Change Act that ensures:

• Serious action to reduce emissions - starting now. The time for action must be now, so the Bill must require at least 3% annual reductions in emissions year-on-year (in line with the SNP Manifesto commitment), starting immediately and not just in ten years time. Delaying a requirement for at least 3% reductions in emissions until 2020 means action will be too late.

• All emissions are addressed from the start. Ministers have made this commitment, yet the Bill says emissions from international aviation and shipping will only be included after more consultation and legislation. The Bill should make sure all emissions are included from the start.

• Scotland gets a Scottish Climate Change Commission that understands the unique Scottish context, data and policies. The Commission will advise and support delivery of the emissions reduction targets in Scotland, and critically will support their scrutiny in the Scottish Parliament.

• A limit on carbon trading. A limit on the amount of emissions reductions that Scotland can buy from overseas. This is vital if the Bill is to ensure Scotland benefits from real domestic emissions reduction and does its fair share to tackle climate change.

• Robust reporting to help Parliament hold Scottish Ministers and Government to account. The spirit of the Bill is good, but the mechanisms and processes need to be strong, transparent and ensure accountability, with scrutiny always in the public domain.

• Scotland counts all its emissions. As well as direct emissions we should also be reporting on consumption-based emissions - those arising in another country when they produce the goods that we buy.

• All public bodies have a duty to deliver the targets set out in this Bill from the start. Public bodies have a critical role to play in delivering the necessary emissions reductions and a duty within the Climate Change Bill would ensure they take the appropriate action to deliver their fair share.

I am willing to play my part in reducing emissions and believe Scotland can lead the way in tackling climate change. Now I am looking to the Scottish Parliament to deliver strong climate change legislation that must be implemented urgently, could be the best in the world and could be a blueprint for other developed nations.

Yours sincerely
Ms Fiona Wolfenden
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

I fully support this action. I have a strong belief in trying to help the reduction of carbon emissions etc. I do my bit, you should do yours!

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Miss Katy Wright
Dear Convener of the TICC Committee

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Yours sincerely
Mr Angus Yarwood
Dear Convener of the TICC Committee

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2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Tackling climate change matters to me because I am concerned about the devastating impact it will have for people and nature around the world.

I am also concerned about the future of the planet for my young child.

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely
Mrs Laura Young
Dear Convener of the TICC Committee

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Miss Hilary Yule
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Yours sincerely
Mr Kunemoemi Zacchaeus
Dear Convener of the TICC Committee

I would be grateful if you and your Committee would consider my views in relation to the Climate Change (Scotland) Bill.

2009 is a critical year for climate change, as internationally we seek to create a new global deal to tackle this massive threat to our planet, and here in Scotland there is a huge opportunity to enact the most progressive climate change legislation in the world.

Climate change endangers life on earth - it must be dealt with as soon as possible

I know that the legislation can be strengthened or weakened as it goes through the Scottish Parliament. I welcome the long-term target of at least an 80% reduction in all greenhouse gas emissions by 2050. However the Bill needs to be strengthened further to ensure the action it prompts will tackle emissions and avoid dangerous climate change.

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Yours sincerely

Mrs Anne Zuill
The Climate Change (Scotland) Bill, currently under consideration, requires careful scrutiny as it is expected to formulate our nations response to issues emanating from an industrialised world. It rightly should address pollution, conservation, greenhouse gas emissions and preservation of the environment for future generations and examination of the projected Bill must be absolute.

Disastrously, one part of this proposed Bill, Section 59, apparently slipped in at the behest of the Westminster hierarchy, will undoubtedly increase pollution, increase waste, increase greenhouse gas emissions and inevitably damage the environment significantly more than if it were omitted. I refer to the appalling inclusion of Mr Browns attempt to “get rid of plastic bags” which manifests itself with the inclusion of a clause granting power to the Government to levy, tax or simply ban what they confusingly mis-represent as single use carrier bags”.

This appalling inclusion in an Environment Bill should be rejected by Parliament as its presence will create unintended consequences which will be in direct contravention of the Kyoto protocol, the Bali agreement and the EU requirements on reducing greenhouse gas emissions and reducing waste. The Scottish Government will rightly be ridiculed by intelligent environmentalists throughout the world for introducing an Environment measure which will further damage the very environment they are charged with protecting.

Ali Raza Ahmed
February 2009
I wish to register my disapproval of the inclusion of Section 59 of the aforementioned Bill.

We learn from a Partial Impact Assessment (PIA) of powers to require charges for single use carrier bags document prepared by Defra, that the use of “single use carriers” is indicative of consumer’s behaviour towards the environment, and that action on this issue may act as a catalyst for wider changes in preferences for environmental goods.

What a load of political gobbledegook! The use of erroneously named “single use carriers” is indicative solely by the need to transport retail purchases from store to home in a waterproof, hygienic, resource efficient and reusable bag. Should change occur in the status quo as a result of this ignorance, then quite simply, it is a proven fact that MORE harm will be done to the environment as a result of substitution of efficient lightweight bags by heavier, bulkier and greenhouse gas producing alternative products.

The PIA states that direct environmental effects will be:

1. Less litter — Wrong. It is well proven that more litter will occur due to substitution of heavier, bulkier alternatives.
2. Less harm to Marine Life — Wrong and unproven. This refers to unsupported evidence with nothing to which it can be compared.
3. Fewer transport emissions. —Wrong. MORE transport will be needed to transport alternatives that must be heavier and bulkier.
4. Waste management — Wrong. More tonnage and volume of waste will be generated as a result.
5. The aspirational benefit of increased recycling participation in recycling by consumers will be pathetically insignificant and unable to be quantified.

This is no more than a cynical attempt by Government to enhance their green credentials, putting an estimated 5000 jobs throughout the UK at risk, further taxing every member of the public with unnecessary expense, without any understanding of the unintended consequences which will make a mockery of their attempt.

The British public is again being fooled and patronised by the following quote from Environment Secretary, Richard Lochhead, who has submitted correspondence to the TICC Committee saying:

“Incidentally, you will note that the UK Climate Change Act provides a power to set carrier bag charges in England, Wales and Northern Ireland: it would be odd if a similar power were not set out in our equivalent Bill.”
Cherry picking political stances when it will be detrimental to the environment is not what I expect of the Scottish Environment Minister.

This section 59 should be removed from the Scottish Bill and the Westminster Bill. Please register my objection to it.

Munir Ahmed
February 2009
The Association of Charity Shops welcomes this opportunity to contribute to the Committee's inquiry.

**Background**
The Association represents 300 charities across the UK, which together operate 6,800 shops, more than 600 of which are in Scotland. Last year, charity shops in the UK generated £120m for vital charitable causes.

Charity shops play a key role in waste prevention and waste minimisation, through the reuse of goods and materials sold in shops. We estimate, for example, that 250,000 tonnes of textiles are prevented from entering the waste stream each year by charity shops. Where these cannot be reused through general sale, they are sold on for recycling or reuse elsewhere. Very little (only about 1%) ever joins the waste stream.

Given this background, and the sector's key role in encouraging reuse of goods, charity shops should be seen as part of the solution in terms of zero waste, and we very much hope that the Scottish Government and Parliament will recognise and promote this role.

**Comments**
Our comments are limited to Question 15, on waste reduction and recycling, and reflect the comments we made in our response to the Scottish Government's formal consultation last year. It is impossible at this stage to say how much individual proposals might impact on the sector. For some (for example, on green procurement), the proposals will have no immediate effects. Therefore, we offer general comments only.

**Legislative burden**
We are concerned that substantive legislative solutions only are being proposed to promote waste reduction and recycling.

The charity shops sector is already over-regulated – it is subject to charity law, to the range of consumer, employment and safety regulation imposed on all retailers, has waste carriers and management obligations, and must comply fully with tax and VAT measures to be able to operate. *Additional, non-necessary legislative burdens would be disproportionate and would damage the sector.*

**Effectiveness of the legislative route**
We do not believe the case has been made for the effectiveness of environmental regulation over other forms of (non-statutory) measure. Indeed, given the acknowledged need for environmental behaviour change to be accompanied by a change in mindset (for example, in the Executive's
consultation, Managing Scotland’s Climate Risk), an argument may be put that legislative routes might – in fact – be counterproductive.

Voluntary measures to reduce the environmental impacts of plastic bags, for example, have demonstrated that collaborative solutions may have significant benefits. In the charity shops sector, measures such as promoting customers’ reuse of plastic bags, reusing plastic bags at the till, offering alternatives or simply charging for new bags are all making an impact. The effectiveness of these measures may be diluted if they are needlessly surrounded by legislative imperative.

We very strongly urged the Executive, therefore, to bring forward non-legislative alternatives, and not to be seen – however unfairly – to be making a presumption in favour of legislation (please also see below, on the Waste Framework Directive).

Rather than, for example, requiring recycling facilities to be provided in offices and other work places, business to charity partnerships could be encouraged, such as the Choose2Reuse@Work initiative launched by the Choose2Reuse campaign, a pilot project funded by the Department for Environment, Food and Rural Affairs in London, operated by the Association and involving charity shops and other community reuse organisations. In this, goods originally intended to be discarded are collected in the workplace and reused via charity shop sales, with significantly greater environmental benefits than recycling would provide.

Interplay with implementation of the Waste Framework Directive
We are concerned about the suitability of the legislative route for these measures, and we note that powers in the Bill appear to be enabling powers only. However, we also note (and Executive officials have confirmed this) that the Bill itself does not seek to meet the requirements of the Waste Framework Directive. Officials confirmed that these would be met via secondary legislation. Given this, it seems inevitable that the Scottish Government will be required to use these powers, in order to meet its Treaty obligations. As drafted, therefore, the Bill must presuppose the legislative route.

Conclusion
We welcome, of course, achievable measures to prevent waste. We believe that charity shops have a key role to play in this, by promoting reuse through donations of unwanted items to shops that would otherwise end up in the waste stream. However, we do not believe that legislative solutions are necessarily good or desirable routes to take.

Association of Charity Shops
24 February 2009
I am grateful for the opportunity to respond to some of the points contained within the above Bill and submit the following for consideration:

My main issue of concern is in relation to Question 15, Waste Reduction and Recycling, and in particular the section relating to charges for carrier bags. However, many of the issues of concern can be applied to many of the other questions set out in the Call for Views document.

Committee members will be familiar with the Environmental Levy on Plastic Bags (Scotland) Bill, introduced in June 2005 by Mike Pringle MSP, which was unanimously rejected by the then Environmental and Rural Development Committee (ERDC) and subsequently withdrawn by the proposer in October 2006.

I would like to remind the Committee that this was one of the most detailed examination of any Bill brought before the Scottish Parliament which, incidentally, received in excess of 1,200 responses with over 1,000 of those responses opposing the proposal to implement charging for carrier bags. I may add that it was also estimated to have cost the taxpayers of Scotland somewhere in the region of £2 million for the process, procedures and due diligence carried out by the ERDC.

In considering all the evidence before them the ERDC also took into consideration an independently commissioned report on behalf of the Scottish Executive conducted by AET Technology (AEAT). This report initially stated that the introduction of a charge for carrier bags would lead to an increase in Scotland's waste arisings by some 4,500 tonnes annually due to other types of carrier bags, such as paper carrier bags, being used as alternatives to conventional plastic carrier bags. The figure of 4,500 tonnes was subsequently proven, with factual evidence, to be totally incorrect and grossly underestimated. Consequently the figure of 4,500 tonnes, in agreement with the Executive, was revised upwards to 13,700 tonnes per annum.

In April 2008, accompanied by a Statement of Reasons, a second attempt to introduce his Bill was lodged by the same Member and considered by the current Rural Affairs and Environment Committee (RAEC) and was again rejected on the same grounds as the previous ERDC since no new evidence was presented to the RAEC in support of the Bill. It should also be noted that the Bill had fallen in May 2008 since no further proposals had been lodged within the required timescale.

The inclusion of carrier bags within the Climate Change Bill suggests that all the considerations, findings and conclusions of both the ERDC and RAEC have been totally disregarded in what can only be described as a "witch hunt"
against carrier bags by those ill-informed and ill-advised. It is a proven fact that by charging for carrier bags, waste arisings will ultimately increase, greenhouse gases will ultimately increase and carbon emissions will ultimately increase, thereby defeating the whole objective of the Climate Change Bill which is to reduce all three.

The original voluntary agreement objective agreed with all parties was to reduce, by 25 per cent the environmental IMPACT of plastic carrier bags over a two year period, and, by early 2008, and having clearly demonstrated that this target would be achieved, the goal-posts were suddenly changed, after only 12 months, from a 25 per cent reduction in the environmental impact of carrier bags to a 25 per cent reduction in their NUMBERS. What we now have in the market place is a plethora of carrier bags in all different types of materials adversely affecting the long term objectives and our desires to reduce profligacy.

Paper bags that truly are "single use" and end up in landfill, Jute bags that can't be recycled because they're lined with the heavier LD type plastic and therefore end up in landfill, Cotton bags that can't be recycled because many have the handles stuffed with a so called "fabric" that's nothing more than a common permeable plastic material, they end up in landfill, Woven and Non-Woven Polypropylene, Nylon etc, etc. Each and every one of them has a greater environmentally damaging impact through the carbon dioxide and methane emissions released when in landfill, substantial increases in transportation, fuel, carcinogenic emissions and decreased energy efficiency.

We have heard the cries of late from many politicians who wish "ban plastic bags", unfortunately they've failed to take on board the recent exchange in the House of Commons where Mr Ellwood asked of the Environment Minister, Jane Kennedy, if there were plans to enable local authorities to prohibit the use of "single-use" carrier bags, to which the Minister responded: "The Government have no such plans. It would be illegal under EU law to prohibit the use of bags, and the Government have no plans to do so or empower local authorities to do so. A very significant reduction in the number of single-use carriers distributed by supermarkets is in prospect following the agreement reached between the Government and the British Retail Consortium in December, under which leading supermarkets have pledged to reduce bags by 50% by the spring". (Hansard, 19th January 2009)

Another ill-informed and ill-advised term used by many is the term "single-use" in relation to plastic carrier bags. Following correspondence to Cabinet Secretary for Rural Affairs and Environment, Richard Lochhead, as to his frequent use of the term "single-use", his reply of the 6th January 2009 was to agree that the term "single-use" should NOT be used.

Furthermore, I can also bring to your attention a Scottish Government sponsored article that appeared in a Scottish daily newspaper on July 17th 2008 where a so called "Eco friendly" Jute shopping bag was being promoted by the newspaper and a supermarket chain. On finding that this bag released a black / blue dye when wet a sample bag (Laboratory Reference
50167602) was presented for examination to the Public Analyst for West Lothian, Dr Andrew Mackie, who's report concluded "I do not consider that the amount of dye which might leach from the bag under normal conditions of use would have any effect on food carried in the bag, provided it was contained in protective packaging". "Food not protected by packaging carried in the bag might be affected by dye leached from the bag should it become wet. This is undesirable, although is unlikely to present a significant hazard to health." For reasons unknown, no further analysis was carried out on possible contaminants contained within the dye such as a lead content, often found in dyes and paints, or phthalates.

I can also confirm, in relation to the above Jute bag promotion, that a successful compensation claim for articles of material irreparably damaged due to the leachage of dye from one of those bags was made by a member of the public to both parties involved in the promotion, the claim being settled in full.

Members of the Committee, much nonsense has been spoken with regards to plastic carrier bags and I would respectfully request that both the TICC Committee and the RAE Committee endorse the findings and decisions made by the former ERDC and current RAEC, both of whom, after great deliberations rejected calls to impose a charge on carrier bags. The following figures, based on projections which can then be accurately calculated, show just how damaging an effect on our Scottish environment alone this persistent and ill-advised drive to curtail the use of plastic carrier bags will have.

The figures show the assumptions and consequences upon reaching a 50% reduction in plastic carrier bag usage with half of that 50% remaining as lightweight supermarket carrier bags. The projected percentages of HDPE, LDPE, paper, woven and non woven polypropylene, jute, cotton and other types of bags are all included in the 2009 figures which are based on the 2006 baseline figure used by WRAP.

**Mid 2009 Projections based on a 50% reduction in plastic carrier bags in Scotland:**

<table>
<thead>
<tr>
<th></th>
<th>2006/7</th>
<th>Mid 2009</th>
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<tbody>
<tr>
<td>Weight of all carriers (tonnes):</td>
<td>10,600</td>
<td>38,340</td>
</tr>
<tr>
<td>Weight of transit cardboard packaging (tonnes):</td>
<td>700</td>
<td>4,100</td>
</tr>
<tr>
<td>Transport and Landfill volumes in cubic mtrs:</td>
<td>27,700</td>
<td>232,500</td>
</tr>
<tr>
<td>20ft Containers required for one journey:</td>
<td>3,500</td>
<td>29,100</td>
</tr>
</tbody>
</table>
Pallets required for delivery (assumed to be full pallets):
76,100          639,300

In closing may I take this opportunity to make myself available to the Committee where I would be only too willing to enhance in greater detail the factual realities of the environmental impact and damage the introduction of a charge on carrier bags would bring, not only to Scotland but to the UK as a whole.

Baggit Ltd
9 February 2009
RURAL AFFAIRS AND ENVIRONMENT COMMITTEE

CLIMATE CHANGE (SCOTLAND) BILL

SUBMISSION FROM GRAHAM BARNES

I refer to Section 59 of the above Bill whereby you seek approval that any future Scottish Parliament has the right to pass legislation to require the suppliers of goods to charge for carrier bags.

I do not agree with the inclusion of this Section because:

- I do not understand the link between a carrier bag tax and climate change

- it is fact that Scottish Parliament and the Scottish people have already determined that there is no justification for a carrier bag tax.

- the introduction of a carrier bag tax in Ireland, although leading to a reduction in number of carrier bags used, has led to an increase in the total tonnage of polythene packaging which is contrary to what was intended.

- it is fact that the current approach of educating retailers to discriminate more in the issue of free carrier bags coupled with educating the public to use less carrier bags has led to a significant drop in the numbers of carrier bags used, so why tamper with a proven formula of success, unless the real purpose of the inclusion of this Section is to raise taxes by stealth.

- carrier bags account for around 0.1% of collected waste. This is such a small percentage that I believe that enough time and money has been wasted on the topic already.

Thank you for giving me the opportunity to express my concerns.

Graham Barnes
24 February 2009
I wish to object to section 59 of the Climate Change (Scotland) Bill as the consequences of introducing any charge for carrier bags is that more waste and carbon dioxide will result.

If the Scottish Government are serious about reducing waste then Section 59 should not be a part of Scotland's Climate Change Bill as we will see a massive increase in so called "bags for life" such as jute, cotton and nylon which cannot be recycled thereby increasing waste. Polythene carrier bags are extremely lightweight and highly reusable which is why I have a stash in my kitchen cupboard to be used as bin liners, pet waste bags, and carrying files to work every day. Even DEFRA acknowledge that 80% are reused at least once. What other form of packaging has such a high rate of reuse? Surely government time and taxpayers money should be spent on targeting and reducing "one-use" packaging?

Polythene carriers can also be recycled into other goods ensuring an even longer lifecycle. Surely reuse of waterproof, lightweight bags is far more favourable than putting old, dirty, smelly (due to lack of waterproofing) heavier bags such as jute, cotton and nylon into landfill. No bag is for "life" so surely it is best to re-use the thinnest material possible, and then recycle the bag at the end of its lifecycle?

Why should Scotland be saddled with yet another tax, due to lack of education? People should be encouraged to reuse and recycle after all that is why we have 4 bins outside our homes. This is the way to help the environment, not put heavier, bulkier bags into landfill creating more greenhouse gases.

Linda Barnes
26 February 2009
What a ridiculous idea to include a proposal to charge for carrier bags in a climate change bill. Charging for carrier bags will increase not only waste but harmful emissions. I was under the impression that we are trying to reduce waste and emissions not increase them, section 59 should be scrapped.

Also in these hard economic times you would think that the decision makers that we, the taxpayer pay, could come up with some innovative ideas, where does adding another tax onto people help reduce emissions, what would be done with the revenue raised, we keep hearing that money is being used to protect the environment, so what specifically would this money be used for, how about applying your minds and come up with something else rather than more stealth tax, taking more money from people to solve problems is an old record that people are absolutely sick of hearing, if all you can come up with is old answers to new problems maybe we should help the environment by sacking you lot and saving the carbon footprint you cause during your brilliant deliberations and put the money into planting trees. how much has this idea cost us already, or are you to ashamed to tell us!!!

Mark Barnett
24 February 2009
Please register my objection to the section in this Bill (Section 59) which gives power to the Scottish Ministers to introduce charges for carrier bags.

We in Scotland have already seen this plea for legislation rejected by Parliament and spent time and taxpayers money doing so

Lightweight carrier bags are being touted as “single use” by our Environment minister Richard Lochhead. If they are, then more fool him for not reusing them as most of the public already do. Even his own DEFRA colleagues acknowledge that 80% are reused at least once.

Now he wants to tax these efficient bags for no other reason than to educate the public. What drivel emanates from Government — pray tell us uneducated masses when was the last time the imposition of a tax educated anyone on a specific policy other than to educate them that their Government is grasping at straws.

Pray tell the world, who is it that wants more taxes which will result in damage to the environment on already stretched incomes, when we are being advised we should be trying to help the environment?

B Becker
26 February 2009
If the Scottish Government are serious about reducing waste then Section 59 should not be a part of Scotland's Climate Change Bill.

Willie Bell
18 February 2009
Please register my objection to the section in this Bill (Section 59) which gives power to the Scottish Ministers to introduce charges for carrier bags.

We in Scotland have already seen this plea for legislation rejected by Parliament and spent time and taxpayers money doing so

Lightweight carrier bags are being touted as “single use” by our Environment minister Richard Lochhead. If they are, then more fool him for not reusing them as most of the public already do. Even his own DEFRA colleagues acknowledge that 80% are reused at least once.

Now he wants to tax these efficient bags for no other reason than to educate the public. What drivel emanates from Government — pray tell us uneducated masses when was the last time the imposition of a tax educated anyone on a specific policy other than to educate them that their Government is grasping at straws.

Pray tell the world, who is it that wants more taxes which will result in damage to the environment on already stretched incomes, when we are being advised we should be trying to help the environment?

S Berrie
26 February 2009
Our Association represents the leading beverage can makers in Europe, namely Rexam Beverage Can Europe & Asia, Ball Packaging Europe and Crown Bevcan Europe & Middle East.

We strongly support the view that “packaging recycling can be classified with a relatively high degree of certainty among the most cost-efficient options to reduce CO2 emissions and other environmental impacts” (European Commission Report COM (2006) 767 final, 6.12.2006).

The present Bill is a framework legislation enabling the Scottish Ministers to make regulations to implement one or several options laid down under Chapter 4 Waste Reduction and Recycling. The options range from voluntary initiatives to increase collection and recycling of waste to compulsory deposit and return systems.

During the Government consultation, our Association stressed that along with WRAP it recently launched a large scale programme (“Every Can Counts”), orchestrated by Alupro (Aluminium Packaging Recycling Organisation), to specifically target the “Away from Home” consumption of beverage cans. It is designed to provision work places, public areas and institutions with comparable recycling facilities to those typically offered by kerbside. In addition, our Association is currently preparing, with the support of WRAP, a pilot-project to increase collection and recycling of kerbside programmes.

It indicates that our members strongly support the flexible options in the Bill and are determined to actively contribute towards achieving the ambitious collection and recycling targets in the order of 75%.

We took notice that section (58) on deposit and return systems should be used only insofar as the more flexible measures do not allow to promote or secure an increase in the recycling of materials.

The SPICe briefing on the waste provisions (15 January 2009 – 09/04) shows genuine concern that any deposit system should comply with legal requirements, in particular overriding EU law. It recalls that “some provisions, such as section 58 on deposit and return schemes, could take up to five years to be in force because of the need for a full implementation group to consider the matter in detail.”

We trust that the enclosed paper on EU lessons concerning deposits on single-use drinks containers will help your discussions and thank you in advance for your attention.
Deposits on single-use drinks packaging - EU lessons –

1. Status of deposits under EU law
Deposits are considered as a potential trade barrier by the EU Court of Justice (ECJ):

- " A deposit causes every producer and distributor to incur additional costs connected with organisation of the taking back of packaging, refunding of sums paid by way of deposit and any balancing of those sums between distributors…"

- " The replacement of a global packaging collection system with a deposit is such as to hinder the placing on the market of drinks imported from other Member States…” (judgment in C-309/02 German deposit)

As a trade barrier, deposits are allowed only as an exception to one of the fundamental Treaty freedoms ( free movement of goods). Their necessity, appropriateness, proportionality must be strictly justified on a case-by-case basis by the Member State concerned. This burden of proof extends to all competent authorities such as the Scottish Government.

2. Environmental justification of deposits
The ECJ insists that the waste management objective in Member States shall be " that the system chosen ( global collection v deposit system) is designed to channel packaging to the most appropriate waste management alternatives and form part of a policy covering all packaging and packaging waste…”

It means that the comparative merits (including costs) of a general collection system and/or a deposit system must be carefully balanced. It also means that a specific deposit system for drinks packaging is questionable as experience with national measures on drinks containers has shown unacceptable trade barriers and domestic distortions of competition (EU Commission Report of 6.12.2006 on the EU Packaging & Packaging Waste Directive).

Two environmental objectives may justify, however, a deposit:
- Increase volume and quality of packaging recycling
- Reduce litter.

2.1. Recycling performance
Experience shows that deposits allow to achieve high return rates for drinks containers up to 90% and more. Some national systems operating without a deposit achieve, however, similarly high recycling for drinks containers beyond the EU targets ( B, NL, CH,…). More precise sorting for materials such as plastics ( higher scrap quality) may be pursued equally without a deposit – cf. present NL setting-up of separate collection of rigid plastic packaging ( not simply drinks) via igloos near retail shops.
Anyway the Packaging Directive does not mean that 100% of packaging waste should be recycled as the “level of environmental protection sought must be reasonable.” (EU Advocate General in Danish cases on the can ban)

Taking out drinks containers from the general household collection system - diminishes the efficiency as two collection systems must be run in parallel-deprives the general collection system of a key income source (high scrap value of drinks packaging) thus increasing costs for other packaging recovery-increases considerably costs for drinks containers (x 3 per container in Germany).

2.2. Anti-litter measure
A recent cross-border comparative study for ADEME (French environment administration) concluded that deposits tend to reduce litter, but that measurements of the actual impact are inconclusive. The study confirms the absence of an agreed measurement methodology (by weight, by unit, by visual impact,). No precise figures on the cost savings for municipal cleaning -up.

The Netherlands may serve as a key political reference as the Environment Minister reported the following to the national parliament after intense discussions and unfruitful litter measurement attempts:

"I realise that the litter problem has been aimed one-dimensionally for many years at bottles and cans, and along the lines on deposits. This is understandable on the one hand because this packaging is rather conspicuous. The easy remedy for reducing bottles and cans in litter therefore appears to be the introduction of deposits on them... But even if all the bottles and cans are cleared away, this would still not solve the litter problem, as litter consists of many more components than just cans and bottles. And because the root of the problem is not tackled by a deposit, attitude and behaviour are the other aspects which must be addressed. In the policy conducted in practice to prevent litter and to clear it away, attention should therefore be given to all the components. This means that an integral solution should therefore be sought which yields a much larger result than deposits on a few packaging items...." (April 2006).

Instead of deposits, the Dutch municipalities now levy fines of 50-60 € for citizens who litter packaging and other items such as cigarettes. For packaging, a special “impulse programme” against litter is financed by a joint effort of environment ministry, municipalities and industry.

The experience in other EU countries shows, therefore, that the aims targeted by a compulsory deposit may be achieved by less burdensome measures. Under settled EU case-law, the State concerned should show that a compulsory deposit is appropriate, necessary and proportionate in any given case to pursuing these two environmental objectives and cannot be attained by measures which are less restrictive for intra-Community trade. This also applies to any Scottish enabling law with, additionally, the issue of affecting the smooth functioning of the UK market.
3. Operational burdens of a deposit system

The following **minimum operational conditions** must be fulfilled by a deposit system imposed on non-reusable containers:

- The system must be comprehensive which means that it shall not be such that consumers, retailers or producers may no longer use legally admissible packaging.
- A sufficient number of return points must be available so that consumers can recover the deposit even if they do not go back to the initial place of purchase;
- To ensure that consumers may return their used packaging to any point of sale, there must be, as a minimum, an operational clearing system for deposit amounts between retailers;
- The system must ensure that all producers, especially from other Member States, may have access to the deposit system under reasonable and non-discriminatory conditions;
- Producers, especially importers, must not be obliged to modify their packaging (for instance new shapes), but may continue to use their normal packaging.

**Labelling, registration, fees**: The obligation to re-label goods lawfully produced and marketed in their country of origin (in this case also goods originating from elsewhere in the UK) constitutes a barrier to trade although it applies without distinction to domestic and imported goods as “it makes it necessary to alter the packaging or labelling of the products concerned for the purpose of marketing them in [the importing State].” The ECJ has held that “even supposing that those extra costs are ultimately borne by consumers, the mere prospect of having to lay out those costs constitutes a barrier for traders since it is capable of acting as a disincentive to those of them who are contemplating marketing the products concerned in [the importing State].”

The obligation to participate in the deposit system leads to the necessity of attaching to the labelling a deposit mark, registering with the national deposit system, reporting duties and payment of fees. Thus, producers and importers are forced to specifically adapt the marketing of their product to the system requirements. Particular obstacles have arisen from country specific EAN codes and/or deposit marks which “may force the importer to alter the packaging of his products on the basis of the place where they are marketed and therefore to incur additional packaging and labelling costs.”

4. The German and Scandinavian models

4.1. Germany

German law imposes a deposit of 25 Cent € for single-use containers. The amount was supposed to discourage single-use in favour of refillable bottles.

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1 Re reasoned Opinion of the EU Commission of 20 April 2004 in case 2003/2133 GERMANY (unpublished)
2 ECJ judgment in Case C-217/99 Commission v Belgium
3 same judgment as under previous footnote
4 see ECJ judgment of 16 November 2000 in Case C-217/99 Commission v Kingdom of Belgium
The objective failed as the refill share of soft drinks and mineral water is declining dramatically

Industry was allowed only to set up framework deposit conditions (labelling, deposit clearing system, by the antitrust authority. It should be anticipated that similar antitrust law hurdles will be raised for Scotland (UK). No integrated deposit system, therefore, in Germany which means, for instance, that unredeemed deposits do not reduce general system costs, but benefit individual operators.

Many cost factors deriving from the deposit (i.e. logistics) are freely negotiated between operators leading to much higher costs for smaller companies. Hard discounters are major winners of the system and cross-subsidize their product prices with income derived from the deposit system (unredeemed deposits, income from scrap sales,).

Globally, it has been calculated that industry pays 33% of collection costs to handle just 7.3% of the total packaging volume, that every extra drink container collected by the deposit system costs 22 Cent (marginal cost), that retailers have invested so far > 700 million € for reverse vending machines.

The German system still leads to intolerable import and export barriers notwithstanding the EU Commission closure of the infringement case.

4.2. Scandinavian model

There is no common Scandinavian model as deposit amounts, labelling requirements etc differ between countries. Sweden appears to have the most flexible system with deposit conditions freely agreed between operators to achieve the required recycling targets.

Deposit systems in Scandinavia have provoked critical scrutiny from the national and partly EU Commission competition authorities. They have experienced cross-border difficulties concerning e.g. private and parallel imports (due essentially to different alcohol taxes).

Denmark offers the model of a totally controlled monopoly system which includes subsidies for installing reverse vending machines. Its detailed deposit regulation is more than 70 pages long! Scotland quotes this country as a possible model, but it should have in mind the high complexity of this foreign deposit system which was criticized by the EU Commission.

Contrary to Germany, the number and variety of operators concerned by the deposit system is much lower and, most importantly, Scandinavian retailers and consumers are supportive of a deposit and build on the existing refill/deposit systems. It allows a competitive positioning of different packaging with a clear trend, however, towards increased convenient single-use containers.
5. Fundamental pre-requisites for a deposit system

Existing deposit systems in a very few EU countries show that effectiveness depends on:
- Absence of an alternative effective collection system
- Minimum per capita consumption, i.e. > 50 drinks cans per year
- Consumers to be familiar with deposit concept (refillable system in operation)
- Well organised, structured and motivated retail trade
- Leading drinks producers and retailers must be supportive of deposit
- High level of reliability in control of deposit handling and repayment
- Deposit amount must be set by industry and be reasonable
  (No discrimination between single-use / refillable bottle deposit amounts)
- Financing body willing to guarantee up-front investment in equipment
- Regulatory framework preventing distortions of competition by free riders.

Beverage Can Makers Europe
January 2009
I wish to object to section 59 of the climate change (Scotland) Bill as the consequences of introducing any charge for carrier bags is that more waste and carbon dioxide will result. This section should be excluded.

Paul Boyle
26 February 2009
RURAL AFFAIRS AND ENVIRONMENT COMMITTEE
CLIMATE CHANGE (SCOTLAND) BILL

SUBMISSION FROM BRITISH POLYTHENE INDUSTRIES PLC

It has been brought to my attention that there has been a submission to the Scottish Parliament on the issue of Climate Change by Cameron McLatchie. (Address not available on the web-site).

For the avoidance of doubt, this submission was not made by Cameron McLatchie, chairman of British Polythene Industries PLC.

In the capacity of chairman of British Polythene Industries, I would now make the following submission.

British Polythene Industries PLC sells a very small amount of retail carrier bags in the UK (around 0.1% of annual turnover) – so we have no material interest in the outcome of any tax / ban / reduction in carrier bag usage. We do have access to detailed knowledge on the production, distribution and re-use of polythene carrier bags and have made this evidence available to both the UK and Scottish Parliaments.

It is absolutely clear from that evidence that any ban or reduction in polythene carrier bags will have a negative effect on climate change. We accept that any ban or reduction may have a positive effect on litter, although this has not been evident in countries which have introduced a ban or reduction. However, we have no doubt that a reduction in the use of polythene carrier bags and an increase in paper or cloth alternatives will lead to an increase in vehicle movements and CO2 emissions.

All of the alternative bags use considerably more energy in production, require a greater number of vehicles to deliver their increased weight and volume and have the effect of increasing CO2 emissions.

If the Parliament is interested, we are more than happy to provide facts and figures – as we have done on previous occasions.

However, we would hope that the Parliament can focus on the real drivers of climate change – electricity generation and road transport – and leave the polythene carrier bag out of this debate.

Cameron McLatchie, chairman, British Polythene Industries PLC
22 February 2009
The British Soft Drinks Association is the national trade association representing the interests of the UK’s manufacturers, factors and franchisors of soft drinks, including fruit juices and bottled waters. Member companies make up over 90% of the industry, with annual retail sales in excess of £12 billion in the UK which includes over £1 billion in Scotland. BSDA supports measure to protect the environment and welcomes the Scottish Government consultation to tackle waste impacts.

Reponses to the proposals

1. Duties on public bodies and businesses to provide recycling facilities.

1.1 BSDA believes that voluntary action would be the most appropriate and effective way encourage businesses and public bodies to recycle

1.2 Local Authorities should work with public bodies and businesses to provide facilities and infrastructure to collect recyclable materials from non-residential sources.

1.3 The Scottish Government should consider following the English example for guidance on ‘Recycling on the go’. Soft drinks companies are already involved in initiatives to increase recycling out of the home.

2. Packaging

2.1 The focus on packaging does not recognise the positive role packaging can play in protecting products and reducing waste, particularly food waste.

2.2 There is an unnecessary and disproportionate focus on packaging when seeking to tackle waste in Scotland. Little attention is paid to other waste streams that may have far greater impacts on the environment than packaging.

2.3 It is not necessary to set statutory targets for retailers to reduce packaging. The Government should follow the example of the Courtauld commitment and seek voluntary action from industry. This action is in addition to many years of work by manufacturers to light-weight their packaging to work towards recyclability. It should be noted that commercial pressures help companies focus efforts on packaging reduction. Packaging is a significant business expense and where reductions can be made manufacturers are already working hard to reduce packaging.
3. Recycled material

3.1 Many companies across a range of sectors are already taking action by including recycled content in their packaging. This is particularly true for soft drinks, where companies regularly use recycled materials in their packaging ranges.

3.2 It is not appropriate to place a requirement for a minimum content of recycled material as this would not appreciate issues of availability of recycled material and importantly, some of the technical issues in using recycled material. Including recycled material is not necessarily the best environmental option for all packaging. Including recycled content in some instances can affect the ability to recycle packaging and may also impede on the function of the packaging.

3.3 Where it is feasible soft drinks manufacturers have been including recycled material for many years. For certain formats of packaging there is already a significant amount of recycled material, for example, cans and glass bottles. For PET plastic, there are serious limitations with regard to specifying a minimum content as the material has limited availability and this can fluctuate significantly in a short timescale. It is essential to increase recycling rates in order to obtain recyclate so that more can be used.

4. Waste prevention plans

4.1 Soft drinks manufacturers are captured under PPC regulations. Part of PPC is to use resources and materials efficiently, and this would include minimising waste.

4.2 Requiring businesses and public bodies to develop and publish waste prevention plans seems to be excessive and it would be more appropriate to encourage organisations to do this on a voluntary basis. Commercial pressures are already causing companies to reduce waste arisings, therefore reducing costs.

4.3 Waste prevention plans could help increase focus on waste issues and encourage recycling but would not necessarily reduce waste. It is important that appropriate infrastructure and facilities are developed or improved to make it practical to recycle out of the home.

5. Deposit and return schemes

5.1 It is not clear why deposit and return issues have not been incorporated under Proposal 2 ‘Packaging’, i.e. measure to tackle packaging. Deposits may be one of the ways to increase collection of materials but this should be considered as only one of the options amongst a wider range of others. In any case BSDA believes strongly that it is not appropriate to have statutory requirements for deposit and return
Companies should be allowed to take decisions on deposit and return schemes on an individual voluntary basis, taking into account the local market needs and local infrastructure issues. While there is one example of a deposits system in Scotland, it must be remembered that this is only one, unique scheme and this should not be used to justify nationwide mandatory deposits for all drinks containers.

It is unreasonable to expect retailers to manage the sorting, storage, sort and collection of containers once they have been returned, particularly for smaller convenience stores. There are also many health and safety implications with operating mandatory deposits schemes.

The financial implications outlined in the Consultation are far from robust and it is not as simple as calculating the operational cost of a scheme in Scotland using costs of the scheme in Denmark on the basis of similar populations. BSDA recommends that the Government carry out a more thorough impact assessment of deposits before enabling powers on deposits.

The consultation is not clear on the distinction between deposits for single use or refillable containers. The financial implications for refillable systems versus single use are very different and the Government should be clear about what costs relate to which proposed system.

Requiring manufacturing companies to use returnable containers is likely to cost several hundred million pounds in capital costs for new manufacturing equipment with annual operational costs in the tens of millions. For single use systems there would be less set up costs but retail outlets would still be required to modify their premises to manage the materials. This is likely to cost many tens of millions, while the annual operational costs would in tens of millions of pounds.

We do not believe that mandatory deposit and returns are the most cost effective or most environmentally responsible way to collect waste packaging and we would support improvements in kerbside collection and on the go recycling.

BSDA firmly believes that kerbside collection is the more cost and environmentally effective way to capture material for recycling and that deposits systems will divert valuable material away from local authority collection schemes, potentially making kerbside collection uneconomic to operate.

BSDA recommends that before powers are enabled in relation to deposits, the Scottish Government should carry out more detailed
investigation into deposits and engage with manufacturing, retail and waste management sectors to understand the issue and implications of any proposals and to assess whether or not deposits are the most effect measure to tackle packaging impacts.

6. Mandatory waste data returns from businesses

6.1 The Producer Responsibility Regulations 1996 ready requires packaging producers, packer/fillers and retailers to account for, and fund the recovery of packaging that is placed on the market. This information should be sufficient for the purposes of policy development and planning in relation to packaging.

7. Other measures, including plastic bags

7.1 We believe that the Government should in the first instance seek voluntary action from businesses and public bodies. The government should back up voluntary action with funding, infrastructure and best practice advice.
Appendix - BSDA position on deposits (please find below)

BSDA position on the use of mandatory deposit systems on single use drinks containers

October 2008

1. Summary

1.1 The soft drinks industry supports measures to protect the environment when these are based on comprehensive environmental investigation and is committed to sustainable consumption and production.

1.2 Where packaging is concerned, studies have not produced definitive answers to the vital questions asked of mandatory deposit schemes, i.e. do they improve the environment cost effectively? It would be unwarranted to implement a system that does not have a desired environmental outcome.

1.3 Many principles risk being compromised with the introduction of deposit schemes, namely the capacity of such measures to:

- Undermine kerbside collection
- Divert valuable material away from Local Authority waste collections
- Cause unnecessary environmental impacts
- Disproportionately increase costs to consumers, manufacturers and retailers
- Discriminate unfairly against soft drinks
- Restrict the free movement of goods within the EU

1.4 The British soft drinks industry firmly believes that the introduction of mandatory deposit schemes would be an ineffective and counter-productive method of reducing the environmental impacts of packaging. It is convinced that the solution lies with multi-material kerbside schemes that address all waste streams. BSDA also supports efforts to provide for recycling out of the home.

2. Soft drinks packaging and sustainability

2.1 The nature of beverage packaging has changed dramatically over the years. Many decades ago drinks were solely packed in glass bottles. Cans were then added followed by cartons and plastic bottles. There is now a much greater variety of shapes, sizes and material types than ever before.

2.2 Packaging continues to be a major cost for the industry, both from a financial and environmental perspective. Members have historically looked for ways to reduce the amount of packing used and have made significant achievements.
2.3 The primary function of packaging is to maintain the safety and quality of the product, ensuring it reaches the consumer at the same levels as when it was first produced and throughout its shelf life.

2.4 Soft drinks manufacturers have always sought to address environmental concerns in relation to packaging:

- Light-weighting of all formats of packaging has been carried out for decades and drinks manufacturers and packaging suppliers continue to seek further opportunities to lightweight.
- Soft drinks packaging is amongst the most recyclable of all materials collected. It is easily recognised, sorted and is also of high value.
- Manufacturers have been using varying volumes of recycled materials in their packaging for many years and at present companies are overcoming technical challenges to work towards significant increases of recycled PET in their plastic bottles.

2.5 Members recognise that there is still further work to be done to address packaging and sustainability while maintaining the primary function of packaging.

3. Undermining kerbside collection

3.1 According to WRAP, 35% of plastic bottles in the household waste stream are now being collected for recycling whereas in 2001 this figure was just 3%. This is predicted to increase to 50% in 2008 and 71% in 2009. These figures indicate that the efforts of local authorities in developing kerbside schemes have been enormously successful and this has been complemented by WRAP’s work to communicate recycling messages to consumers.

3.2 European Directives to increase recovery and decrease land filling of waste are comprehensive in their application. They do not target one particular waste stream and aim to reduce all wastes to landfill. This stimulates recovery and reprocessing industries to adapt and grow to meet demands.

3.3 Effective kerbside collection schemes are considered by many to be the best environmental option in addressing the recycling and recovery of packaging. The 2001 RDC/PIRA Study demonstrates that, combined with achievable recycling rates, kerbside schemes deliver optimum environmental benefits compared to other packaging recovery scenarios. A deposit system on drinks containers would only tackle a small percentage of household waste. Kerbside collection captures far higher volumes of waste across all material categories.
3.4 Mandatory deposit schemes would therefore undermine the success of local authority kerbside collection as they would divert the most identifiable, easily sorted and valuable materials away from cost effective materials collection by local authorities.

4. Deposits: an expensive way to recycle

4.1 Data collected in the US have shown that kerbside collection schemes cost around $100 - $200 per tonne of material collected, whilst deposit systems cost $500 - $800 per tonne of recycled material. Experience in Germany suggests that the cost of collecting materials through deposit schemes is three-times that of kerbside collection.

4.2 Kerbside collection schemes offer the following advantages:

- They focus on a range of materials not just a subset of cans and bottles, thus achieving greater economies of scale.
- Most recycling schemes manage materials by commodity type (e.g. glass, PET, paper), rather than pack type, size or brand, which minimise handling and sorting costs for the supply chain and allow for an increasing number of pack types to be recycled.
- The operation and collection of materials are managed by the waste industry and Government, rather than the food distribution and retail chain, which are not well suited to handling materials for recycling.

4.3 Mandatory deposit systems will result in increased prices to the consumer and throughout the supply chain. Returned beverage containers must be counted, sorted and stored requiring additional infrastructure, planning and resources. The burden on small retailers would be even greater. For example:

- They would have to collect and store containers and refund deposits on behalf of the manufacturer.
- A regular CTN would struggle to do this even with a small number of product lines.
- The impulse buy sector does not have the square footage required to operate such a scheme.
- Such a measure would be impractical to manage and would severely disadvantage corner shops and garage forecourts.
- There would be a significant increase in vehicle movements as pick-ups would be needed on a regular basis for retail outlets. This would add to congestion, hinder efforts to improve air quality.
quality and would be counter to efforts to reduce climate change impacts from transport.

5. Discrimination without environmental reasoning

5.1 Deposit systems operate randomly across Europe for different drinks’ packaging. For example:

- In Finland the deposit system covers beer and carbonated soft drinks only
- Denmark levies a deposit on all soft drinks other than milk

5.2 The final goal of any deposit scheme is a comprehensive reduction in environmental impact. There is no logic in singling out certain products and not others

5.3 Complex redemption systems can lead to increased environmental degradation. For example, in Sweden, used single trip containers are returned to the point of fill where they are counted individually. Designed to achieve a high rate of recycling, the additional transport costs and energy required to complete this process far outweigh the benefits.

5.4 In Germany deposits were added to drinks containers in 2003. The main objectives of the schemes were to reduce litter and to reduce the overall contribution of carbon dioxide emitted due to packaging. A study in 2007 showed that there had been no significant reduction in the amount of litter or cost to local authorities in dealing with litter and the reduction in carbon was also negligible. The cost of the German scheme was assessed to be over €900m per year.

6. Deposit fraud

6.1 Potential for fraud and misuse is a serious concern for the single trip/deposit market. Deposits create an incentive to redeem containers that do not bear a charge. This increases consumer prices. Each redeemed container imposes a cost for redemption, collection, and reprocessing. If a pack is returned fraudulently the refund is a direct cost to the distributor.

6.2 US studies into the use of reverse vending machines have suggested that 7% to 30% of drinks cans returned in this way were on non-deposit bearing items, despite the refund being paid.

7. Barriers to trade

7.1 Deposit schemes may restrict the free movement of goods within the European Union (Article 28EC).
7.2 Despite achieving recovery and recycling rates under the European Directive, some member states impose deposit systems to further increase recovery levels.

7.3 Importing goods into a member state operating a deposit scheme requires packaging that adheres to each country’s requirements. This may include specific labelling, bar-coding or exclusive marking to identify the package as ‘recoverable’. In addition, contributions to the cost of a deposit return system are required. These costs may be significant, even more so for smaller producers.

7.4 Deposit systems go beyond the scope of the EU Packaging Directive. They could be considered protectionist, favouring local producers, and represent a clear barrier to trade.

8. Achieving further improvement in recycling rates: Alternatives to deposits

8.1 The BSDA believes the simplest, cost effective and environmentally sound way to increase recycling rates is through effective kerbside collection schemes as opposed to deposit schemes. These are already well established and run along side municipal waste collection.

8.2 The success of local authority collection schemes across the UK has been significant in recent years. WRAP data has shown that in 2001 recycling of plastic bottles was just 3%, by 2007 this had risen to 35%. WRAP expect the recycling of plastic bottles to reach over 70% by 2010, while estimates have shown that deposits schemes might retrieve 80% of the containers with deposits on them.

8.3 To improve recycling out of the home, the government and local authorities, with the help of WRAP, should continue with the strategy for ‘recycling on the go’: manufacturers are becoming involved in such schemes. It is important that consumers have the opportunity to recycle out of the home. This will not only improve recycling rates but is also likely to help reduce all forms of litter.

8.4 In conclusion, BSDA argues strongly that there are no valid economic or environmental reasons to impose mandatory deposits schemes on single use drinks containers.

BSDA
29 January 2009
Consultation on Zero Waste Proposals — Analysis of Responses

You will no doubt be aware of the consultation undertaken by Government with specified bodies requesting their views on a range of planned legislative measures to implement Zero Waste proposals which have been reported upon last month (December 2008).

Firstly, it should be brought to your attention that correspondence received on behalf of the Cabinet Secretary for Rural Affairs and Environment, Richard Lochhead, on 9th January 2009 in response to a letter sent to him on 17th October 2008 requesting that the Cabinet Secretary define the term “single use” carrier bag. His response makes it abundantly clear that the term “single use” should NOT be used as it is clearly inaccurate.

The UK Government’s own Waste Resource Action Programme (WRAP) found that 74% of plastic bags are re-used at least once, and are not single use. These are used as pedal bin liners, lunch bags and for multiple uses beyond shopping, e.g. collecting dog dirt. “Single use” carrier bags are a very rare species indeed.

One of the proposals, number 7, was specifically targeted to “include action on single use carrier bags”, and in the response analysis it clearly states in the second bullet point of the main findings that such a proposal received support from only a minority of the respondents. Therefore it is clear that the majority of the responses are against legislation, yet the subsequent analysis goes on to describe in detail the views of the minority - now that’s blatant misrepresentation and manipulation of the facts.

In the expanded response analysis on question 7, it, at length, reports upon potential legislation and on taxes and levies being applied, despite these points being made by an agreed minority of the respondents with, clearly, the views of the majority being overlooked and ignored in the fuller context of the analysis. Democratically that is out of order and unacceptable if the majority rule is to apply. There is NO mention of the INCREASE in waste and environmental damage which would result in this proposal being instigated, nor the other inevitable consequences of the reduction in use of lightweight supermarket carrier bags all of which have been endlessly quantified, debated, and dismissed. Parliament has already spent an estimated £2 million of public money discussing this issue and concluded that it was not to be pursued. Additionally, on the consultation taken on that proposal, at that time, over 90% of the respondents were against a levy or tax on plastic carrier bags.
This is supposed to be a proposal to implement ZERO waste for Scotland, and the Minister is well aware (he was a member of the Committee which unanimously rejected the proposed Bill to levy charges on plastic bags in 2006) that lightweight plastic bags that are removed from the public’s use will require to be replaced by heavier, bulkier, carbon dioxide emitting, unhygienic, filth absorbing and unsanitary substitute bags, which, in turn, will significantly increase the waste tonnage generated by carrier bags in Scotland. When will this Government realise this make no sense in a Zero Waste proposal?

Furthermore such alternative carrier bags (paper, jute, cotton, polypropylene, nylon etc.) all require more transport (estimated at 23,000 extra lorry journeys in Scotland annually, spewing out carcinogenic exhaust fumes) to manufacture, deliver, store, and these alternative products will take up more space in warehouses, shops, and inevitably landfill, where they will create more carbon dioxide emissions and more methane emissions than the lightweight plastic bags they replace. The UK has signed up to a 20% reduction in waste by 2020, with a reduction of 20 % in their carbon dioxide emissions in the same timescale. This proposal will increase waste findings and increase carbon dioxide emissions and produce significant additional environmental damage to our country. Where is the recognition of this additional damage to the environment identified and explained?

Significantly, whilst one paper bag manufacturer (with an inherent biased view) was “consulted”, there is no evidence that any request for an opinion was made to any of the companies in Scotland who are commercially involved in the business of manufacturing or supplying lightweight supermarket plastic carrier bags, yet the majority of the respondents were still against making legislation in relation to “single use carrier bags”. The public simply do not want to be forced into paying for something they currently believe they are entitled to when making retail purchases, particularly when they are providing free advertising to the retailers.

The Government should be far more proactively encouraging the public to reuse their lightweight plastic carrier bags where hygienically possible, and to recycle them in the plethora of disposal units now visible in the forecourts of most major supermarkets. Plastic is environmentally easily and economically recycled, using less resource than any of the substitute products, and we should be encouraging continued use of lightweight bags rather than reducing their use which leads to further damage to the environment from substitute products.

CBC Scotland
14 January 2009
I wish it to be recorded that I object in the strongest possible terms to the inclusion of Carrier Bags within the proposed Climate Change (Scotland) Bill.

It was clearly stated by the previous Environmental and Rural Development Committee (ERDC) that the environmental objectives in introducing a charge could not be met and to proceed with the inclusion of such a proposal in the Climate Change (Scotland) Bill without any further robust evidence is a condemnation of the scrutiny and conclusions reached by the ERDC.

It has already been proven, categorically, that the introduction of such a proposed charge will see a substantial increase in the waste findings in Scotland and in doing so will see the Scottish Government incur the most severe penalties under EU agreements. Those penalties will run into millions of pounds which will ultimately have to be met by the Scottish taxpayer.

Lauren Calder
February 2009
I wish it to be recorded that I object in the strongest possible terms to the inclusion of Carrier Bags within the proposed Climate Change (Scotland) Bill.

It was clearly stated by the previous Environmental and Rural Development Committee (ERDC) that the environmental objectives in introducing a charge could not be met and to proceed with the inclusion of such a proposal in the Climate Change (Scotland) Bill without any further robust evidence is a condemnation of the scrutiny and conclusions reached by the ERDC.

It has already been proven, categorically, that the introduction of such a proposed charge will see a substantial increase in the waste findings in Scotland and in doing so will see the Scottish Government incur the most severe penalties under EU agreements. Those penalties will run into millions of pounds which will ultimately have to be met by the Scottish taxpayer.

Marion Calder
February 2009
I wish it to be recorded that I object in the strongest possible terms to the inclusion of Carrier Bags within the proposed Climate Change (Scotland) Bill.

It was clearly stated by the previous Environmental and Rural Development Committee (ERDC) that the environmental objectives in introducing a charge could not be met and to proceed with the inclusion of such a proposal in the Climate Change (Scotland) Bill without any further robust evidence is a condemnation of the scrutiny and conclusions reached by the ERDC.

It has already been proven, categorically, that the introduction of such a proposed charge will see a substantial increase in the waste findings in Scotland and in doing so will see the Scottish Government incur the most severe penalties under EU agreements. Those penalties will run into millions of pounds which will ultimately have to be met by the Scottish taxpayer.

Tracey Calder
February 2009
I am writing as I wish to object to section 59 of the Climate Change (Scotland) Bill as the consequences of introducing any charge for carrier bags is that more waste and carbon dioxide will result. I feel that this section should be excluded. My reason for this is that Scotland has already voiced its opinion on proposals to tax carrier bags, which was a resounding NO vote.

Fred J Carss
25th February 2009
RURAL AFFAIRS AND ENVIRONMENT COMMITTEE

CLIMATE CHANGE (SCOTLAND) BILL

SUBMISSION FROM HUGH CLARKSON

I wish it to be recorded that I object in the strongest possible terms to the inclusion of Carrier Bags within the proposed Climate Change (Scotland) Bill.

It was clearly stated by the previous Environmental and Rural Development Committee (ERDC) that the environmental objectives in introducing a charge could not be met and to proceed with the inclusion of such a proposal in the Climate Change (Scotland) Bill without any further robust evidence is a condemnation of the scrutiny and conclusions reached by the ERDC.

It has already been proven, categorically, that the introduction of such a proposed charge will see a substantial increase in the waste findings in Scotland and in doing so will see the Scottish Government incur the most severe penalties under EU agreements. Those penalties will run into millions of pounds which will ultimately have to be met by the Scottish taxpayer.

Hugh Clarkson
February 2009
We are a small business and it is total hypocrisy to suggest that by charging for carrier bags it will somehow reduce our waste. It has already been proven that to do so would increase waste.

Scrap Section 59 of this bill forthwith.

Stewart Collins
25 February 2009
I wish to object to the inclusion of Section 59 of the aforementioned Bill. The Environment Minister wants to tax single use carrier bags as a measure to educate the public to be aware of our disposable society. They have stated that it is neither a waste nor a litter matter, which is just as well as the inevitable consequences will be more tonnage and cubic capacity taken in waste findings due to alternative products substituted. Section 59 is what appears to be a last minute hook onto the Climate Change Bill to grant this power to the Government should they require to do so, yet we have had no definition of what a “single use” carrier bag encompasses.

The ERDC dismissed a proposal in 2006 to do exactly what Section 59 wants to do. Section 59 will increase only increase waste and should be deleted.

Defra and Wrap, between them have acknowledged that 80% of all UK carrier bags are currently already reused at least once, so presumably that takes such bags out of the tax net although just how that is going to be policed is yet to be determined. There is, contrary to what Ms Kennedy has stated, no public support for a further tax on the public and whilst there may be a number of wealthy politicians who believe this to be an insignificant tax, the public who have less income than they have, are content with the present free plastic carriers secure in the knowledge that they will have a receptacle for sports gear, packed lunches, shoes and the myriad of SECONDARY uses to which lightweight carrier bags are reused.

Lightweight supermarket bags are specifically being targeted, yet their very lightness is what makes them so highly efficient. There is NOTHING that is engineered to carry 25 kilos that is waterproof, hygienic and as easy to carry than the lightweight supermarket bag which itself, weighs under 8 grams.

Should this singularly daft proposal become part of law, the Government will be ridiculed worldwide for introducing a measure in an environment Bill which will increase the damage to the very environment they are charged with preserving.

John Cunningham
February 2009

1. Introduction

The Community Recycling Network for Scotland (CRNS) was established in 2004 to provide support and information for community led organisations involved in recycling, reuse, composting, reduction and waste education activities.

The CRNS is a membership body for community recycling organisations throughout Scotland. We provide information, advice and support to both existing and emerging community recyclers.

Mission Statement
The CRNS exists to build a stronger community recycling sector in Scotland which can create real social, environmental and economic benefit within our local communities.

Values
These are the underlying principles that guide the work of the CRNS) The CRNS is:

• Committed to the principles of Zero Waste and sustainable development.
• Committed to and directly accountable to the Membership.
• Committed to local communities delivering local recycling solutions.
• Committed to carrying out all of its activities with trust, integrity and openness.
• Committed to social and environmental justice.

Objectives

Our current objectives are:

• To build more robust organisations
• To assist the sector to maximise the recycling, reuse, composting and waste prevention opportunities available to it
• To provide networking opportunities and information exchange to allow the sharing of best practice
• To represent and raise the profile of the sector
• To provide an accessible portal and range of advice to sustainable communities on recycling opportunities
• To improve Membership services and benefits

Impact of Sector

The size and impact of the community recycling sector in Scotland was mapped by the CRNS in 2006. The mapping study found that there were;

• diverted almost 73,000 tonnes of materials from landfill
• had a turnover in excess of £26 million
• employs 1,100 full time equivalent staff
• offers over 950 training places and over 3,200 volunteering opportunities
• helps over 68,000 people

2. Overview

The CRNS welcomes the opportunity to respond to the consultation document. Our response focuses not only on answering the questions posed by the Scottish Government in the consultation, but also an overview of the impact that any proposed legislation may have on the community recycling sector as well as some of the opportunities that the proposed legislation presents.

We have assumed that the proposals that have been included in the consultation have been set out because the progress in these areas has not happened to date through market forces, voluntary codes and other guidance and therefore the role of legislation in driving these issues forward needs to be further investigated.

It is also interesting to note the impact that the publication of the consultation has already had with some of the major supermarkets announcing more robust waste prevention plans as well as trials of reverse vending systems.

As you are aware, the CRNS is fully committed to the goal of Zero Waste. The Zero Waste philosophy focuses on the redesigning of our one-way industrial system into a circular system, similar to the successful strategies found in nature where waste becomes an asset rather than a liability. Products that cannot will simply be designed out of the system (prevented). Waste would then cease to exist in its current form and the waste management industry would be replaced by a resource re-utilisation sector led by empowered community organisations that would realise the value of the assets flowing through their communities for local economic and social gain. This is surely a fundamental part of sustainability in the truest sense.

Zero Waste should therefore not only be seen as a function of waste management, but as a new economic system for Scotland with all policies and strategies coming from the Scottish Government benchmarked against
whether they move us towards and away from a Zero Waste society. The CRNS would therefore like the legislation to reflect the fact that it will be part of the solution on the journey towards a Zero Waste society within the Zero Waste philosophy as outlined above.

In support of these principals the CRNS has responded to the questions in the consultation as requested in an attempt to shape waste policy in the direction of sustainability which embraces social and economic goals as much as environmental ones and seeks to address waste as a resource which when managed locally can lead to a positive impact on communities and the environment.

3. Responses to the Consultation Questions

3.1 Proposal 1: Duties on public bodies and businesses to provide recycling facilities

Proposal

To further encourage recycling by giving a power to the Scottish Government to make regulations which would impose duties on public sector bodies and businesses to provide recycling facilities for customers, staff and, where appropriate, members of the public. The regulations would specify which bodies and businesses were to be subject to this duty and the nature of the recycling facilities that would be required.

Response to questions

1. Do you consider that legislation should be made in this area?
2. If so, what form should that legislation take?

Comments

Of the options outlined the CRNS would propose Option 1

Given that over 80% of waste arisings are from commercial and industrial sources and that targets are going to be increasingly hard to meet, it is no longer the time for the commercial sector to be given the option of a voluntary Code of Practice. The CRNS believes that recycling, reuse and composting should be obligatory particularly where the services and infrastructure are available.

The criteria for determining which bodies and businesses would be subject to this legislation needs to be very clear. Factors to consider should include number of staff, customers, members of the public that access the bodies or business, the amount of waste they currently generate etc. Where appropriate and depending on the size and nature of these bodies and businesses they should be required to have onsite composting.

In addition steps should be taken to move from a volume/frequency of collection charging system to a weight based charging system to allow direct
cost savings to be made through waste prevention. Furthermore the cost of collecting residual waste for disposal should be much higher than the cost to collect recyclates.

These bodies and businesses also need to have access to guidance, support and resources to help them minimise their waste (see Proposal 4 Waste Prevention Plans) This may be delivered through existing bodies including the Scottish Waste Awareness Group, Envirowise, the Business Environment Partnership and Scottish Enterprise.

The Scottish Government should also give consideration as to whether this legislation could be broader to include wider measures to reduce the carbon footprint and climate change impact including energy use, water and utility use and transport.

This also links to Proposal 6 about mandatory waste data returns

3.2 Proposal 2: Packaging

Proposal

To encourage waste prevention by giving powers to the Scottish Government to make regulations on packaging which would set statutory targets on retailers for packaging reductions. Response to questions

1. Do you consider that legislation should be made in this area?
2. If so, what form should that legislation take?

Comments

Of the options outlined the CRNS would opt for Option 1

There are already challenging targets within existing packaging legislation and the work being undertaken by WRAP and the major retailers and supermarkets through the Courthald Commitment has seen some significant progress made in this areas.

In addition the work of packaging compliance schemes such as Valpak are also making good progress in this area, including raising awareness amongst consumers and the public about the role of packaging and the progress that has been made to date.

There is a need to encourage further lightweighting and best in class approaches across a wider range of packaging as well as increasing the amounts of recycled materials in packaging and greater levels of reusable packaging in particular in the transit and secondary packaging areas.

Could also investigate the possibility of variable VAT rates for materials with greater levels of recycled content and where reusability I recyclability is linked to VAT rates.
3.3 Proposal 3: Specifying recyclate

Proposal

To encourage recycling by taking powers to enable the Scottish Government to place a duty on public bodies and businesses to specify a minimum percentage of material made from recyclate in procurement contracts.

Response to questions

1. Do you consider that legislation should be made in this area?
2. If so, what form should that legislation take?

Comments

Of the outlined options the CRNS would propose Option 3

3.4 Proposal 4: Waste Prevention Plans Proposal

To encourage waste prevention and recycling by taking powers to enable the Scottish Government to place a duty on public bodies and businesses to have waste prevention plans.

Response to questions

1. Do you consider that legislation should be made in this area?
2. If so, what form should that legislation take?
3. What public bodies and businesses should be covered?

Comments

Of the options proposed the CRNS would opt for Option 1

Substantial quantities of organic waste could be diverted from the waste stream if appropriate incentives are put in place to encourage public and commercial organisations to compost garden and food waste on site or have their compostable waste collected, if a collection service exists in their area. This is particularly important for hospitals, offices with canteens, schools or hotels generating large quantities of food waste, and equally important, in terms of reducing carbon emissions, for the hospitality industry in remote, rural locations of Scotland.

Obviously this could not be made obligatory at this stage as organic waste collections do not exist in many areas and not all commercial and public sector premises have the suitable space for on-site composting. On-site composting could range from one or two home composters or green cones to small-scale in vessel composters depending on the size and type of organisation. In vessel composting on site is a labour intensive process which
needs significant staff time especially in the start-up phase. As the regulations stand the site would also have to have room for the use of the finished compost unless they have the compost (reduced in volume) uplifted as a waste product.

As outlined in the CRNS response to the Better Waste Regulation Consultation in June 2007, there is an urgent need for the current Waste Management Licensing Regulations to be amended to allow non-household premises to compost their own meat-included food waste on site under an exemption or low level permit as currently a Full Waste Management Licence and a Certificate of Technical Competence is required, costing £3348 in Year 1 and £2073 per annum thereafter, plus on average £2500 for a COTC. At present meat-excluded waste can be composted under an exemption by these premises but the segregation of the meat component from the food waste stream discourages participation and reduces the amount of waste that can be diverted.

If the CRNS goes ahead with the Compost Doctors Programme trained community sector employees will be able to assist a number of public and commercial sector Organisations each year in selling up their on site composting operations.

Promotion of the benefits of on-site composting including potential cost savings and where to find information need to be promoted to the public and private sectors. Incentives to compost on site could include the waiving of VAT on composters, extending the current Big Hanna type government type deals such as reduced price in-vessel composters to companies purchasing them via LA (this has the advantage of LA’s recording what companies are using the deals and targeting training or expertise to those companies to make sure they are doing the work. This would also link to Proposal 6 about mandatory waste data returns) Alternatively offering direct discounts subsidised by the government (such as have been offered through WRAP to householders).

In terms of the bodies and businesses the criteria for identifying them should be very clear but should include the tonnage of materials generated by these bodies and businesses and the extend to which they

All Scottish Local Authorities and non-governmental departmental bodies should be required to have a Waste Prevention Plan. However, rather than targeting individual companies perhaps make encourage industry bodies to have waste prevent plans in place for their industry. Not only would this take some of the pressure from small companies to undertake them but it would allow for smaller resources to be directed towards these bodies to roll out initiatives. Initially those bodies which could have the biggest impact such as the Tourism Industry should be targeted firstly perhaps rolling out to other industry bodies in the longer term. As per comments on Proposal 1 existing organisations should be further resourced and partnered with those bodies to develop Waste Prevention Plans in addition these could be linked to wider sustainability/climate change/ carbon footprint action plans. Finally, it would
allow for an industry wide waste data returns system which might see better data returned.

3.5 Proposal 5: Deposit and Return

Proposal

To encourage recycling and reuse by taking powers to enable the Scottish Government to introduce deposit and return systems.

Response to questions

1. Do you consider that legislation should be made in this area?
2. If so, what form should that legislation take?
3. Your views on the practicalities of such schemes in Scotland?

Comments

Of the three options outlined I prefer Option 1

3.6 Proposal 6: Mandatory Waste Data Returns from Business

Proposal

To ensure more effective planning and policy making on commercial and industrial waste by taking powers to make regulations requiring businesses to send waste data returns to SEPA. Responses to questions

1. Do you consider that legislation should be made in this area?
2. If so, what form should that legislation take?
3. Do you have any views on the kind of businesses to be covered?

Comments

Of the three options outlined the CRNS opts for Option I although criteria for choosing businesses should be based on more than just size and should relate to amount of waste generated. Consideration should also be given to undertaking this action in the short to medium term on an industry body basis as outlined in proposal 4 comments above which might improve the quality of data returns.

Any mandatory waste data returns should be rolled out in such a way that it is linked to environmental risk and volume of waste. As such it should be based on amount of waste specific businesses generate in particular hazardous waste and bio-degradable/organic waste.

The collection of data is crucial but any systems introduced need to ensure they are not too onerous on businesses, especially if an individual business approach is adopted as against a industry body approach. If so a simplified version of the Waste Data Flow system should be used bearing in mind that a
lot of these companies are not waste management companies so support must be available from SEPA/Government to assist initially in completing a data flow, perhaps having an online support resource.

Perhaps we should also focus on the quality and quantity of waste data that is currently collected and ensuring that this is good data by requiring waste management companies to provide more details to businesses and to government/SEPA about the quantities and types of materials that they collect.

3.7 Proposal 7: Other measures to encourage waste prevention, including action on single-use carrier bags

Proposal

The Scottish Government would also welcome other ideas on legislation which could help to prevent waste.

Responses to questions

1. Do you consider that legislation should be made in this area?
2. If so, which areas should these powers cover?
3. Are there any other areas, not covered by this consultation, where legislation could be made to increase recycling and promote waste prevention?

Comments

The CRNS would like to suggest a tax on high-impact products such as bottled water in plastic bottles and more public awareness raising on the impact of such products and their waste materials (especially in areas of tourism, as raised at the Cairngorms Forum).

Single use carrier bags — the current definition is not clear as to what these bags are as many products/consumer goods come in single use carrier bags (potatoes, toilet roll etc.) and therefore any definition has to be extremely clear.

Landfill Bans—the Government may want to consider banning certain products/goods from landfill particularly focusing on those products/materials that either has a market value or has a recycling or reprocessing route. Again any definitions used need to be very clear in order that there is minimal room for interpretation. Furniture should be banned from landfill as should clothes, textiles and all wood/wood derived products.

Variable VAT on environmentally/recycling friendly products and packaging

CRNS
October 2008
RURAL AFFAIRS AND ENVIRONMENT COMMITTEE
CLIMATE CHANGE (SCOTLAND) BILL
SUBMISSION FROM MARLENE DEEKS

This plan to reduce the use of carrier bags is fraught with danger. Section 59 of the aforementioned Bill should be removed forever from the Bill and I wish to register my wish that this should be noted. The consequences are disastrous for the country, the environment and for climate change.

Just what is a carrier bag? Are there ANY carrier bags manufactured that are specifically engineered not to be reused? The answer to that as every intelligent adult knows is NO, there are no such bags.

We define a carrier bag by size, weight and thickness, so let us look at the standard supermarket carrier bag which is essentially a shaped like a T shirt. The main supermarkets carriers all measures approximately 300mm across the face, when opened out, 500 mm and is 550 mm long. It weighs about on average 7.35 grams per piece and has a thickness of about 17 microns.

ALL the alternatives to this lightweight supermarket carrier bag are heavier, bulkier and use more natural resources by way of water, electricity and transportation costs delivering them to the market place. Nobody surely pretends that we all can do without carrier bags, so we must quantify the consequences of significant reductions which Holyrood have insisted upon. Holyrood did just that in a partial way in 2004 – 2006 and concluded that to alter the status quo would probably produce an extra 13, 500 tonnes of waste findings every year in Scotland alone. When the Environment Committee realised that, they quickly and intelligently dropped plans to tax carrier bags and the then proposed Bill was not recommended to the House.

Now in 2009, the consequences are clearly visible, with jute, cotton, woven and non woven polypropylene carrier bags being sold as alternatives to the free lightweight bags. Nobody at Holyrood has updated the quantification on the unintended consequences done by them at that time, but it has been shown, using expert software based on actual products in today's market, just how disastrous this has been for Scotland.

If the 50% reduction in numbers undertaken by retailers can be achieved, then

1 The weight of product will increase from 10,600 tonnes per annum to 27,700 tonnes per annum
2 The weight of product transit packaging, will increase from 700 tonnes per annum to 3,400 tonnes per annum( more than 50% in weight of the reduction in lightweight bag weight)
3 The bulk of product will increase from 27,600 cubic meters per annum to 232,500 cubic meters per annum
4 The number of lorries travelling around Scotland alone, spewing out carcinogenic exhausts will increase from 3,500 per annum to 29,100 per annum
The number of FULL (unlikely) pallets moving around Scotland will increase from 76,000 to 639,000 pallets per year.

That’s just a few of the consequences – It is a certainty that these will occur and that more damage will be incurred to our environment as a result.

Ms. Marlene Deeks
27 February 2009
I wish to object to the inclusion of Section 59 of the aforementioned Bill. The Environment Minister wants to tax single use carrier bags as a measure to educate the public to be aware of our disposable society. They have stated that it is neither a waste nor a litter matter, which is just as well as the inevitable consequences will be more tonnage and cubic capacity taken in waste findings due to alternative products substituted. Section 59 is what appears to be a last minute hook onto the Climate Change Bill to grant this power to the Government should they require to do so, yet we have had no definition of what a “single use” carrier bag encompasses. Section 59 has no place within the Climate Change (Scotland) Bill and should be removed.

Defra and Wrap, between them have acknowledged that 80% of all UK carrier bags are currently already reused at least once, so presumably that takes such bags out of the tax net although just how that is going to be policed is yet to be determined. There is, contrary to what Ms Kennedy has stated, no public support for a further tax on the public and whilst there may be a number of wealthy politicians who believe this to be an insignificant tax, the public who have less income than they have, are content with the present free plastic carriers secure in the knowledge that they will have a receptacle for sports gear, packed lunches, shoes and the myriad of SECONDARY uses to which lightweight carrier bags are reused.

Lightweight supermarket bags are specifically being targeted, yet their very lightness is what makes them so highly efficient. There is NOTHING that is engineered to carry 25 kilos that is waterproof, hygienic and as easy to carry than the lightweight supermarket bag which itself, weighs under 8 grams.

Should this singularly daft proposal become part of law, the Government will be ridiculed worldwide for introducing a measure in an environment Bill which will increase the damage to the very environment they are charged with preserving.

William Dick
February 2009
I wish it to be recorded that I object in the strongest possible terms to the inclusion of Carrier Bags within the proposed Climate Change (Scotland) Bill.

It was clearly stated by the previous Environmental and Rural Development Committee (ERDC) that the environmental objectives in introducing a charge could not be met and to proceed with the inclusion of such a proposal in the Climate Change (Scotland) Bill without any further robust evidence is a condemnation of the scrutiny and conclusions reached by the ERDC.

It has already been proven, categorically, that the introduction of such a proposed charge will see a substantial increase in the waste findings in Scotland and in doing so will see the Scottish Government incur the most severe penalties under EU agreements. Those penalties will run into millions of pounds which will ultimately have to be met by the Scottish taxpayer.

Mr Archie Douglas
February 2009
I wish to object to section 59 of the Climate Change (Scotland) Bill as the consequences of introducing any charge for carrier bags is that more waste and carbon dioxide will result.

If the Scottish Government are serious about reducing waste then Section 59 should not be a part of Scotland's Climate Change Bill as we will see a massive increase in so called "bags for life" such as jute, cotton and nylon which cannot be recycled thereby increasing waste. Polythene carrier bags are extremely lightweight and highly reusable which is why I have a stash in my kitchen cupboard to be used as bin liners, pet waste bags, and carrying files to work every day. Even DEFRA acknowledge that 80% are reused at least once. What other form of packaging has such a high rate of reuse? Surely government time and taxpayers money should be spent on targeting and reducing "one-use" packaging?

Polythene carriers can also be recycled into other goods ensuring an even longer lifecycle. Surely reuse of waterproof, lightweight bags is far more favourable than putting old, dirty, smelly (due to lack of waterproofing) heavier bags such as jute, cotton and nylon into landfill. No bag is for "life" so surely it is best to re-use the thinnest material possible, and then recycle the bag at the end of its lifecycle?

Why should Scotland be saddled with yet another tax, due to lack of education? People should be encouraged to reuse and recycle after all that is why we have 4 bins outside our homes. This is the way to help the environment, not put heavier, bulkier bags into landfill creating more greenhouse gases.

Yvonne Douglas
February 2009
I wish it to be recorded that I object in the strongest possible terms to the inclusion of Carrier Bags within the proposed Climate Change (Scotland) Bill.

It was clearly stated by the previous Environmental and Rural Development Committee (ERDC) that the environmental objectives in introducing a charge could not be met and to proceed with the inclusion of such a proposal in the Climate Change (Scotland) Bill without any further robust evidence is a condemnation of the scrutiny and conclusions reached by the ERDC.

It has already been proven, categorically, that the introduction of such a proposed charge will see a substantial increase in the waste findings in Scotland and in doing so will see the Scottish Government incur the most severe penalties under EU agreements. Those penalties will run into millions of pounds which will ultimately have to be met by the Scottish taxpayer.

Louise Dowds
February 2009
The provisions of section 59 of the proposed Bill will INCREASE the waste generated in Scotland, rather than reduce it. This was clearly agreed and acknowledged in 2006 when the Bill for the introduction of a levy on plastic bags was finally rejected by ALL members of the Committee at Holyrood which was charged with investigating it. Government and Parliament agreed that an extra 13,500 tonnes of waste would arise resulting in the Bill being thrown out by a unanimous all party committee in 2006.

Since then matters have gone from bad to worse, with the supermarkets introducing heavyweight jute, cotton, polypropylene and other types of bags with greater weight and bulk than those bags they purported to replace. Even with a 50% reduction in the NUMBER of bags used in Scotland every year, it is estimated that with the products actually in the market place the weight of the products used will increase from 10,600 tonnes per annum to 38,400 tonnes per annum. Even worse, the bulk of these products will increase from 27,000 cubic meters to 232,000 cubic meters annually. This means we have to transport this bulk around the country using more transport and when it all goes to landfill or to recycling centres, then we will need not 76,000 pallets full of material but 639,000 pallets full of material to do so.

The Climate Change Bill is supposed to reduce Carbon emissions, the inclusion of this section 59 will INCREASE these emissions as well as further damage our infrastructure and our environment.

This clause must be removed in its entirety if the Government is serious about reducing the effects of Climate Change. I strongly object the inclusion of this Section 59 in the proposed Bill.

J Doyle
February 2009
SECTION 59

I believe Scotland has voiced its opinion on the Climate Change (Scotland) Bill and Section 59 should be removed.

NO TAX on CARRIER BAGS

Susan Dunbar (Mrs)
19 February 2009
I wish it to be recorded that I object in the strongest possible terms to the inclusion of Carrier Bags within the proposed Climate Change (Scotland) Bill.

It was clearly stated by the previous Environmental and Rural Development Committee (ERDC) that the environmental objectives in introducing a charge could not be met and to proceed with the inclusion of such a proposal in the Climate Change (Scotland) Bill without any further robust evidence is a condemnation of the scrutiny and conclusions reached by the ERDC.

It has already been proven, categorically, that the introduction of such a proposed charge will see a substantial increase in the waste findings in Scotland and in doing so will see the Scottish Government incur the most severe penalties under EU agreements. Those penalties will run into millions of pounds which will ultimately have to be met by the Scottish taxpayer.

Yvonne Dunslay
February 2009
Please register my objection to Section 59, dealing with carrier bags, in the proposed Bill.

There is a headlong rush by the Westminster Government to deny the public the continuing convenience of free carrier bags when they spend their hard earned and already highly taxed earnings on retail purchases of their choice, and now Scotland, with this power devolved to them, have meekly included the same provision in the subject proposed Bill.

No consultation with the public has taken place, and despite the ongoing existence of a voluntary Code of Conduct entered into by all major retailers which has reduced the environmental impact of all carrier bags by 25% by the end of this year, and a further commitment by retailers to reduce the number of carriers in use by 50% by the summer of 2009, we are already being informed by the Department of Environment, Food and Rural Affairs (DEFRA), that their “preferred option” is that laws are required to take powers to charge and use their existence to motivate stronger voluntary action by retailers, with compulsory charging as a fall back if this does not work.

So, without any consultation, we are to have laws enacted giving powers to produce more environmental damage, more greenhouse gas emissions and more destruction of our country emanating from a Government which claims to have the protection of the Environment as a priority. This Government is pursuing policies which further damages and humiliates their reputation.

This is yet another example of Government choosing to ignore facts in favour of political spin and to promote an issue which will inevitably produce more waste and unwelcome greenhouse gas emissions contrary to the Kyoto Protocol, The Bali Agreement, the Posnam accord and subsequent EU requirements on reducing carbon dioxide emissions and is simply irresponsible. This measure will INCREASE carbon dioxide emissions, increase methane emissions, increase tonnage of waste, increase landfill requirements, from 28,000 cubic meters per annum to 232,000 cubic meters per annum, and increase transport requirements from 76,000 pallets per year running around Scotland to 639,000 pallets running around Scotland.

Remove section 59 in its entirety and let the retailers meet their commitment. They will be delighted to do so as they will make more profits as a direct result, but please remember, the public will still need bags to carry retail purchases home.

Anne Edwards
27February 2009
I wish to object to the inclusion of Section 59 of the aforementioned Bill. The Environment Minister wants to tax single use carrier bags as a measure to educate the public to be aware of our disposable society. They have stated that it is neither a waste nor a litter matter, which is just as well as the inevitable consequences will be more tonnage and cubic capacity taken in waste findings due to alternative products substituted. Section 59 is what appears to be a last minute hook onto the Climate Change Bill to grant this power to the Government should they require to do so, yet we have had no definition of what a “single use” carrier bag encompasses.

Scotland has already voiced it’s opinion on proposals to tax carrier bags, a resounding NO.

Defra and Wrap, between them have acknowledged that 80% of all UK carrier bags are currently already reused at least once, so presumably that takes such bags out of the tax net although just how that is going to be policed is yet to be determined. There is, contrary to what Ms Kennedy has stated, no public support for a further tax on the public and whilst there may be a number of wealthy politicians who believe this to be an insignificant tax, the public who have less income than they have, are content with the present free plastic carriers secure in the knowledge that they will have a receptacle for sports gear, packed lunches, shoes and the myriad of SECONDARY uses to which lightweight carrier bags are reused.

Lightweight supermarket bags are specifically being targeted, yet their very lightness is what makes them so highly efficient. There is NOTHING that is engineered to carry 25 kilos that is waterproof, hygienic and as easy to carry than the lightweight supermarket bag which itself, weighs under 8 grams.

Should this singularly daft proposal become part of law, the Government will be ridiculed worldwide for introducing a measure in an environment Bill which will increase the damage to the very environment they are charged with preserving.

Hazel Elliot
February 2009
Introduction

The Federation of Small Businesses is Scotland’s largest direct-member business organisation, representing around 20,000 members. The FSB campaigns for an economic and social environment which allows small businesses to prosper.

FSB Scotland has consistently highlighted the need for the Scottish Government to examine how waste disposal options for small businesses can be expanded, to allow Scotland and business to benefit from the opportunities offered by increased business recycling.

We recognise the role that business must play in achieving a more sustainable Scotland and we believe that small businesses have demonstrated their commitment to this in recent years; however small businesses require support to change, particularly in the current financial climate. While we support the government’s aim to take action in relation to improving business (including public sector) recycling, we strongly believe that offering carrots, instead of, or in addition to, sticks would be a more beneficial way to progress.

Small Businesses and the Environment

We have always been happy to share data on environmental performance of small businesses with the Scottish Government. We previously carried out a membership survey on waste disposal in late 2004. At that time we learned that 43% of our members recycled some waste. The majority did not have hazardous waste streams, mainly disposing of paper, cardboard, and food waste (similar to household waste). Most businesses had their waste collected by their local authority.

 Recent survey work with FSB members suggests that Scottish businesses have made progress and have a commitment to environmental improvement. Initial data (not yet published) shows that 40% of our members have changed the operation of their business as a result of climate change.

In examining the most important catalyst for future improvements, the main factor cited was a general concern for the environment — fines and penalties were less important as motivation for change.
Data gathered in early 2008 for the biennial FSB membership survey. Data referred to is based on 708 Scottish responses.

Waste

This recent data also shows that 84% of small businesses are now recycling some of their waste — a substantial improvement on the 2004 survey data. Responses also underline the ongoing importance of local authorities in small business waste disposal in Scotland, particularly when compared with other areas of the UK. The majority see local authorities as the main source of advice on environmental legislation and Scottish respondents are most likely in the UK to recognise that their local authority offered business kerbside recycling at a charge. 63% and 68% report that they use local authority facilities to recycle cardboard and paper respectively.

We remain concerned that some of the persistent problems relating to recycling are still a factor. Many businesses still feel that no facilities are available for recycling (21% felt no recycling was available for catering waste for example) and cost was cited as the main barrier in waste disposal. Overall only 43% were satisfied with the level of recycling offered by their local authority, perhaps suggesting a frustration at current limitations.

Moving Forward

We believe that evidence from our members shows that progress has been made in improving recycling amongst small businesses, as well as strong indications of support for environmental improvement. The fact that we have made such dramatic progress suggests that a legislative approach is not the right way to improve and risks alienating the goodwill that clearly exists in the small business community.

Yet again we see evidence of the key role played by local authorities in waste disposal for small businesses in Scotland. We understand the concerns of local authorities regarding pressure of landfill targets but we reiterate our view that developing recycling services and facilities for local businesses would help increase valuable recyclate collected by local authorities and reduce the small business contribution to municipal landfill. We are pleased that many local authorities have made progress in recent years but this issue cannot be ignored and local authorities must recognise this if we are to make progress as a nation.

In considering the evidence we are concerned that the Scottish Government should not proceed with plans to force all businesses to recycle, or offer facilities to do so to their customers, until cost-effective, facilities are in place to cope with increased demand. We do not believe that appropriate infrastructure or services exist at present.

If the Scottish Government wishes to set specific standards for parts of the public sector — and the evidence for facilities at certain public amenities is
convincing - then small businesses should be specifically exempted at this stage. In the main this is because a large number of small businesses are not customer-facing (i.e. not shops or cafes open to public) and have hardly any employees (93% of all businesses have less than 10 employees). Therefore, legislation aimed at providing facilities for employees and customers would unfairly impact on the majority of small businesses.

Finally, we are disappointed that the consultation paper lacks detailed proposals, particularly since these proposals are likely to feature in primary legislation. The consultation paper is well structured and ambitions for legislation are clear but we reiterate our opposition to vague, enabling legislation. Some of the measures proposed have the potential to affect anywhere between a number of prescribed public sector premises, to tens of thousands of businesses. Clearly there is a vast difference in the cost and practicality of such extremes. To proceed to primary legislation without options which have been subjected to an effective business impact assessment would be both unwise and contrary to the Scottish Government’s support for the principles of better regulation. As a first step, when citing examples from other EU member states, the Scottish Government should, as a matter of course, also obtain relevant impact assessment information from the member state (down to costs per business, where available) to inform discussion of the practicalities and costs of such options.

Questions

PROPOSAL 1: DUTIES ON PUBLIC BODIES AND BUSINESSES TO PROVIDE RECYCLING FACILITIES

As outlined above, we do not believe the case has been made to place a duty on small businesses to offer facilities to customers and staff. Such a duty imposed on businesses would likely impact on the majority when in fact it aims to provide facilities in some specific locations and premises as an obvious first step to improving availability of recycling facilities. This is not a sound basis on which to impose a cost on businesses and we therefore welcome the reference to only applying this duty to units over a certain size.

If such a duty is placed on public bodies (particularly local authorities), we hope this might build capacity by encouraging greater thought about the availability of uplifts and facilities for recycling which could also be used, at a later stage, for small businesses.

PROPOSAL 2: PACKAGING

There is little doubt that there is a growing public mood against excessive packaging. The problem lies in identifying those with influence and responsibility to reduce packaging — most small businesses have no clout whatsoever in terms of supply chain pressure.

The suggestions for legislation tend to suggest that retailers will be expected to provide a lot of paperwork on excess packaging when they are not the main
source of the problem. We cannot see what will be gained by placing a further reporting burden on small retailers.

PROPOSAL 3: SPECIFYING RECYCLATE

We see the need to continue to support the use of recycled material in, say, construction contracts and to extend this where appropriate to other spend by the public sector. We must, however, be careful to ensure this duty does not contradict wider aims of sustainable procurement, particularly the benefits of buying from local sources. We cannot see any relevance to purchasing by small businesses and recommend they be exempted from such a duty.

PROPOSAL 4: WASTE PREVENTION PLANS

We support the Scottish Government’s aim to place greater emphasis on commercial and industrial waste. We recognise that having a forward strategy for dealing with waste will be a key factor for many organisations, particularly large parts of the public sector involving many different complex services and premises. For the majority of small businesses who probably operate from one premises, have few employees, and straightforward waste streams, we cannot see the benefit of such plans outweighing the bureaucratic burden. We do support, however, an increase in advice and aware-raising for small businesses about the benefits to the business of reducing, re-using and recycling waste but we must be careful not to raise expectations — many businesses would like to recycle more waste but simply do not see practical, affordable options.

PROPOSALS: DEPOSIT AND RETURN

We agree that there is a history of operating deposit and return schemes in Scotland; therefore it may be easier to encourage public participation in such a scheme. There are clearly a number of issues which would need to be addressed and which cause particular concern for small businesses. We agree that a working party to help develop such proposals would be an effective way to proceed. We note the likelihood of exemptions for small businesses not being available however we think it would be worth exploring phased introduction, should the government decide to proceed with deposit and return. This could result in a pilot project (perhaps voluntary?) as a first step, followed by rolling out to larger stores in the first instance.

We will gather more detailed views from smaller retailers regarding practicalities of such a scheme however in the meantime the concerns for small businesses would include:

- Practicality of storing cans/bottles — consider fire and health and safety aspects
- An increase in paperwork and costs associated with running the scheme, particularly clarity of deposit money for accounting purposes
• Enforcement — would local authorities be best-placed to interact with local businesses?
• Fees — businesses should be encouraged to participate, therefore imposing a fee/licensing structure would not be helpful
• Reverse vending — we support the use of technology to facilitate the scheme but will this be possible or affordable for small businesses?’
• Support - in rolling out such a scheme it is likely small businesses would require some kind of source of information and advice
• Impact on existing kerbside recycling by local authorities

Lastly, since this proposal is based on two existing schemes, it would be helpful (in advance of any working group) to gather relevant information from those countries regarding the practicalities for businesses of: separation, storage and collection of the goods; any impact on existing waste collection and additional costs on business; and, bureaucratic and accountancy implications for business.

PROPOSAL 6: MANDATORY WASTE DATA RETURNS FROM BUSINESS

While we accept that it is clearly necessary to have information on waste streams in order to plan and build appropriate infrastructure, we would nonetheless like to see more explanation of which specific information is required and for which policy purposes. This justification would make it clearer where information requirements should be targeted and there would then be a clearer proposal for legislation or working with particular sectors to develop a plan for gathering more comprehensive data (with the threat of legislation). We also believe that there must be scope to improve the sharing of data gathered through different licensing procedures and/or government agencies. We welcome SEPA’s indication that they will address this - surely, this should be completed before any legislation is discussed?

At present, we are not convinced that the small amounts of non-hazardous waste from most small businesses require blanket legislation potentially forcing them to complete paperwork which would be of little value. If any data requirement legislation is introduced, it must be combined with a review of other environmental data gathered from businesses so that some kind of streamlining or reduction can be achieved.

PROPOSAL 7: OTHER MEASURES TO ENCOURAGE WASTE PREVENTION, INCLUDING ACTION ON SINGLE-USE CARRIER BAGS

The FSB’s response to legislative measures to reduce the use of plastic carrier bags is well documented. We believe that previous proposals were likely to impact most severely on small, non-food retailers — who we suggest are least likely to be perceived as the main perpetrators’ of excess use of carrier bags. We believe that focusing on carrier bags has been a distraction from more substantial issues regarding business recycling — some of which have been discussed in this document.
RIA
We welcome the work initially carried out for the partial RIA but would encourage the Scottish Government to incorporate the use of the Business Impact Assessment, as recently recommended by the Regulatory Review Group in Scotland. We do feel that some of the conclusions reached regarding costs to business are perhaps rather optimistic.

Further detailed information (particularly looking at costs) from other countries would help develop the RIA further and would then help the Scottish Government determine which proposals are viable on the basis of excessive cost and practicality implications for businesses (and the public sector).

FSB
October 2008
RURAL AFFAIRS AND ENVIRONMENT COMMITTEE
CLIMATE CHANGE (SCOTLAND) BILL
SUBMISSION FROM KERRY FLEMING

The arrogance of Environment Minister, simply beggars belief. He informs us the public want Government to do something about the carrier bag issue and so he invidiously includes powers to deal with such bags in the proposed Climate Change (Scotland) Bill.

The fact of the matter is that there have been two official consultations on the subject: one received over 1200 individual responses of which over 1100 were specifically against the introduction of a levy or tax on plastic carrier bags. The second stated categorically that the proposal relating to carrier bags (section 59 in the Bill) only received support from a minority of respondents.”

If the Government were to be honest enough to ask the nation, if the introduction of a projected tax of over 600% on a product which was currently given away free was on their personal wish list, they would be told to check in to the mental institution.

This is yet another example of Government choosing to ignore facts in favour of political spin and to promote an issue which will inevitably produce more waste and unwelcome greenhouse gas emissions contrary to the Kyoto Protocol, The Bali Agreement, the Posnam accord and subsequent EU requirements on reducing carbon dioxide emissions is simply irresponsible.

This measure will INCREASE carbon dioxide emissions, increase methane emissions, increase tonnage of waste, increase landfill requirements and increase transport requirements from 76,000 pallets per year running around Scotland to 639,000 pallets running around Scotland.

This section 59 in the proposed Bill should be eliminated in its entirety. Please register my objection accordingly.

Kerry Fleming
February 2009
I wish it to be recorded that I object in the strongest possible terms to the inclusion of Carrier Bags within the proposed Climate Change (Scotland) Bill.

It was clearly stated by the previous Environmental and Rural Development Committee (ERDC) that the environmental objectives in introducing a charge could not be met and to proceed with the inclusion of such a proposal in the Climate Change (Scotland) Bill without any further robust evidence is a condemnation of the scrutiny and conclusions reached by the ERDC.

It has already been proven, categorically, that the introduction of such a proposed charge will see a substantial increase in the waste findings in Scotland and in doing so will see the Scottish Government incur the most severe penalties under EU agreements. Those penalties will run into millions of pounds which will ultimately have to be met by the Scottish taxpayer.

Amanda Galisden
25 February 2009
I wish to object to section 59 of the Climate Change (Scotland) Bill as the consequences of introducing any charge for carrier bags is that more waste and carbon dioxide will result.

Many supermarkets now impose a charge on lightweight carrier bags yet our waste mountain is increasing. The inclusion of Section 59 will see a massive increase in bags such as paper, jute, cotton and nylon which cannot be recycled thereby increasing waste. Section 59 will not address the real climate change dilemma merely increase costs for everyone.

Sandra Giddy
26 February 2009
RURAL AFFAIRS AND ENVIRONMENT COMMITTEE

CLIMATE CHANGE (SCOTLAND) BILL

SUBMISSION FROM GRANT JAMES HENDRY

I wish it to be recorded that I object in the strongest possible terms to the inclusion of Carrier Bags within the proposed Climate Change (Scotland) Bill.

It was clearly stated by the previous Environmental and Rural Development Committee (ERDC) that the environmental objectives in introducing a charge could not be met and to proceed with the inclusion of such a proposal in the Climate Change (Scotland) Bill without any further robust evidence is a condemnation of the scrutiny and conclusions reached by the ERDC.

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Grant James Hendry
February 2009
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It has already been proven, categorically, that the introduction of such a proposed charge will see a substantial increase in the waste findings in Scotland and in doing so will see the Scottish Government incur the most severe penalties under EU agreements. Those penalties will run into millions of pounds which will ultimately have to be met by the Scottish taxpayer.

William Hamilton
February 2009
I wish to object to the inclusion of Section 59 of the aforementioned Bill. The Environment Minister wants to tax single use carrier bags as a measure to educate the public to be aware of our disposable society. They have stated that it is neither a waste nor a litter matter, which is just as well as the inevitable consequences will be more tonnage and cubic capacity taken in waste findings due to alternative products substituted. Section 59 is what appears to be a last minute hook onto the Climate Change Bill to grant this power to the Government should they require to do so, yet we have had no definition of what a “single use” carrier bag encompasses.

Why we in Scotland need to have this Section 56 included just because the UK Government wants it is unjustified.

Defra and Wrap, between them have acknowledged that 80% of all UK carrier bags are currently already reused at least once, so presumably that takes such bags out of the tax net although just how that is going to be policed is yet to be determined. There is, contrary to what Ms Kennedy has stated, no public support for a further tax on the public and whilst there may be a number of wealthy politicians who believe this to be an insignificant tax, the public who have less income than they have, are content with the present free plastic carriers secure in the knowledge that they will have a receptacle for sports gear, packed lunches, shoes and the myriad of SECONDARY uses to which lightweight carrier bags are reused.

Lightweight supermarket bags are specifically being targeted, yet their very lightness is what makes them so highly efficient. There is NOTHING that is engineered to carry 25 kilos that is waterproof, hygienic and as easy to carry than the lightweight supermarket bag which itself, weighs under 8 grams.

Should this singularly daft proposal become part of law, the Government will be ridiculed worldwide for introducing a measure in an environment Bill which will increase the damage to the very environment they are charged with preserving.

David Houston
February 2009
Please register my objection to the section in this Bill (Section 59) which gives power to the Scottish Ministers to introduce charges for carrier bags.

We in Scotland have already seen this plea for legislation rejected by Parliament and spent time and taxpayers money doing so.

Lightweight carrier bags are being touted as “single use” by our Environment minister Richard Lochhead. If they are, then more fool him for not reusing them as most of the public already do. Even his own DEFRA colleagues acknowledge that 80% are reused at least once.

Now he wants to tax these efficient bags for no other reason than to educate the public. What drivel emanates from Government — pray tell us uneducated masses when was the last time the imposition of a tax educated anyone on a specific policy other than to educate them that their Government is grasping at straws.

Pray tell the world, who is it that wants more taxes which will result in damage to the environment on already stretched incomes, when we are being advised we should be trying to help the environment?

B Jervis
26 February 2009
I am writing as part of the above call for views on behalf of the John Lewis Partnership (JLP). Across the UK, the Partnership operates 27 department stores johnlewis.com, 198 Waitrose supermarkets and Greenbee.com, a direct services company. The business has an annual turnover of over £6.8bn. It is the UK’s largest example of worker co-ownership where all 69,000 staff are Partners in the business, sharing in its decision making and in its financial success. We welcome the opportunity to contribute to the committee’s call for views and support the Scottish government’s commitment to tackling climate change through the Climate Change Bill and more specifically its aim of zero waste.

The John Lewis Partnership’s waste strategy is based on our ambition to divert our waste from landfill by reducing, reusing, recycling or recovering energy from all our commercial waste and packaging. We have an overarching target to divert 95% of our waste from landfill by 2013. Delivery of this is supported by a range of specific targets and initiatives in John Lewis and Waitrose.

In summary:

**Waitrose targets**
- Recycle 75% of all Waitrose waste by year-end 2012
- Reduce own-brand packaging by 2013 on a like-for-like basis, compared with 2005, and work with suppliers to encourage similar reductions
- Apply packaging recyclability labelling to own-brand products by year-end 2009
- Continue to explore ways to reduce food waste and provide practical information in-store and online to raise customer awareness of this issue
- Continue anaerobic digestion trials

**John Lewis targets**
- Recycle 50% of all John Lewis waste by year-end 2010
- Help achieve the collective retailer, WRAP, Government target of a 50% reduction in single use carrier bags

**Scottish Government’s zero waste proposals**

**Question 15 – Recycling**

The Partnership believes that as a responsible retailer it is helping to establish examples of best practice in this area. The Scottish Government’s packaging and waste proposals are welcomed and we supporting voluntary codes to take these forward. These have worked well in the past and good progress is being made. Regulation seems to us unnecessary where voluntary agreements with industry could produce as constructive and positive outcome.
The Partnership actively encourages customers to recycle both in and out of the home. We have highlighted some of the recycling initiatives and our efforts to encourage customers, below:

**Recycling initiatives**

Our waste and recycling procedures continue to deliver significant improvements, helping us towards our ongoing objective to divert 95% of our waste from landfill. In 2008–09, Waitrose diverted half (50%) of our waste, saving over 23,257 tonnes from going to landfill.

In an attempt to maximise the recycling opportunities across the business, our efforts have included:

- introduced battery recycling and polystyrene briquette-making at Cambridge
- shared backhauling capacity at Rushden and in Scotland
- plans to send non-recyclable waste from the Waitrose head office in Bracknell to the first purpose-built ‘energy from waste’ incineration facility, due to be commissioned next year.
These procedures continue to deliver substantial cost savings and a step change in our waste recycling. In 2008/09 John Lewis we diverted 4,814 tonnes of waste from landfill (43%).

A collaborative arrangement sees cardboard and polythene bales from Waitrose Comely Bank, as well as segregated waste material from John Lewis Edinburgh, backhauled to our local Distribution Centre.

Under the terms of the Packaging Waste Regulations, we are also legally obliged to recover and recycle 55–80% of our product packaging. We do this by contributing over £1 million a year towards a recycling compliance scheme, which invests in kerbside collections and public recycling centres so that customers can recycle the packaging they take home. We also use returnable transit packaging for around 41 million trips annually through our Waitrose supply chain. We encourage Local Authorities to offer other recycling points in our Waitrose car parks, where space permits, for materials such as clothing, glass and paper, and encourage customers to reuse and recycle plastic bags, or switch to more sustainable alternatives. There are also carrier bag recycling facilities in Waitrose shops, with certain John Lewis shops trialing such facilities.

**Encouraging customers**

To help our customers to recycle, where possible, we clearly identify the materials used in our own-label packaging, and we have recently worked with the Waste and Resources Action Programme (WRAP) and other retailers to develop concise, consistent recycling messages on back of pack.

We fully support the Waste Electrical and Electronic Equipment (WEEE) Regulations which allow people to recycle old electrical and electronic appliances at sites across the UK, free of charge. The Partnership has contributed funds to the Distributor Take Back Scheme, which we helped to establish. This scheme is investing £10 million in local recycling facilities so customers can locally recycle their waste electrical and electronic items.

As a manufacturer of own-brand electrical products, we also have a responsibility for recycling waste electricals. So we are funding a compliance scheme to do this on our behalf. Our customers can learn more about the legislation, and their recycling options, through in-store leaflets and online at www.recycle-more.co.uk. All John Lewis and Waitrose Food and Home shops also offer mobile phone recycling.

**Fighting food waste**

Waitrose is the first national food retailer to successfully trial anaerobic digestion as a food waste solution. A trial for the past three months at five Waitrose branches (including Scotland) has been successful in sending food waste, both naked and primary packaged, to an anaerobic digestion plant in north Bedford. This has turned 251 tonnes of food waste into 50 megawatt hours of electricity - enough to boil 12,000 electric kettles for one hour.
This initiative will see us routing approximately 25% of the Partnership’s food waste to electricity production - rather than to landfill. The cost to do so is neutral compared to the current collection method of transporting food waste to landfill. However, as landfill costs continue to rise, this approach will reduce our future costs.

In addition to the energy which is generated, the digestate residue from the process, which is high in nitrates, can be spread on the land at certain times of year as a fertiliser to grow crops - and no damaging methane gas is released into the atmosphere.

The only constraint is that today the number of anaerobic digestion plants is very small as it is new technology to this country. As plants proliferate there is every reason to believe that all our food waste could be recycled in this manner.

Packaging
We are actively pursuing a policy of packaging reduction. While we agree with the assertion that there is significant scope for the reduction in packaging, certain types of packaging are essential to ensure that goods remain undamaged in transit and are hygienically presented to consumers. Any new regulations in this area should take account of this.

We have set out below the work we are doing in this area and believe that a combination of guidance and voluntary action will achieve further significant progress. The Scottish Government’s proposal to detail and report on all types of packaging for shops the size of John Lewis and Waitrose would require significant resource allocation, time and investment. We believe that as long as retailers are setting ambitious targets and meeting those targets such an approach is unnecessary.

Reducing packaging
We continually strive to find a balance between reducing packaging and making sure it still protects our products in transit and on the shelf. Waitrose, is a signatory of the Courtauld Commitment and has helped WRAP o achieve the first Courtauld target of eliminating packaging growth, despite a sharp increase in sales. Waitrose has itself reduced packaging consumption relative to sales by 36% since 2000 and our packaging designers are working to improve its performance and, where possible, reduce its weight. As part of our commitment, 50% of our organic produce now comes in degradable, biodegradable or compostable packaging. John Lewis is also playing its part in reducing packaging

Specifying recyclate
We are also looking at introducing products and packaging utilising recycled materials. However, we believe that business should be given the flexibility to innovate in this area without the constraints of legislation. Introducing recycled content tends to increase weight, which provides a challenge, as many of the measures currently in place are weight based.
Waste Prevention Plans
The John Lewis Partnership through its varied initiatives is committed to preventing waste. Guidance and voluntary action supported by government will help drive good practice and ensure that companies who already undertake measures to prevent waste continue to set and achieve ambitious targets. Also opportunities to share best practice and provide an ‘incentive’ to other companies at the start of the waste journey.

Deposit and Return
We would be willing to work with government to extend customer educational programmes and encourage the public to take responsibility for recycling and reducing the impact of their personal waste. Waste reduction on a large scale will only happen if the general public are educated, provision is made locally and responsibility is taken at home for personal waste. The implications of this scheme are difficult to quantify and may prove challenging and resource intensive to implement. Any such scheme also needs to be backed up by comprehensive consumer research to evidence their effectiveness and joined up with wider and more integrated waste management measures.

Mandatory Waste Data Returns from Business
We believe that a mandatory approach to data returns is unnecessary and would be expensive and bureaucratic to set up and operate. The voluntary targets and existing measures are designed actively to reduce consumption, recycle, reuse and dispose of waste sustainably. Such a measure, in our view, would only serve to add further layers of bureaucracy where that none are necessary. We already provide data as part of our Packaging Waste and WEEE obligations (this will soon include Batteries as well). Also, we voluntarily report data for Waitrose as part of our commitment to the Courtauld Commitment and the Voluntary Agreements on carrier bags. We also participate in the British Retail Consortium’s Better Climate Initiative. In addition, we voluntarily report our performance across this whole area through our Corporate Social Responsibility work.

Other measures to encourage waste prevention, including action on single-use carrier bags
We agree with the Scottish Government’s voluntary approach to plastic bags. We have carefully evaluated all options open to us for driving a reduction in customer usage. We firmly believe that a national campaign supported by both retailers and Government is the only way to change people’s habits. This is why both John Lewis and Waitrose signed up to the initial Government Voluntary Code of Practice on Carrier Bags in 2007 and the more recent agreement with food retailers. As part of this commitment we have installed many practices to reduce the environmental impact of our carrier bags and to discourage use or encourage reuse. In Waitrose activities such as increased Partner training, prominent customer communications instore, ensuring our mainline checkout are visibly clear of carrier bags and offering customers a Bag For Life before any single use bags are dispensed, has already helped us to achieve a cumulative reduction in carrier bag usage to date of 37.5% (avoiding the use of around a million bags). Waitrose is optimistic that we can achieve an overall 50% reduction by May 2009 and build on this longer term.
In John Lewis, the introduction of a Bag for Life has also helped drive reductions in free issue plastic bags. John Lewis are also working to introduce a wide variety of reusable bags to help drive further reductions in carrier bag usage.

**Summary**
The John Lewis Partnership welcomes the Scottish Government's commitment to 'zero waste'. We take pride in our reputation as a responsible retailer and we are committed to reducing, reusing, recycling and disposing of waste responsibly. We believe that a voluntary approach, supported by the sharing of good practice and government guidance is the right approach. A statutory approach may add unnecessary and cumbersome levels of bureaucracy and cost. These could place Scottish companies at an unfair competitive disadvantage.

We would welcome the opportunity to engage with the Transport, Infrastructure and Climate Change Committee and the Scottish Government to take any of these proposals forward.

John Lewis
5 March 2009
Dear Sirs,

Re call for views on Climate Change (Scotland) proposed Bill.

Kindly register my objection to the section of this proposed Bill which relates to carrier bags.

The Environment Department is presumably supposed to be protecting the environment, yet we are expected to suffer the ignominy of paying a tax for our carrier bags at the supermarket which has been specifically proven by the Scottish Government in 2006 to result in more damage to the environment by the substitution of smelly, bulkier and heavier alternatives.

If we have no free plastic bags we will just have to buy plastic bin liners instead, costing us even more of our hard earned net of tax, earnings, and by so doing will only increase the amount of raw materials used. Is this not simply madness?

L Lammie
February 2009
I wish to object to the inclusion of Section 59 of the aforementioned Bill. The Environment Minister wants to tax single use carrier bags as a measure to educate the public to be aware of our disposable society. They have stated that it is neither a waste nor a litter matter, which is just as well as the inevitable consequences will be more tonnage and cubic capacity taken in waste findings due to alternative products substituted. Section 59 is what appears to be a last minute hook onto the Climate Change Bill to grant this power to the Government should they require to do so, yet we have had no definition of what a “single use” carrier bag encompasses. Exactly how legislation to impose a charge for carrier bags will improve our waste findings is utterly baffling.

Defra and Wrap, between them have acknowledged that 80% of all UK carrier bags are currently already reused at least once, so presumably that takes such bags out of the tax net although just how that is going to be policed is yet to be determined. There is, contrary to what Ms Kennedy has stated, no public support for a further tax on the public and whilst there may be a number of wealthy politicians who believe this to be an insignificant tax, the public who have less income than they have, are content with the present free plastic carriers secure in the knowledge that they will have a receptacle for sports gear, packed lunches, shoes and the myriad of SECONDARY uses to which lightweight carrier bags are reused.

Lightweight supermarket bags are specifically being targeted, yet their very lightness is what makes them so highly efficient. There is NOTHING that is engineered to carry 25 kilos that is waterproof, hygienic and as easy to carry than the lightweight supermarket bag which itself, weighs under 8 grams.

Should this singularly daft proposal become part of law, the Government will be ridiculed worldwide for introducing a measure in an environment Bill which will increase the damage to the very environment they are charged with preserving.

Lynda Lammie
February 2009
Please register my wish to see the whole of section 59 of the Climate Change (Scotland) Bill removed from this proposal.

Should we get rid of single use carrier bags as the Government is encouraging us to do or they will introduce legislation to charge the public for free bags? Just what do they expect us to use to transport retail purchases from shop to home? They want us to use alternative reusable bags which they erroneously believe will help the environment, yet all give cause for environmental concern.

Degradable lightweight bags are not acceptable to environmentalists even though they are made from polyethylene which is easily recycled. If a 4% degrading additive is added to make them so called BioDegradable the plastic is lost to the world forever as BioDegradable films, by their very nature, are not recyclable. In these days of recycling surely this is socially unacceptable.

Starch based compostable carrier bags are not currently strong enough or economically viable. They too are socially unacceptable considering the requirement of having to grow high yield starch based food crops to make them whilst more than 25% of the world’s population is starving. We have, within the last three months already seen food riots in various parts of the undeveloped world due to food prices increasing dramatically as corn and other food is used to produce ethanol for motor fuels.

Woven polypropylene and non woven polypropylene bags, now prevalent in our supermarkets, are just plastic bags in a different guise. Jute and cotton bags are the preferred option of the well intentioned Environmentalists. Both products essentially emanate from the Indian sub-continent and little wonder, considering they do not give one jott about the environment.

Just how on earth can transporting these heavier, bulkier, fuel guzzling alternative products all the way from India and beyond, be more Environmentally friendly?

The lightweight, waterproof, non-absorbent plastic carrier bag is the best alternative. Reuse it where hygienically possible and when its useful life expires, recycle it in one of the major supermarkets collection bins. It will then be recycled and converted into a whole host of products i.e. black refuse sacks, bin liners, agricultural and building films to name just a few.

As responsible adults we should REDUCE – REUSE – RECYCLE if it just wasn’t so damned difficult.

Claire Lamont, 25 February 2009
I wish it to be recorded that I object in the strongest possible terms to the inclusion of Carrier Bags within the proposed Climate Change (Scotland) Bill.

It was clearly stated by the previous Environmental and Rural Development Committee (ERDC) that the environmental objectives in introducing a charge could not be met and to proceed with the inclusion of such a proposal in the Climate Change (Scotland) Bill without any further robust evidence is a condemnation of the scrutiny and conclusions reached by the ERDC.

It has already been proven, categorically, that the introduction of such a proposed charge will see a substantial increase in the waste findings in Scotland and in doing so will see the Scottish Government incur the most severe penalties under EU agreements. Those penalties will run into millions of pounds which will ultimately have to be met by the Scottish taxpayer.

Donna Lee
February 2009
Please register my objection to the section in this Bill (Section 59) which gives power to the Scottish Ministers to introduce charges for carrier bags.

We in Scotland have already seen this plea for legislation rejected by Parliament and spent time and taxpayers money doing so

Lightweight carrier bags are being touted as “single use” by our Environment minister Richard Lochhead. If they are, then more fool him for not reusing them as most of the public already do. Even his own DEFRA colleagues acknowledge that 80% are reused at least once.

Now he wants to tax these efficient bags for no other reason than to educate the public. What drivel emanates from Government — pray tell us uneducated masses when was the last time the imposition of a tax educated anyone on a specific policy other than to educate them that their Government is grasping at straws.

Pray tell the world, who is it that wants more taxes which will result in damage to the environment on already stretched incomes, when we are being advised we should be trying to help the environment?

J MacDonald
26 February 2009
I wish it to be recorded that I object in the strongest possible terms to the inclusion of Carrier Bags within the proposed Climate Change (Scotland) Bill.

It was clearly stated by the previous Environmental and Rural Development Committee (ERDC) that the environmental objectives in introducing a charge could not be met and to proceed with the inclusion of such a proposal in the Climate Change (Scotland) Bill without any further robust evidence is a condemnation of the scrutiny and conclusions reached by the ERDC.

It has already been proven, categorically, that the introduction of such a proposed charge will see a substantial increase in the waste findings in Scotland and in doing so will see the Scottish Government incur the most severe penalties under EU agreements. Those penalties will run into millions of pounds which will ultimately have to be met by the Scottish taxpayer.

V MacDonald
February 2009
The provisions of section 59 of the proposed Bill will INCREASE the waste generated in Scotland, rather than reduce it. This was clearly agreed and acknowledged in 2006 when the Bill for the introduction of a levy on plastic bags was finally rejected by ALL members of the Committee at Holyrood which was charged with investigating it. Government and Parliament agreed that an extra 13,500 tonnes of waste would arise resulting in the Bill being thrown out by a unanimous all party committee in 2006.

The Scottish purse has already been pillaged of two million pounds in arriving at that decision, is there any need to waste more taxpayers money to arrive at the same answer.

Since then matters have gone from bad to worse, with the supermarkets introducing heavyweight jute, cotton polypropylene and other types of bags with greater weight and bulk than those bags they purported to replace. Even with a 50% reduction in the NUMBER of bags used in Scotland every year, it is estimated that with the products actually in the market place the weight of the products used will increase from 10,600 tonnes per annum to 38,400 tonnes per annum. Even worse, the bulk of these products will increase from 27,000 cubic meters to 232,000 cubic meters annually. This means we have to transport this bulk around the country using more transport and when it all goes to landfill or to recycling centres, then we will need not 76,000 pallets full of material but 639,000 pallets full of material to do so.

The Climate Change Bill is supposed to reduce Carbon emissions, the inclusion of this section 59 will INCREASE these emissions as well as further damage our infrastructure and our environment.

This clause must be removed in its entirety if the Government is serious about reducing the effects of Climate Change. I strongly object the inclusion of this Section 59 in the proposed Bill.

Derek Martin
February 2009
RURAL AFFAIRS AND ENVIRONMENT COMMITTEE

CLIMATE CHANGE (SCOTLAND) BILL

SUBMISSION FROM CRAIG McCANN

I wish it to be recorded that I object in the strongest possible terms to the inclusion of Carrier Bags within the proposed Climate Change (Scotland) Bill.

It was clearly stated by the previous Environmental and Rural Development Committee (ERDC) that the environmental objectives in introducing a charge could not be met and to proceed with the inclusion of such a proposal in the Climate Change (Scotland) Bill without any further robust evidence is a condemnation of the scrutiny and conclusions reached by the ERDC.

It has already been proven, categorically, that the introduction of such a proposed charge will see a substantial increase in the waste findings in Scotland and in doing so will see the Scottish Government incur the most severe penalties under EU agreements. Those penalties will run into millions of pounds which will ultimately have to be met by the Scottish taxpayer.

Craig McCann
February 2009
Please register my objection to the section in this Bill (Section 59) which gives power to the Scottish Ministers to introduce charges for carrier bags.

We in Scotland have already seen this plea for legislation rejected by Parliament and spent time and taxpayers money doing so.

Lightweight carrier bags are being touted as “single use” by our Environment minister Richard Lochhead. If they are, then more fool him for not reusing them as most of the public already do. Even his own DEFRA colleagues acknowledge that 80% are reused at least once.

Now he wants to tax these efficient bags for no other reason than to educate the public. What drivel emanates from Government — pray tell us uneducated masses when was the last time the imposition of a tax educated anyone on a specific policy other than to educate them that their Government is grasping at straws.

Pray tell the world, who is it that wants more taxes which will result in damage to the environment on already stretched incomes, when we are being advised we should be trying to help the environment?

D Millar
26 February 2009
I wish to object to section 59 of the Climate Change (Scotland) Bill as the consequences of introducing any charge for carrier bags is that more waste and carbon dioxide will result. This section should be excluded as I clearly do not agree with it.

What a ridiculous idea to include a proposal to charge for carrier bags in a Climate Change Bill. Charging for carrier bags will increase not only waste but harmful emissions. We will see a massive increase in bags such as paper, jute cotton and nylon which cannot be recycled thereby creating and increasing more waste???

A possible rethink is due on this one.

Thanks

Roseanne Miller
20 February 2009
Please register my wish to see the whole of section 59 of the Climate Change (Scotland) Bill removed from this proposal.

Should we get rid of single use carrier bags as the Government is encouraging us to do or they will introduce legislation to charge the public for free bags? Just what do they expect us to use to transport retail purchases from shop to home? They want us to use alternative reusable bags which they erroneously believe will help the environment, yet all give cause for environmental concern.

Heavyweight plastic carrier bags have always been available, but are limited in their reuse. If blood from meat or fish taint the insides then the bag should be discarded or the risk of cross infection on reuse becomes prevalent. Similarly bleach, soap powder or milk spills render the bags hygienically suspect and discarding such spoiled bags is the only safe option.

Degradable lightweight bags are simply not acceptable to environmentalists as they are made from over 90% polyethylene which is easily recyclable but if the 4% degrading additive is added, then the plastic is lost to the world forever. In these days of recycling this is socially unacceptable.

Bio-degradable bags are not currently strong enough or economically viable and are not socially acceptable when you have to grow food to make them with over 25% of the world’s population going to bed hungry. We have, within the last three months seen food riots in various parts of the undeveloped world due to food prices increasing dramatically as corn and other food is used to produce ethanol for motor fuels.

Woven polypropylene and non woven polypropylene bags now prevalent in our supermarkets are actually both plastic bags and whilst sturdy, are both internally absorbent for all spills mentioned in the preceding paragraph. Additionally non woven polypropylene bags are externally and internally absorbent and this able to transfer street dirt (dog excrement, street germs, both human and animal) into the fabric.

Jute and cotton bags are the preferred option of the well intentioned Environmentalists and the blue rinse brigade. Both products essentially emanate from the Indian sub-continent and if you examine in situ, the standards of working conditions, public health, hygiene, and ethical issues of underage workers in that area, it is highly unlikely that anyone with a modicum of intelligence or any interest in hygiene or moral issues would ever consider using either of these types of bags. Dirty, filthy, badly lit, working conditions, open to insect infestation, where cows freely roam the streets outside, where 90% of the population do not have ACCESS to a toilet, where there is no
running water, crowded workers, many of them clearly underage, work for a pittance in unsafe conditions using antiquated machinery, producing jute and cotton bags for direct food contact is not what anyone should consider an environmentally friendly option. Good luck with the e-coli, the sanitation diseases, the salmonella, and the other diseases commensurate with a product into which grubby hands and feet have been sewing in unhygienic conditions. Again these products are absorbent and not waterproof rendering them susceptible to hygiene implications. Some of the jute bags do have plastic inside, so defeat the point anyway, and washing uses water, electricity, chemicals and damages the environment further.

The transport implications are horrendous with heavier and bulkier alternatives using an estimated 4,000,000 more full (unlikely) pallet journeys every year throughout the UK, of which some 500,000 will be in Scotland.

The lightweight, waterproof, non-absorbent plastic carrier bag is the best alternative. Reuse it where hygienically possible, when its useful life expires, recycle it in one of the major supermarkets collection bins where it is turned into black refuse sacks, bin liners, agricultural and building films.

Alastair Monteith
25 February 2009
RURAL AFFAIRS AND ENVIRONMENT COMMITTEE

CLIMATE CHANGE (SCOTLAND) BILL

SUBMISSION FROM MURDOCH BROTHERS BUTCHERS

I would like to register an objection to the introduction of section 59 in the bill allowing Ministers at Holyrood to impose charges on carrier bags. As we are a butchers business selling fresh meat to the public, disposable carrier bags is the most hygienic method of transporting meat from the retailer to the home. Other materials paper cloth etc are not suitable for fresh meat products if the packages in the carrier bag leaks.

Graham Murdoch
25 February 2009
I write specifically in regard to Section 59 of the Climate Change (Scotland) Bill. My frustration is that I want to write volumes about this matter but I doubt that you would have time to read them. I will therefore be extremely grateful for nine minutes of your time to read what follows.

An independent report carried out in 2005 by AEA Technology, and commissioned by the Scottish Government, concluded that a levy on plastic carrier bags would INCREASE Scotland’s waste by 13,700 tonnes annually. Strange, but true! Check the report, or perhaps give Richard Lochhead a ring to confirm this fact. He was a member of the committee which studied this report. In 2006 he said, quote, “SNP accepts the urgent need to cut down the amount of waste produced but this proposed Bill (to charge a levy on plastic bags) may have simply resulted in displacing the environmental impact of plastic bags to other areas ... even the introduction of a simple levy would turn into a legislative and practical nightmare.

In 2006, members of the Environmental and Rural Development Committee had access to what was described as the most comprehensive study of this subject ever, and a study which cost a reported £2 million of taxpayers’ money. Not a single member of this committee, which included Richard Lochhead and a representative of the Green Party, concluded in favour of a levy on plastic carrier bags.

Please do not be fooled by the much proffered claim that, “My old mam used to do her shopping in a shopping bag that she’d had for twenty years.” The reason your old mam managed this was because she stayed at home! She did the cooking, she did the washing and the cleaning, and more. And, DAILY, she went with her one shopping bag to the corner shop (which is no longer there) to do her daily shopping and she topped up later in the evening from the grocers’ vans which went round the doors. Things have changed. Most families would now have to cart 10-15 of these bags to the supermarket to carry the family’s WEEKLY shopping, if indeed the family can find a slot to do the WEEKLY shopping in today’s busy, often stressful lifestyle.

Please also do not be influenced by the perennially produced photographs of plastic carrier bags stuck in trees. If Scotland (and, indeed, the rest of the U.K.) has anything to be ashamed of environmentally, then it is its abysmal, constant failure to tackle litter louts. So much so, that most school children no longer even know that it is wrong to discard litter. Such an easy problem to solve if the will was there; such a miserable failure by politicians.

Plastic carrier bags are such an easy, but misguided target. It could be difficult to come up with a modern creation which has such a wide range of good uses and which creates so much convenience for the public AND which disturbs the environment so little, making up only 0.3% of landfill. As I say, such an easy, misguided target. I could offer 1001 alternative environmentally threatening targets for politicians but they simply would not have the courage
to take aim at them. I smiled inwardly recently, when discussing this matter with a good friend. She told me she always re-used plastic carrier bags as she always had some spare in her car. I asked her where she shopped. She shopped 300 yards from her home! Quite oblivious she was to the extensive damage she caused to the environment with her car while believing that she was single handedly saving the planet by re-using plastic carrier bags. I have to take my hat off to my opponents in this regard. They have done a magnificent job in convincing a sizeable (minority) of people that the planet can indeed be saved if we just start charging for plastic carrier bags. Of course, there is absolutely nothing wrong in re-using plastic carrier bags, and that is why the government funded organisation, W.R.A.P., was delighted to point out that 74% of plastic carrier bags are RE-USED, with this percentage rising. And yet, we still hear the constant mantra of ‘single use’ carrier bags. Also, if people are priced away from buying plastic carrier bags they will buy other plastic bags for their pedal bin liners, their dogs’ dirt and their 101 other uses. The same landfill percentage (0.3%) will accrue.

Two other points, if I may, to illustrate how we plastic carrier bag supporters have to compete against a referee who appears to have been told what the final score should be. In 2008, Griffiths and Scott of Glasgow Caledonian University published Social Research Document No.4/2008. In the document they clearly refer to a proposal to charge for ‘single use’ carrier bags having only received support from a MINORITY of respondents. Yet, in their extended analysis, significantly more emphasis was given to the minority of respondents who wanted legislation and what these people suggested any legislation should cover. It was a blatant manipulation of the finding that the MAJORITY of respondents did NOT want any legislation. Check the paper out for yourself; it would have been returned to any sixth former marked, “More work needed.”

Secondly, Parliament’s website says, “There are a few situations where we do not publish all the evidence sent to us. This may be for practical reasons: for example, where the number of submissions we receive does not make this possible or where we receive a large number of submissions in very similar terms. In that case, we would normally publish only a list of the names of people who have submitted evidence.” In 2006, when a Bill was put forward to charge a levy on plastic carrier bags the names of over one thousand of its opponents were simply listed as a ‘pro forma’ petition because the content of their submissions was deemed to be similar.

I now invite you to check out, [link]

You will see the names of approximately 190 people who have written in support of charging for plastic carrier bags. These people have not been listed as a petition because they have all made a very minor amendment to a standard letter which has been circulated to them. Mr. Eric Nisbet has been particularly helpful in this regard. If you scroll to his submission you will note that he has inadvertently entered his name after his customised ‘insert’.-
So, there we have it. The MAJORITY of people who are against charging are given less prominence in the Glasgow Caledonian University report than the MINORITY who want to introduce charging. And, the one thousand plus people who previously opposed such legislation were listed as a petition while the 190 who entered a ‘customised’ sentence to a ‘round robin’ letter are given individual status. I sense an uneven playing field!

Some other random points:

I often hear reference to taxing plastic carrier bags to increase our awareness of the environment. We are taxed throughout life and we are even taxed when we die. Please spare us a tax to make us think We deserve better than that.

I have many friends in Ireland; not researchers, not environmentalists, not politicians, but real people. They detest the inconvenience and added expense that has been foisted upon them by their government by charging for plastic carrier bags.

There has been talk about such a tax showing a surplus of income. It will never realise a surplus. I have worked for a local authority for thirty years and as sure as the sun rises in the morning an ever increasing costly empire will be created in each authority to deal with the ramifications of this Bill. Someone will be appointed to ‘police’ the levy. That person will require an assistant. Two people will require secretarial support. All will require computers and, of course, mileage claims. The department will soon require a manager. All these people will require extensive training, mainly health and safety, with costly annual ‘refreshers’. The end game? Another pointless, costly and ‘here to stay’ department in each local authority.

Please also don’t burden owners of small shops with the additional administration and the resultant hassle from customers. Independent owners are already struggling to survive.

The report before the E.R.D.C. committee in 2006 very clearly acknowledged that a tax on plastic carrier bags will impact most on people with a low income and people with a disability. Did these people expect such a tax when they voted for a Scottish Parliament?

I made a complaint to the BBC about a Radio 5 programme which featured two people against the use of plastic carrier bags and NONE in favour of their use. In his reply to my complaint (see attached) Philip Abrams, Complaints Director wrote, “Firstly, the report prepared for the Scottish Parliament, and the website you directed me to, considered the question of whether a levy on plastic bags would be effective. I don’t think it oversimplifies its findings much to say that it found the levy as planned, and a number of similar alternatives, would have, overall, more disadvantages than advantages, so it’s not surprising that the Scottish Parliament rejected the levy. An objective observation from someone with no axe to grind!

Anyone looking for other interesting reading would be advised to read the contribution of Lord Lawson to the House of Lords on the 17th of November 2008. Referring to the Climate Change Bill he said, “ Bill will go down in history, and future generations will see it, as the most absurd Bill that this House and Parliament as a whole as ever had to examine Strong stuff from someone who is no-one’s fool! The most interesting part of his speech,
however, is his reference to other countries now falling over themselves to retreat from previous ‘environmental commitments’ which they now realise will cost people money and which will also be grossly inconvenient for people. I think a tax on plastic carrier bags fits very comfortably into this particular bracket!

IF there ever becomes a good reason to charge for plastic carrier bags (doubtful) then please ensure that the matter comes before Parliament for a root and branch investigation of the issues at that time. To give ministers carte blanche to introduce a charge at any time is to render them vulnerable to the unceasing gnawing of people who are determined to make life as complicated and as expensive as possible for the rest of us in pursuit of their ‘Holy Green Grail’. Ministers only have to weaken once and we will be needlessly paying for plastic carrier bags forever against the logic of common sense. There is one other important point in this regard. Spare some thought for the hundreds of hard working, decent Scots folks whose jobs are under threat if charges are introduced. They have already lived through a stressful period in 2006 and now they and their families are being subjected to the same worries again at a time when jobs are being lost in tens of thousands. Don’t leave these hard working, decent Scots people with the Sword of Damocles hanging over them for ever and a day because a ridiculously easy environmental target has been identified.

I make one final plea to you because it is the one which will impact on your fellow Scots the most. Before you decide on this matter, please, go and watch the check outs in a busy supermarket. In your mind’s eye see the queue; see the person in front of you, including older people and people with a disability who already do magnificently in the rigours of supermarket shopping, footer about, trying to unravel the correct number of plastic bags brought from home before trying to calculate the minimum additional bags they have to purchase, followed by the recount when these are not sufficient. Or, alternatively, having to pay a charge from their moderate incomes. See the additional delays adding to an already stressful chore as people re group from the spillages as they try to cram ever more items into a single plastic bag. Ask yourself, were you really elected to make life more expensive, difficult and stressful for your fellow Scottish citizens?

Please, please kick Section 59 of this Bill well and truly into touch

Thank you for taking the time to read this.

J. Murdoch
27 Februaury 2009
5 Live Breakfast, 1 October 2008

Thank you for your further email of 31 January about this discussion of plastic bags. I’ve looked on the website you mention, and at the report prepared for the Environment Committee of the Scottish Parliament “Environment Group Research Report Proposed Plastic Bag Levy — Extended Impact Assessment” (available at http://www.scotland.gov.uk/Publications/2005/08/1993154/31553) I have also listened to the recording of the relevant part of the programme, and been in touch with Richard Jackson, its editor who told me

The peg for the item was the fact that Sainsbury was banning plastic bags from its checkouts. We wanted to consider with a PR expert whether this was a good strategic marketing move by the company. We also thought it would be interesting to reflect on the experience of a small town which had banned plastic bags completely.

The item came at a time when there was a momentum among stores to stop using plastic bags — and we were trying to assess the PR and marketing impact of the move. We were not attempting to base a discussion about whether plastic bags should be banned or not - we were attempting to explore whether supermarkets were enhancing their reputation by having such a ban. The guest from the town of Modbury was there to give his description of how a complete ban had worked.

The PR man was there to consider, whether the supermarkets were seeking to jump on a green bandwagon. The guest we had from a PR perspective came across as a keen advocate of the ban on bags, and so was not the impartial observer we were looking for.

I conceded in my earlier reply that I felt the presenter could have done more to put the view that some people are against a ban and doubt its worth, I have also said that we should bear in mind the arguments against the bag ban when doing future items. I am certainly happy to take up Mr Mudoch’s suggestion of looking the issue from the perspective of the industry and also the effectiveness of the bans some months after they came into force.

I would agree with much of this. It is certainly a matter of regret that Danny Rogers from “PR Week” chose to engage with the topic from a personal perspective. However, there are a number of points on the oilier side that I also have to consider.

Firstly, the report prepared for the Scottish Parliament, and the website you directed me to, considered the question of whether a levy on plastic bags would be effective. don’t think it oversimplifies its findings much to say that it found that the levy as planned, and o number of similar alternatives, would have, overall, more disadvantages than advantages, so it’s not surprising that the Scottish Parliament rejected the levy. But I don’t think the report considered the question of whether attempts to discourage plastic bag use by other means — such as Sainsbury’s decision to make them harder to obtain for customers - would be sensible.

Secondly, the presenter did make so efforts to put the arguments for plastic bags, pointing out that “plastic bags account for a very small amount of
landfill” and, when Danny Rogers suggest making plastic bags socially unacceptable, like smoking, and continued “just ban plastic bags because they are destroying the environment she responded:

Oh dear now you’re being controversial , making it the same as smoking, there, are still a lot of people who think the smoking ban, whatever the health messages, is an incursion of freedom, is that not the same, saying on can not have a bag or you will be a social pariah.

Thirdly the Guideline I quoted gives latitude to programme maker’s to “produce content about any subject, at any point on the spectrum of debate as long as there are good editorial reasons , for doing so “ As Richard Jackson explained, this was never intended as an examination of the merits of plastic bags, it was a discussion triggered by Sainsbury’s’ decision to keep plastic bags under the counter, rather than make them freely available to all customers.

Finally. I have considered whether plastic bags do fall into the category of a “controversial subject”. The guidelines’ explanation the term (and I apologise for omitting this from my previous letter) says:

In the United Kingdom controversial subjects are issues of significance for the whole of the country, such as elections, or highly contentious new legislation on the eve of a crucial Commons vote, or a UK wide public sector strike.

I do not think the use of plastic bags is the subject of any legislation currently before parliament, so I do not feel it falls into the category of a “controversial issue.

The test I have to apply is whether this discussion constituted a serious breach of the standards in the editorial guidelines. I think this is a closely balanced question here, because, like Richard Jackson, I do not think the item was wholly satisfactory. However, after reflecting carefully on the balance of arguments, I think this is the kind of case where the item was not itself so flawed it constituted a serious breach of standards. The presenter did make efforts to put the counter-arguments, and the facts suggest that it is the kind of subject where the guidelines give producers some latitude. In the circumstances, I do not feel I have grounds to uphold your complaint. I hope, however, I have been able to go at least some way to addressing your concerns. Nevertheless, if you are not satisfied with my decision I would be happy to consider any additional points you might wish to make. In any event, it is open to you to appeal to the Editorial Standards Committee of the BBC Trust. Correspondence for the Committee should be addressed to its Secretary, at the BBC Trust Unit, 35 Marylebone High St. London W 1U 4AA. The trust would normally require that an appeal is received within four weeks of the date of this letter, or of my subsequent letter in the event that you raise further issues with me within that time.

Complaints Director
Please note my objection to the section which grants powers to the Government to charge for carrier bags.

It is no coincidence that Marks and Spencers introduction of a charge of 5p for a plastic food carrier bag roughly coincides with a reported 6% reduction in their food sales. I for one, will not buy a carrier bag which advertises for free the shop which sells it, and regardless of their smarmy insistence of donating MY money to charity, I have voted with my feet. Patronising their customers will never be regarded as sound commercial practice, and so it has proved.

Furthermore, just earlier this month, they have INCREASED the weight of the green food bags they supply from 8.3 grams per piece to 17.5 grams per piece, thus using more than 100% more material when they should be REDUCING materials if they wish to help the environment.

All alternative carrier bags weigh more, cost more to make, cost more to transport and do more proven damage to the Environment than lightweight plastic bags.

This part of the Bill should be excluded as there is simply no need for any more regulation on carrier bags. Hasn't the public been taxed enough?

Sandi Murdoch
26 February 2009
Kindly register my objection to the section of this proposed Bill which relates to carrier bags.

The Environment Department is presumably supposed to be protecting the environment, yet we are expected to suffer the ignominy of paying a tax for our carrier bags at the supermarket which has been specifically proven by the Scottish Government in 2006 to result in more damage to the environment by the substitution of smelly, bulkier and heavier alternatives.

If we have no free plastic bags we will just have to buy plastic bin liners instead, costing us even more of our hard earned earnings, and by so doing will only increase the amount of raw materials used. Is this not simply madness?

Yours faithfully,

Jim Nicolson
18 February 2009
RURAL AFFAIRS AND ENVIRONMENT COMMITTEE

CLIMATE CHANGE (SCOTLAND) BILL

SUBMISSION FROM LYNNE ROBSON

This is in connection with section 59 of this proposed Bill

Marks and Spencer are again advertising free smelly part recycled plastic “bags for life” in their stores this weekend. That makes my family now able to have accumulated over 50 of these smelly recycled bags kicking about inquiry house with absolutely no chance of me reusing them for food. At least 5 of them are torn, 12 others have dried blood from meat bought at the butcher, 8 more have dried milk or fish liquid dried spills, 3 have soap powder grains in the base, 2 have spilt bleach and the many of the remainder have shoe polish scuffs or dirt from my golf shoes, dirt from potatoes, sweaty gym kit and bits of extraneous matters collected from work taken home, DIY projects and other indeterminate tasks that comprise my fairly normal lifestyle. The hygiene risk to the health to my family comes first, long before my sense of doing our bit for the environment.

These 50 bags collectively weigh 1920 grams which is already 166% of the collective weight of the average number of lightweight supermarket bags I am told I use every year. Furthermore I have not paid one penny for one of them, nor will I ever do so.

Earlier this month they have introduced a “New Greener Bag” in their food department which is supposedly made from recycled plastic. This new bag uses more than twice the plastic of the bag it replaced. Where is the sense in this stupid idea that this is protecting the world?

Am I alone in thinking this Government has again shot itself in the foot promoting at OUR expense a measure to, in the words of Gordon Brown “get rid of plastic bags”, when the unavoidable consequence of that unintelligent policy is to increase waste and damage the environment further?

Please register my objection to Section 59 of the Climate Change (Scotland) Bill as it has no place in our society as it will increase waste generated in the country and not in any way decrease waste generated.

Lynne Robson
February 2009
I first of all have to state that I agree with the principles of the Scottish Government on Climate Change. We all have a duty to reduce, recycle and reuse and lower our Carbon emissions.

I DO NOT agree with the proposal to lease (practically SELL OFF) forestry land and timber. I find this really strange on the concept of a 'Nationalistic Government' "selling off" the land to private and foreign companies. The Forestry Commission (FC) land holdings and operations are funded from the public purse, not just from Scotland but from all the UK. Has the question been put the people of these other countries concerning the loss of land which they fund?

The Forestry Commission has been in existence for ninety years and in that time has seen many changes and developments, this is by far the most draconian to date. The outcome could be the loss of employment for 100s of people and in a rural economy, devastating. The UK forest industry is seen by many organisation across the globe as a leader in forest management, land management, conservation, environmental protection and recreation it would be a great loss to the people of this country to lose that recognition.

Having had some time to consider the Governments proposals I strongly feel that changing the forestry act would permit the (FC) to enter into joint venture agreements with the major energy companies and businesses that would benefit the whole country and still help to reduce carbon emissions.

The FC has land and facilities that could be developed in partnership with private companies to generate income, create employment and be sustainable. Hydro power, wind power and bio power ventures are just a few that spring to mind.

In Scandinavia the use of Bio fuel is one area where joint venture investment has been successful. Local power plants, constructed by private companies or the state purchase the fuel from the forestry companies (both private and state owned) and sell the energy to the local communities. Everyone involved with the supply of the energy is being financially compensated.

We all know the potential financial returns from large scale hydro electric power schemes. However; small hydro power plants located within FC land generating energy to supply to local communities or the national grid could be just as profitable?
Kielder forest in North England is a good example of partnership working. The dam was constructed in the early 80s to supply power to the Consett Steel Works. With the steel works closing the water and potential energy was not required. Investigation and partnership working with several companies and organisations, including the FC and local council has seen the area prosper from energy being fed into the national grid and an expansion of recreation facilities around the dam. Which is creating employment, revenue to the local and national purse.

I see no reason why the Forestry Commission, Scotland (Government) cannot enter into these type of ventures with the power supply companies, instead of selling the ‘family jewels’ (cheaply I may add) to create a fast but short term answer to our current financial problems. Which has nothing to do with Climate Change of Carbon Reduction!!

Colin J Saunders
25 February 2009
I wish it to be recorded that I object in the strongest possible terms to the inclusion of Carrier Bags within the proposed Climate Change (Scotland) Bill.

It was clearly stated by the previous Environmental and Rural Development Committee (ERDC) that the environmental objectives in introducing a charge could not be met and to proceed with the inclusion of such a proposal in the Climate Change (Scotland) Bill without any further robust evidence is a condemnation of the scrutiny and conclusions reached by the ERDC.

It has already been proven, categorically, that the introduction of such a proposed charge will see a substantial increase in the waste findings in Scotland and in doing so will see the Scottish Government incur the most severe penalties under EU agreements. Those penalties will run into millions of pounds which will ultimately have to be met by the Scottish taxpayer.

David Saunders
February 2009
f the Scottish Government are serious about reducing waste then Section 59 should not be a part of Scotland's Climate Change Bill.

It is a ridiculous idea to include a proposal to charge for carrier bags in a Climate Change Bill. Charging for carrier bags will do nothing to tackle waste and will cause even more harmful emissions.

Section 59 should be removed from the bill.

Douglas Scott
February 2009
Please register my objection to the section in this Bill (Section 59) which gives power to the Scottish Ministers to introduce charges for carrier bags.

We in Scotland have already seen this plea for legislation rejected by Parliament and spent time and taxpayers money doing so.

Lightweight carrier bags are being touted as “single use” by our Environment minister Richard Lochhead. If they are, then more fool him for not reusing them as most of the public already do. Even his own DEFRA colleagues acknowledge that 80% are reused at least once.

Now he wants to tax these efficient bags for no other reason than to educate the public. What drivel emanates from Government — pray tell us uneducated masses when was the last time the imposition of a tax educated anyone on a specific policy other than to educate them that their Government is grasping at straws.

Pray tell the world, who is it that wants more taxes which will result in damage to the environment on already stretched incomes, when we are being advised we should be trying to help the environment?

L Scott
26 February 2009
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Pray tell the world, who is it that wants more taxes which will result in damage to the environment on already stretched incomes, when we are being advised we should be trying to help the environment?

M Scott
26 February 2009
This submission is presented on behalf of the Scottish Beer & Pub Association, the Society of Independent Brewers, the National Association of Cider Makers, the Gin and Vodka Association, the Wine & Spirit Trade Association and British Hospitality Association Scotland. Our members represent the vast majority of alcohol retailed in Scotland as well as supermarkets, pubs, restaurants and hotels. As responsible members of the business community we fully appreciate the dangers of Climate Change, have adopted policies to counter it and will support effective, proportionate measures to deal with this important issue.

Alcohol drinks producers have taken significant steps in recent years to reduce the amount of packaging they use. Working with the Waste & Resources Action Programme (WRAP), major steps have been taken to reduce the amount of glass in bottles, whether this is in beer, cider, wine or spirits. All our drinks sold in cans and bottles are now fully recyclable. As part of Climate Change Agreements Scottish producers have made extensive savings in Carbon emissions, and are amongst the most efficient in the world.

As well as this submission, a number of our individual members will be making wider submissions on the Climate Change (Scotland) Bill as a whole; however this submission responds solely on the issue of “deposit and return”, as identified at Question 15 in the TICC Committee’s call for views.

Our general view on deposit and return

We do not believe that legislation is needed in this area. It places a disproportionate cost on producers and retailers, and there are more effective ways to increase recycling already in place, such as increased kerbside collection from consumers. In addition local authorities should be allowed to count commercial waste towards their recovery targets.

As to reuse, this is now accepted as being more costly, in environmental terms as well as in cash, than recycling and could lead to concerns about hygiene and so public safety. Reuse schemes should not be encouraged except perhaps as a responsible procedure in tightly limited local schemes with full understanding of the risks and negligible Carbon footprint.
The practicalities of a return and deposit scheme in Scotland

**Considerable cost:** A deposit and return scheme would cause considerable additional cost to retailers. They are obliged to collect and store containers on behalf of manufacturers. They also have the responsibility for charging and returning the deposits. This places additional cost burdens throughout the supply chain and consequently on the consumer. Whilst this is a burden on the retail sector as a whole, it is particularly onerous on smaller retailers, who do not have the space or resource to deal with such an operation.¹

**Setup costs:** As well as the ongoing costs to business the set-up costs of such a scheme should not be ignored. Automated tills would need to be amended to allow the charging of a deposit, and there would also be training costs involved to assist staff in recognising which products are obliged to pay a deposit.

**Potential for fraud:** Putting a financial value on a container clearly incentivises potential criminality. With a value attached to each container there is the risk of fraud, whereby non-deposit paying containers are exchanged in return for a deposit. This can be negated in part by training (at a cost) but if the financial value is sufficient, then there is the potential for more sophisticated fraud. Deposits can also lead to people searching through litter for containers with deposits. There is also a danger with such a scheme that it could lead to counterfeiting of products as reused bottles lose their brand identity.

**On-trade issues:** The practicalities within the on-trade (pubs, clubs, restaurants, etc) are even more difficult. For a busy pub to operate a scheme would be very difficult indeed. A pub would be burdened with the same cost pressures as other retailers but would suffer particularly at closing time. There is likely to be a large number of people leaving at the same time, demanding the return of their deposit. This would cause huge problems for bar staff, who are concentrating on the orderly dispersal of their customers. A busy bar would be likely to need additional staff to deal with deposits, imposing additional costs on the business. If a deposit and return scheme were to be introduced, it seems logical that on-trade premises are excluded due to the specific aforementioned issues, especially given that existing arrangements already ensure high levels of recycling take place.

**Cross-border deposits:** A further issue arises with cross-border deposits. With a deposit scheme in Scotland and not in England there is the potential for Scottish retailers to be disadvantaged. Firstly, as the upfront cost will be lower in England then Scottish consumers are likely to purchase from England, particularly if this is a large purchase. The second potential downside is that consumers will purchase their goods in England and redeem

¹ The brewing industry has recently been considering a deposit scheme for kegs and casks. This is totally unrelated to this issue and was as a result of container thefts due to the high value of scrap metal. The scheme has not been introduced due to the high costs involves, even with much larger containers than bottles.
the deposit in Scotland. If this was carried out on a large scale then this could cause significant costs to Scottish retailers.

**Cash flow:** Retailers are also likely to have issues arising from cash flow. Whilst the scheme should be broadly neutral, a situation could arise where certain retailers are liable to pay out more through deposits than they receive. For example, consumers may buy from their local shop on a regular basis but then redeem their deposits during their weekly deposits at a supermarket, potentially acting as a disincentive to accept containers for recycling. Alternatively the opportunity could arise where a consumer stores up the bottles they have bought from the supermarket and takes them to the local pub to collect the deposits.

**Producer specific issues:** Without knowing all the details of a scheme it is difficult to identify exactly which factors are likely to hit producers hardest. However issues such as labelling and re-labelling, complications concerning transactions and the potential removal of recyclable material could all place a financial and logistical burden on producers, which will ultimately result in higher prices to the consumer.

**Infrastructure:** In addition, to be able to reuse containers, producers would have to invest in major alterations to their distribution and collection operations and to bottling and canning plant to allow returnable containers to be collected, cleaned and refilled safely.

**Product quality:** If a refillable system were to be introduced this would cause problems for producers in terms of maintaining excellent quality standards for their products. Returnable bottles became notorious for being chipped and generally low quality when they were commonplace in the beer market. The modern consumer expects a higher level of presentation from their product. The only remedy would be for producers to increase the amount of glass used in their bottle to maintain the damage caused by multiple use. This would be counter-productive to the aim of reducing the use of packaging used in products.

**Light-weighted bottles:** Enormous steps have been taken by producers to introduce light-weighted bottles, and these are nearly universal in the alcoholic drinks sector. This has brought significant benefits in terms of reducing environmental and financial costs. This type of glass cannot be reused as it would be unsafe but can be recycled.

**Uneconomic:** Further, the reuse of glass containers has been shown to be uneconomic in cash and environmental terms. The costs of distribution and return and then reuse are higher than the use of one-trip bottles followed by efficient kerbside recycling.

**Benefits of kerbside collection:** In terms of long-term solutions to the recycling of beverage containers, the most cost-effective solution must be specialised kerbside collection. A deposit and return scheme results in a proliferation of sites needing to collect, store and administer a scheme before
the containers are even removed for recycling. With kerbside collections still needed for other forms of waste/recycling collection the most cost- and environment-efficient method of recycling must be a centralised system of collection. Building up a critical mass of recyclable material on routes gives the economies of scale necessary to make this happen – and reducing the kerbside collection volume is likely to result in higher prices for remaining users.

**Local Authority targets:** Another option to increase recycling, particularly in the on-trade, is to allow Local Authorities to count commercial recycling towards their recycling targets. This would lead to an increase in recycling of containers sold in the on-trade. It would also encourage pubs to site bottle banks on their premises, providing a service to the wider community – and consequently boosting recycling without the need for additional costs to the consumer. These actions as well as increased information to the general public would be a far more effective method of increasing recycling rates and reducing packaging waste.

**General points**

Clause 58 of the proposed legislation states that the Climate Change Bill will enable Ministers, by regulation, to introduce a deposit and return scheme. While the Bill will not introduce such a scheme in itself, we would suggest this approach, of introducing such a major policy change by regulation, rather than by primary legislation will inevitably mean any future development in this area could be introduced with far less scrutiny by the Scottish Parliament. We do not believe the current approach is a sensible one, especially given that the scope of the powers which could be granted to Scottish Government Ministers by Clause 58 are so wide-ranging and currently lacking in detail that they are difficult to meaningfully respond to.

The Scottish Government have not actually indicated their intention of pursuing the introduction of a “deposit and return” scheme, at this stage, or indeed at some point in the future. We would hope that the Committee’s deliberations on the Climate Change Bill would clarify the Scottish Government’s stance on this issue and that the final legislation would reflect their position and plans.

In any event we would hope that the Committee would reject the concept of a “deposit and return” scheme in light of our concerns, and the availability of other more effective policy options to increase recycling rates. We are willing to supply further information and comment if required by the Transport, Infrastructure and Climate Change Committee.
Trade Bodies Supporting This Submission

The Scottish Beer and Pub Association

The Association's members are Scotland's brewing and large pub companies representing the licensed trade industry in Scotland. The main aim of the Association is to contribute to the economic and social wellbeing of Scotland through employment, investment and training. SBPA's members account for 1,500 of the 5,200 licensed public houses in Scotland.

The Society of Independent Brewers

Formed in 1980 as the Small Independent Brewers' Association, to represent the interests of the emerging new wave of microbrewers. With growing credibility and campaigning success, SIBA has come to represent the broad spectrum of the independent brewing sector. There is no longer a ceiling on membership and the Society of Independent Brewers – renamed in 1995 – is now one of the most authoritative and respected bodies in the brewing industry.

The National Association of Cider Makers

The voice of the UK’s cider makers. Founded in 1920, the National Association of Cider Makers (NACM) is the governing body of the cider and perry industry in the UK. It represents both the larger producers and the many hundreds of smaller scale Cider Makers. The NACM itself is a member of the Association of the Cider and Fruit Wine Industries of the European Union and through this body is able to represent the interests of Cider Makers with the European Union.

The Gin and Vodka Association

The Gin and Vodka Association is a non-profit, non-trading association. Membership is open to any individual, firm, limited company or corporation, which is a producer, brand owner or importer of gin or vodka. There are currently 35 members who, between them, represent an estimated 98% of the gin and vodka trades in the UK.

The Wine and Spirit Trade Association

Established in 1824, the WSTA represents the whole of the wine and spirit supply chain including producers, importers, wholesalers, bottlers, warehouse keepers, logistics specialists, brand owners, licensed retailers and consultants. The WSTA has over 330 members and works with them to promote the responsible production, marketing and sale of Alcohol and to share best practice with the entire trade.
The British Hospitality Association (BHA) In Scotland

The BHA is the national association for the hotel, restaurant and catering industry and it has been representing the hotel, restaurant and catering industry for over 90 years. The BHA represents some 3,000 establishments in Scotland, across all sections of the industry – not just group-owned properties, but also hundreds of individually owned hotels and restaurants.

Scottish Alcoholic Drinks Producers
27 February 2009
SESA is the trade association representing Scotland’s waste and secondary resource industry.

Driven by EU environmental law, we are a leading partner in Scotland’s transformation from a disposal to a recycling society: since Devolution, we have helped Scotland’s household recycling rate to increase more than five fold to above 32%.

Two out of every three voters in Scotland believes the waste collection, recovery and management service our Members provide in partnership with local authorities is the most valued local service.

Our Members provide one third of the Country’s renewable electricity.

Preface

Law relevant to recovery, recycling and management of waste is overwhelmingly governed by EU law. As a general principle, it is therefore particularly important that Scotland’s laws are demonstrably consistent with EU law and use definitions wholly consistent with, for example, the Waste Framework Directive (2008/98/EC). To give one example, we believe references in the Bill to “recycling” - when their meaning is much closer to “recovery” as defined by the Directive - are an unhelpful recipe for confusion;

We have no objection to Scotland seeking to be more ambitious than EU law when there is a clear justification for - and route map to - such ambition, but Scotland’s law should still be framed in a way that is manifestly consistent with relevant EU law;

Further, we note that the Bill proposes very wide powers for Ministers through regulations. We would prefer to see greater clarity and detail in the primary legislation to inform the democratic process. Unlike an EU Directive which permits flexibility within a Member State as to how prescribed outcomes are achieved, such imprecision in the Bill is clearly not aimed to deliver subsidiarity across Scotland but instead seeks wide executive powers where the likely character of such execution remains opaque.

Clause 52: waste plans

We would greatly welcome good, clear plans for the management of waste, with clear targets for recycling and recovery of waste and how these targets are to be achieved. It would be more helpful if Clause 52(1) reflected the terminology used in the Waste Framework Directive setting out the five tier hierarchy and the distinction between recovery and disposal;

We also recognise that Scotland should reflect reference in the Waste Framework Directive to minimisation of waste. However, this must not
distract from the need to provide infrastructure to recover value from existing volumes of wastes diverted from landfill. A legal requirement for site waste management plans for construction and demolition projects is one example of a useful approach to adopt;

We advise against the definition of “recycling” proposed in Clause 52(4): it is not consistent with the EU law with which Scotland must comply.

- **Clause 53: waste data**

  Clause 53(1) is an example of a Clause providing such wide-ranging powers for Ministers as to make the primary law almost meaningless. For example, the primary law ought to indicate how and on whom the burden of the law is likely to fall;

  Our industry has long recognised the need for better and more relevant and timely data on waste. We believe this requires significantly better capture of data from waste producers and from sites exempted from waste management licences;

  Data from our industry should generally be required by regulation and the requirement should avoid being framed in terms that require duplication of effort. In addition, this is an area where there should be consistency across the UK to avoid, for example, the need to replicate computer systems.

- **Clause 54: recovery facilities**

  This Clause reflects a presumption in the Waste Framework Directive in favour of recovery over disposal of waste and, again, should be both couched in such terms and provide sufficient detail in the primary legislation to give an indication as to what in practice the law is likely to mean;

  In broad terms, we welcome the general provision of the polluter pays principle at Clause 54(2)(e) provided SEPA and other relevant authorities are adequately resourced to enforce zero tolerance of fly-tipping across Scotland;

  Notwithstanding current turbulence in global commodity markets, we believe the Landfill Tax escalator and other drivers will over a relatively short period suffice to promote higher levels of recovery of business waste and that an unduly prescriptive regime for this waste stream may not provide the best possible results.

- **Clause 55: facilities at events**

  Subject to comment already made, this provision seems sensible.

- **Clause 56: green public procurement**

  We warmly welcome the prospect of greener public procurement as a stimulant for markets in recycled materials. Frankly, however, public
authorities across the UK should now be able to provide far more detail than the generic framework offered by Clause 56.

- **Clause 57: packaging targets**
  It is important not to disrupt the functioning of existing producer responsibility obligations, transposing the EU Packaging Directive, placed on the packaging sector;

  The Producer Responsibility Obligations (Packaging Waste) Regulations, applicable in Scotland, England and Wales, already provide a direct incentive for those using packaging to reduce its use. Further regulation on this matter may be seen to be redundant;

  Also, the Packaging (Essential Requirements) Regulations already require that packaging weight and volume must be reduced to the minimum necessary for safety, hygiene and consumer acceptance of the packaged product. More robust policing of existing law might be preferable to new law.

- **Clause 58: deposit and return**
  Statutory deposit and return schemes appear to work well in a number of EU Member States;

  However, given the scale of investment in infrastructure required to enable Scotland to comply with relevant EU law, it is important that there is a measure of consistency in Scottish official policy extending beyond the ebb and flow of specific administrations. We simply note that this proposal represents a change of policy since the Strategic Waste Fund provided resources for collection infrastructure: there is potential for deposit and return schemes to conflict with investment assumptions behind such investment in infrastructure and this could mean, for example, that the Scottish taxpayer might not secure the best value for money;

  We would invite the Scottish Parliament to probe the Scottish Government on the evidential base behind its current proposal and to give a very precise indication as to why it is believed to offer better prospects than the rapid increase in recycling and public participation rates in recycling being secured through the model of investment in collection infrastructure.

- **Clause 59: carrier bags**
  We do not consider this to be a priority;

  Far more important is the need to extend general awareness of broader waste management issues such as the need to segregate materials for recycling and the pressing need for new facilities to recover value from waste.
• **General points**

Much of the 22 million tonnes of waste produced each year in Scotland is potentially either a recyclable material or a renewable, decentralised source of energy providing a net carbon benefit and making a significant contribution towards Scotland’s carbon reduction targets. Appropriate waste laws in Scotland can therefore deliver both compliance with EU waste laws and also an opportunity to reduce net CO2 emissions at no additional marginal cost;

It would clearly be easier for public authorities to determine optimised policies for waste in a context where there were internationally accepted, relevant and robust indicators of sustainability. SESA’s Members are filling a vacuum by compiling methodology which will enable specific waste facilities to benchmark their carbon footprint against those of other such facilities. We hope to conclude this work in 2009.

Scottish Environmental Services Association

22 January 2009
On behalf of the Scottish Food and Drink Federation (SFDF), I would like to thank you for the opportunity to contribute to this consultation process and to welcome the Scottish Government’s stated ambition of moving towards a Zero Waste society. As the largest manufacturing sector in Scotland, not only does the food and drink manufacturing industry consider minimising any negative impact of our activities on the environment as a responsibility, but we also view minimising waste and improving resource efficiency as an economic driver.

A successful food and drink manufacturing industry is a vital component of a healthy Scottish economy, not least, because it provides employment for around 50,000 people – that is, one in five people who work in Scottish manufacturing – and generates annual sales of £7.57 billion and exports worth £3.57 billion. Achieving sustainable economic growth is quite rightly the Scottish Government’s key priority. Therefore, it is our view that it is the role of Government to set the framework that will ensure the physical infrastructure is put in place that is not only fit for purpose, but that will facilitate growth and not constrain it.

SFDF is a devolved division of the Food and Drink Federation (FDF).

**Industry Leading by Example**

In October 2007 FDF announced its commitment to making a significant contribution to improving the environment by targeting priorities where we, as a sector, can make the biggest difference. In summary, working collectively, our Five-fold Environmental Ambition is to:

- Send zero food and packaging waste to landfill from 2015
- Make a significant contribution to WRAP's work to achieve an absolute reduction in the level of packaging reaching households by 2010 compared to 2005.
- Achieve a 20% absolute reduction in CO₂ emissions by 2010 compared to 1990 and to show leadership nationally and internationally by aspiring to a 30% reduction by 2020
- Achieve significant reductions in water use and contribute to an industry-wide absolute target to reduce water use by 20% by 2020 compared to 2007
- Embed environmental standards in our transport practices, including our contracts with hauliers as they fall for renewal, to achieve fewer and friendlier food transport miles.

In the intervening period, SFDF also convened round-table discussions with all of the main Scottish Government funded business support programmes to ensure food and drink manufacturing companies in Scotland are enabled to
access a coordinated programme of support and advice that will assist them in delivering progress towards achieving these targets. The Sustainability Group that has now been established is currently chaired by SFDF and involves the Carbon Trust, the Energy Savings Trust, Envirowise, the National Industrial Symbiosis Programme Scotland, the Waste & Resources Action Programme, Scottish Enterprise and Highlands and Islands Enterprise.

The Role of the Government

It is the role of the Scottish Government to ensure that the physical infrastructure is in place and in the correct locations to deliver on their five strategic themes. It is self evident that poor infrastructure is a major impediment to economic growth, and to how industry manages their environmental obligations in terms of reducing waste, energy efficiency and cutting emissions. The waste infrastructure currently in place in Scotland is simply not sufficiently developed to support the legislative obligations currently placed on industry, let alone any longer-term aspirations to make progress beyond these. This represents a major barrier to the sustainability of the food and drink manufacturing sector in Scotland.

For some time we have advocated a more strategic approach to major infrastructure projects. To that extent, we have previously applauded the Scottish Government for its Infrastructure Investment Plan and the national perspective it is taking in relation to major infrastructure projects, strategic priorities for Scotland and key industries, such as food and drink. However, whilst the Scottish Government is ambitious for the Infrastructure Investment Plan to take forward its priorities on climate change and achieving a zero waste society, in our view the absence of a national dimension in terms of commercial waste treatment, recycling and disposal infrastructure needs to be urgently addressed.

Furthermore, against a backdrop of increasing raw material costs and competition from low cost economies, charges for business are also set to spiral over the next few years with the Scottish Environment Protection Agency predicting that landfill costs are likely to rise by between 400 and 800%. As noted above, our industry is already working to find cost effective solutions to existing waste management issues. A well developed and integrated infrastructure is therefore critical if our industry is to be both sustainable and successful in the long-term.

Mapping Provision to Encourage Investment in Infrastructure

We urge the Scottish Government to recognise the strong links that exist between investment in infrastructure, the business growth rate and sustainable development. By taking steps to ensure the physical infrastructure in Scotland promotes the dual objective of achieving business growth in a sustainable way, industry will be enabled to minimise further its environmental impact and manage their costs more effectively and the Scottish Government could make real progress towards its ambition of a zero waste society. Thus,
together, we will be able to ensure that we ‘strike the right balance’ between economic, social and environmental factors, securing improvements and progress without damaging the underlying competitiveness of industry.

By mapping the current waste infrastructure provision in Scotland – for commercial as well as domestic waste – the Scottish Government will be able to identify any gaps. Painting this national picture of waste infrastructure and comparing that with waste streams generated, will enable local authorities to make key strategic decisions about whether or not to service the commercial as well as domestic waste markets (individually or via shared service projects with other authorities or by adapting existing facilities) and potentially stimulate private sector interest in plugging those gaps. Ensuring the waste infrastructure is ‘fit for purpose’ will enable businesses and others to divert materials away from landfill.

When it comes to food packaging specifically, it is worth noting that some lightweight mixed material packs, which often contain food residues, are not currently worth recycling as it would require more energy and resources to do so than would be recovered. However, as this form of packaging is less bulky, it often has environmental benefits earlier in its life such as savings on fuel through transportation. It would still be possible to extract value from these materials, provided local authorities had energy from waste plants available for use and information from a Scottish Government waste mapping programme could facilitate this.

Regulation

When it comes to regulation, SFDF do not consider that additional legislation is required in this context as existing legislation in combination with voluntary agreements such as FDF’s Fivefold Environmental Ambitions and a widened Courtauld agreement, alongside continuing consumer and media pressure should go a significant way to achieving our shared ambitions of a zero waste society.

Indeed, as things stand, the food and drink industry continues to face considerable regulatory burden, which adds significantly to its cost base and affects its ability to compete successfully in domestic and international markets. Indeed, regulation remains one of the biggest perceived threats to the competitiveness of our industry, a fact that needs to be better understood across Government – in the Scottish, UK and EU contexts.

Furthermore, the process of enacting and then implementing primary legislation would be likely to take several years. Given the industry initiatives around zero waste that are already in place and beginning to deliver, this would seem an unnecessary distraction from delivering progress.

I trust our comments will be taken into consideration and look forward to the opportunity for the Scottish Food and Drink Federation to continue the dialogue with Government and others as the national policy is developed and an implementation plan drawn up.
RESPONSE TO SPECIFIC PROPOSALS

PROPOSAL 1: DUTIES ON PUBLIC BODIES AND BUSINESSES TO PROVIDE RECYCLING FACILITIES

SFDF do not consider that legislation should be made in this area.

A voluntary Code of Practice on recycling for public sector bodies, could be implemented within a relatively short timeframe and deliver benefits more quickly in terms of reduction of waste to landfill. Showing there was a long term demand from the public sector could serve to stimulate private sector investment in reprocessing capacity and infrastructure and expand the availability of waste management facilities for use by businesses.

When it comes to SMEs, the lack of affordable recycling facilities around Scotland leave many companies who generate smaller quantities of waste with no option but to send waste to landfill. This cost – amounting to millions of pounds every year – is bad for business and the unnecessary waste is bad news for Scotland’s environment. Indeed, a recent report commissioned by Highlands and Islands Enterprise found that recycling of paper and cardboard alone would reduce the waste burden on SMEs in Scotland by 32%, saving £200 million per year.

As the rules stand, SEPA classifies joint collection schemes as ‘collection centres’. However, allowing SMEs to cooperate in the joint collection of waste could make waste collection more economical and assist SMEs in not only cutting their own costs, but also in making a greater contribution to our shared ambition of reducing the amount of waste they sent to landfill. We recommend that the Scottish Government considers how best to introduce some flexibility into the waste management system and so enable companies to pursue practical, common sense solutions.

PROPOSAL 2: PACKAGING

SFDF do not consider that legislation should be made in this area.

SFDF believes that existing legislation, voluntary agreements such as the FDF’s Fivefold Environmental Ambitions and Courtauld, together with continuing media and consumer pressure will together lead to further reductions in packaging used and make additional legislation unnecessary.
Our members’ activities under WRAP’s Courtauld commitment to send zero food and packaging waste to landfill from 2015 are already producing tangible results. Indeed, the first target to end packaging growth has been recently met. A new agreement for 2010 is currently being discussed with signatories.

SFDF continues to promote the Courtauld commitment and, going forward, we plan to work closely with WRAP as it develops its thinking regarding a possible follow-up to Courtauld.

In addition, FDF and its member companies have been involved in the Packaging and Recycling Action Group since its formation which is seeking both to optimise the amount of packaging used on products and to identify ways to stimulate collection and recycling of household packaging waste. It comprises stakeholders from across the packaging chain as well as the Scottish Government.

PROPOSAL 3: SPECIFYING RECYCLATE

SFDF do not consider that legislation should be made in this area.

SFDF would suggest that there is no case for specifying recycled content on a generalised basis. Use of recycled content needs to be considered on a case by case basis, taking into account technical properties of the material, fitness for purpose, sourcing, functionality, manufacturing capability and cost. This is particularly true since the availability, quality and technical specification of recycled material varies by material. In addition, food contact issues have to be considered for a range of materials, such as plastics in each case. Therefore, we do not believe that specifying mandatory recycled content levels will work.

PROPOSAL 4: WASTE PREVENTION PLANS

SFDF do not consider that legislation should be made in this area.

SFDF believes that voluntary approaches such as our Five Fold Environmental Ambitions already adequately address waste prevention, for example our overall support for the waste hierarchy. Moreover, European Union Member States will shortly be required to draw up waste prevention plans when the revised Waste Framework Directive is implemented.

PROPOSAL 5: DEPOSIT AND RETURN

SFDF does not consider that legislation should be made on deposits, particularly since such schemes have a number of well documented shortcomings. Notably:

- A number of European countries with no deposits achieve higher recycling rates for metals and plastics than those with. (Source: official figures submitted by Member States to the Commission).
Deposit and return schemes apply only to a small proportion of packaging, usually beer and soft drink containers which are less than 10% of used household packaging.

UK consumers are no longer in the habit of returning containers to retailers. Even in the 1970s with a 12p deposit less than a third of bottles were returned.

These schemes divert the comparatively high priced recyclate from existing collections so kerbside and ‘bring schemes’ would cost much more per tonne to operate.

High administrative costs.

Complex handling procedures both for redeeming the deposits and for transferring funds through the supply chain.

Increases the environmental impact of collecting recyclables because a separate fleet of lorries would be needed to transport material to sorting centres and reprocessors.

These schemes lead to higher prices for consumers as they cost more to run than industry can make from retention of unclaimed deposits. These costs would likely be passed on to the consumer.

PROPOSAL 6: MANDATORY WASTE DATA RETURNS FROM BUSINESS

SFDF do not consider that legislation should be made in this area.

SFDF considers that existing mechanisms should be explored first before considering additional legislation. Food and drink manufacturers already provide waste information to the Scottish Environmental Protection Agency as part of their annual pollution inventory return and it should be for those who collect that data to ensure they make best use of it. Any creation of mandatory waste data returns would simply duplicate efforts already made to no discernible commercial advantage or other obvious benefit to producers.

PROPOSAL 7: OTHER MEASURES TO ENCOURAGE WASTE PREVENTION, INCLUDING ACTION ON SINGLE-USE CARRIER BAGS

SFDF do not consider that legislation should be made in this area.

SFDF considers that resources should not be diverted away from the development of an integrated waste management infrastructure by single-issue subjects which may, as is the case with carrier bags, only contribute to a relatively small proportion of waste. By focussing and prioritising effort in this way genuine progress will be made across the range of issues, delivering genuine, significant and sustained environmental wins without the distraction of additional legislation.
The Food and Drink Manufacturing Industry

The Scottish Food and Drink Federation (SFDF) represents the food and drink manufacturing industry in Scotland. The food and drink manufacturing industry in Scotland has a gross output of around £7.57 billion and exports worth £3.57 billion.

SFDF is a devolved division of the Food and Drink Federation (FDF), the voice of the UK food and drink manufacturing industry.

As the largest manufacturing sector in the UK, food and drink manufacturers employ over 500,000 people and have a combined annual turnover of £70bn. UK food and drink exports in 2005 were almost £10bn.

The following Associations are members of the Food and Drink Federation:

ABIM  Association of Bakery Ingredient Manufacturers
ACFM  Association of Cereal Food Manufacturers
BCA  British Coffee Association
BCCCA  Biscuit, Cake, Chocolate and Confectionery Association
BOBMA  British Oats and Barley Millers Association
BSIA  British Starch Industry Association
CIMA  Cereal Ingredient Manufacturers’ Association
EMMA  European Malt Product Manufacturers’ Association
FA  Food Association
FOB  Federation of Bakers
FPA  Food Processors’ Association
GPA  General Products Association
IDFA  Infant and Dietetic Foods Association
MSA  Margarine and Spreads Association
NACM  National Association of Cider Makers
SB  Sugar Bureau
SIBA  Society of Independent Brewers
SMA  Salt Manufacturers’ Association
SNACMA  Snack, Nut and Crisp Manufacturers’ Association
SPA  Soya Protein Association
SSA  Seasoning and Spice Association
UKAMBY  UK Association of Manufacturers of Bakers’ Yeast
UKTA  UK Tea Association

Within FDF there are the following sector organisations:

FF  Frozen Food Group
LDT  Lifestyle and Dietary Trends Group
MG  Meat Group
ORG  Organic Food and Drink Manufacturers’ Group
SG  Seafood Group
VEG  Vegetarian and Meat Free Industry Group
YOG  Yoghurt and Chilled Dessert
RURAL AFFAIRS AND ENVIRONMENT COMMITTEE

CLIMATE CHANGE (SCOTLAND) BILL

SUBMISSION FROM SCOTTISH GROCERS’ FEDERATION

The Scottish Grocers’ Federation (SGF) is the trade association for the Scottish Convenience Store Sector. It is the authoritative voice for the trade to both policy makers and the media.

The SGF brings together retailers throughout Scotland, from most of the Scottish Co-operatives, Somerfield, SPAR and local independents who are our largest category of members. Our members sell a wide selection of products and services throughout local town centre, rural and community stores. According to recent statistics (2007) there are just over 5,600 convenience stores throughout Scotland, with annual sales in excess of £3.2 billion.

Our members share the environmental concerns of the public at large and incorporate procedures into their businesses to reduce their carbon footprints. However, zero waste is a concept that does not seem realistic to many small shops. This goal is even harder to envisage due to the limited facilities available to small shops.

SGF is concerned that the Climate Change Bill takes considerable enabling powers whilst providing very little detail. As a result is extremely difficult to determine the likely impact of the legislation on small shops, should the enabling powers be enforced.

Increased costs and additional administration would be very damaging to small shops, especially in the current economic climate. SGF is concerned there is insufficient detail on the cost of these proposals. The Government must acknowledge small shops require support and encouragement via voluntary methods in order to meet recycling targets.

DUTIES ON PUBLIC BODIES AND BUSINESSES TO PROVIDE RECYCLING FACILITIES

1. In March 2008, DEFRA published their analysis of responses to the consultation “Recycle on the go”. In the main voluntary initiatives were preferred ahead of considering introducing legislation. Because a key outcome must be behaviour change (i.e. people recycle more), it was not widely thought that legislation could be an especially effective driver for securing the outcome.
2. If England is to pursue a voluntary approach and Scotland a legislative route, Scottish businesses would be put at a disadvantage compared to their English counterparts.

3. A number of SGF members, who own stores with customer car parks, already provide recycling points for newspapers, glass bottles, clothing, plastic bottles etc often in conjunction with the local authority. There may be an opportunity for public places including sports grounds, parks, cinema car parks etc where people are consuming and disposing of the types of items which are recyclable, to offer recycling facilities. This service is on a voluntary basis and should continue.

4. Small shops, whilst proactive in addressing waste issues relating to their back of store operating, do not have the physical space required within their selling floor to offer recycling facilities to their customers. It would be impractical for a number of reasons including, space, hygiene, manual handling, health and safety and lack of knowledge of waste issues, to offer these facilities.

5. Many small shops, located in village and town centres, are accessed by customers on foot. The bulky nature of items which can be recycled including plastic and glass bottles means it is easier for the public to use kerbside collections to recycle. The doorstep is the most accessible place for collection. Alternatively, the public are likely to use their cars to take items to a superstore which has recycling facilities located within its car park or a local amenity recycling centre. The town centre car parking policy of many local authorities throughout Scotland discourages many people from attempting to drive into town centres and park their cars.

6. Local authority kerbside collections are far more convenient for the public, cost effective and deliver better results. This is a tried and tested regular service, there will be many issues with on-street retail collection related to on demand services which are costly and could affect volumes from kerbside.

7. Out with the central belt of Scotland there are few recycling companies prepared to collect material to be recycled. In these areas it is inevitable that local authorities must take the lead role in recycling.

8. Initiatives to provide recycling facilities should be carried out in a voluntary capacity. If it were to be mandatory SGF believe small shops, under 289 sq m (this threshold size has a precedent in UK legislation in relation to Sunday trading in England and shelf-edge labelling requirements throughout the UK) should be exempt due to store capacity and the administrative burden complying with such a proposal would place on small shops.
PACKAGING

9. In 2007 the UK disposed of an estimated 10.5 million tonnes of packaging waste, of which around 59% (Source: NYPD) was recovered and recycled. This is a significant achievement when compared to the fact that only 27% of packaging waste was recovered in 1998 (Source: publication: e-Digest of Environmental Statistics, March 2006).

10. The packaging producers including retailers made a £1 billion contribution to the UK recycling and recovery industries over the last ten years. Retailers have also played a part in raising customer awareness of the need to recycle packaging waste and the environmental benefits it brings.

11. SGF and some of its leading members are signatories to the Courtauld Commitment, established in 2005. The Courtauld Commitment is a voluntary agreement between WRAP and major UK grocery organisations that supports less packaging and food waste ending up in household bins. It is a powerful vehicle for change and in 2008 has led to zero growth in packaging despite increases in sales and population.

12. A campaign called “Love Food Hate Waste” was launched in November 2007 aimed at helping consumers, local government and business to cut back on food waste. Several of the signatories are already actively supporting WRAP in this work. The campaign has already delivered a reduction of 110,000 tonnes in the annual amount of household food waste.

13. Small shops do not have the necessary buying power required to allow them to have an influence on the style of packaging used by food manufacturers.

14. Many packaging producers and suppliers are already, on a voluntary basis, taking measures to reduce the amount of waste. This included designing out waste, lighting, substitution of expanded polystyrene for recycled paper and other initiatives. These companies should be encouraged to promote and publicise these waste prevention measures in order to encourage behaviour changes in the public.

15. Packaging must be fit for purpose. Packaging must be of an appropriate standard in order to protect the food and avoid spoilage. If packaging requirements were too restrictive any reduction in waste from packaging could be offset by an increase in food waste which could be significantly more harmful to the environment.

16. The consultation document states some packaging is required to ensure the goods reach consumers in a safe and hygienic way and to ensure that key information is provided to the consumer. The health and safety implications of any changes to packing would need to be considered and
could result in an inappropriate level of responsibility being placed on the retailer.

17. The Producer Responsibility Obligations (Packaging Waste) Regulations 2005 already require any business which handles more than 50 tonnes of packaging per annum or has a turnover of more than £2 million per annum to register with SEPA or via a compliance scheme. It requires businesses to recover and recycle specified tonnage of packaging waste each year and to certify this recovery and recycling has been achieved. If the current framework is not achieving the level of recycling the Government requires, rather than creating additional legislation, it would be more appropriate to review and amend existing legislation.

18. Without investment in new technologies it would be extremely difficult for retailers to provide information on the amount of packaging on goods being sold to consumers. The financial investment required would be prohibitive for small retailers.

19. Taking into consideration the current legislation relating to packaging and the progress made by retailers in reducing levels of packaging through a voluntary arrangement, SGF believe voluntary initiatives should continue to be used.

SPECIFYING RECYCLATE

20. Many small retailers already provide materials in their stores made from or incorporating recycled material including carrier bags, paper, glass and plastic bottles etc.

21. SGF would suggest a voluntary approach with business being offered financial incentives to purchase material which contains an agreed level of recycled material.

22. Guidance should be provided by WRAP and should apply to all local authorities throughout Scotland.

WASTE PREVENTION PLANS

23. SGF does not support the introduction of mandatory waste prevention plans.

24. Retail businesses already have a duty to ensure any waste produced is handled safely and within the law.

25. Many retailers already have waste prevention plans in operation to avoid paying landfill tax and to reduce levels of waste which doubled in cost in the last two years. In addition, the Producer Responsibility Obligations (Packaging Waste) Regulations 2005 requires certain businesses to recover and recycle specified tonnage of packaging waste each year and
to certify that this recovery and recycling has been achieved. This would imply that much of the information included in a Waste Prevention Plan is already known to the authorities and a plan would therefore result in a duplication of effort.

26. The average amount of food waste produced by a typical convenience store (under 289 sq m) is approximately double the amount produced by an average family household. Due to the very small amounts of waste produced, a waste prevention plan would be an unnecessary and additional cost and a further administrative burden for small retailers already having to cope with an increase in licence fees and with the prospect of additional costs relating to new tobacco regulations.

27. For a small shop to produce a waste prevention plan for goods purchased via a cash and carry would be time consuming, costly and of little use.

28. In addition to paying business rates a small shop has to pay the local authority, in which it operates, a fee for uplift of waste. For a typical convenience store (under 289 sq m) this is approximately £1500 per annum.

29. In the current economic climate, additional financial burdens could place a small shop at risk of closure. This is not the time to introduce “nice to do” for little return.

**DEPOSIT AND RETURN**

30. Convenience is key to engaging people in recycling and changing their behaviour. By far the most convenient method of recycling is kerbside collections which avoid members of the public driving to recycling points. Any competition to kerbside collections is likely to lead to confusion and could undermine local authority schemes.

31. Most glass bottles are not designed to be washed and reused. There are only a few soft drinks manufacturers in Scotland who continue to pay a deposit for the return of bottles and crates.

32. Currently there is no supply chain established to handle a deposit and return scheme and no supporting infrastructure in place. This would need to be established and could result in additional costs for small retailers.

33. Small retailers do not have available space to operate a deposit and return scheme nor the funds available to purchase a deposit and return vending machine.
34. The costs of implementing such a scheme for a retailer in terms of manpower would be prohibitive. Additional sales staff would be required to enable a store to accept and handle returned bottles, cans etc and maintain records.

35. A deposit and return scheme raises health and safety issues. There could be a risk to public health if fresh food were to be contaminated as a result of used returned packaging being stored in close proximity.

36. Within the consultation document reference is made to the deposit and return scheme in Denmark. Denmark has strong recycling systems in place that are approximately ten years ahead of the UK. The quality of recycling material is far superior compared to the UK to the extent that Novelis, the UK’s largest aluminium recycler, prefers to use Danish material compared to UK stock.

37. In addition to the measures proposed in this consultation document, the Scottish Government has recently proposed changes to tobacco and alcohol legislation. All these proposals will result in increased costs and additional administration for small shops, if they are to proceed.

38. In addition it has been proposed that all these schemes will be enforced by different officials. Licence standards officers for alcohol, trading standards for tobacco and SEPA for waste. Obviously there will be a cost implication and it is likely this cost will only increase over time.

MANDATORY WASTE DATA RETURNS FROM BUSINESS

39. Under the duty of care retailers must keep a record of the disposal of waste. A mandatory waste data return would be a replication of regulation and a further burden on small businesses. SGF is not convinced for the small amount of waste produced by small shops that blanket legislation is required and small shops should therefore be exempt.

40. The consultation suggests the total cost to submit the return is going to be £20. SGF believe the costs would be considerably higher and does not take into account the additional administration burden this proposal would create for small shops, if implemented.

41. The consultation states that SEPA already collect data from business by way of surveys. The surveys are voluntary and currently returns tend to be low. Rather than requiring mandatory data returns the Scottish Government should continue to engage with business and generate support through voluntary initiatives.
OTHER MEASURES TO ENCOURAGE WASTE PREVENTION, INCLUDING ACTION ON SINGLE-USE CARRIER BAGS

42. Carrier bags are not significant in terms of net environmental impact. However, SGF recognises the symbolic nature of single use carrier bags in relations to the environment and the Scottish Government’s desire to reduce their usage.

43. SGF is a member of the Zero Waste Retailers Group and is working with the Scottish Government to investigate how carrier bag usage can be reduced.

44. SGF welcomes the Scottish Governments preferred use of a voluntary initiative to reduce bag usage. SGF believes mandatory charging for carrier bags would affect the poorest and most vulnerable in society, who least can afford it.

45. Due to the disparate nature of the convenience sector, a unified and centrally monitored target would be impossible to deliver. We would therefore have to agree a workable means of our sector being involved in the activity and feasible monitoring criteria.

46. Supermarkets recently agreed to achieve a 50% reduction in bag use by Easter 2009, from a baseline to be agreed. SGF believes the Scottish Government may need to take into account the different type of shopping and customer base in the convenience sector, compared with the large format stores. There is a difference in bag use between weekly planned shops and more spontaneous visits to shops (where customers are less likely to take their own bags).

47. Consumers have been in the habit of using single use carrier bags in this way for many years and it will take a significant effort to change this pattern.

48. If the Government were to decide to proceed with mandatory charging stores smaller than 289 sq m should be exempt from the requirement to charge for bags due to the bureaucratic burden that compliance and reporting would place on tens of thousands of small businesses and the administrative burden on local authorities charged with monitoring and enforcement.

49. SGF members have taken steps to reduce carrier bag usage through various voluntary initiatives.

50. To succeed in achieving waste reduction requires behaviour change. SGF welcomes the Government’s use of education rather than penalties
to reduce single use carrier bags and would welcome a similar approach to all the proposals included within the consultation. Legislation targeted at business is unlikely to encourage the public to recycle more.

51. SGF is very willing to work with the Scottish Government to develop voluntary initiatives with the Government to encourage our members to reduce waste and improve recycling.

Scottish Grocers’ Federation
24 February 2009
RURAL AFFAIRS AND ENVIRONMENT COMMITTEE

CLIMATE CHANGE (SCOTLAND) BILL

SUBMISSION FROM SEPA

[Due to time constraints, this submission is a copy of the original submission made in response to the Scottish Government’s consultation on the provisions in the Bill relating to waste.]

Proposal 1: Duties on Public Bodies and Businesses to Provide Recycling Facilities.

**Question 1: Do you consider that legislation should be made in this area?**

SEPA does not consider that a Voluntary Code of Practice on Recycling outwith the home would on its own deliver a zero waste society. We therefore believe that legislation would be beneficial in this area. Significant quantities of recyclable materials exist in waste streams outside the home within both public spaces and work facilities that could usefully be recovered.

**Question 2 If so, what form should that legislation take?**

Legislation could be based on a revised form of a number of existing regulatory systems such as:

- Producer responsibility
- Duty of Care
- Building regulations
- Event licensing process
- The Planning System

Town and Country Planning legislation could be a useful vehicle to deliver appropriate requirements. The Town and Country Planning General Development Procedure Order could potentially be amended to require all qualifying new development to provide details of recycling and composting provision when submitting a planning application. The planning application would not therefore be registered as “valid” without this information, in a similar manner to requesting details of drainage and road access. Amending planning legislation would ensure developers took this requirement on board at the earliest design stage where the facilities and any land area required can be properly considered. Failure to consider this at the planning application stage may result in applications subsequently being submitted for Building Warrant where the layout would have to be changed to provide recycling facilities, materially affecting the entire development. This would then, in some cases, result in the developer having to submit a revised planning application so delaying the development process. Separate legislation would be required to enforce this requirement retrospectively.
Legislation should address a range of specific issues including:

- the type of waste, for example, cans, glass, paper, batteries, household hazardous wastes and plastics to be recycled
- facilities should be appropriate to the location and types of waste likely to arise
- powers should enable material collections systems and capacities to be specified based on the type of location in question

The following issues must also be addressed:

- assess and resolve the availability of UK reprocessors and end markets.
- establish the dependence on overseas markets and assess any long term risks in dependence on such markets
- address how geographical issues will be considered such as remoteness from markets, collection systems and the related cost implications for businesses and public sector bodies in remote or rural areas?
- demonstrate that reuse has been explored (especially for furniture and WEFE) before materials are recycled

The legislation should apply to all public sector bodies and commercial businesses (especially retail, fast food, travel and entertainment centres) which attract large numbers of members of the public; or in buildings with more than 50 employees, or part of a national chain or franchise that are frequented by the public.

Other Issues to be considered:

- Resources for enforcement of legislation.
- How to assist developers with any costs with “retrofitting” existing sites/developments, for example, through local business rate relief or some similar mechanism.
- Importance of guidance being prepared on what type of provision is to be made for different scales/types/thresholds of development.
- That materials recovered in public spaces would count towards local authority recycling targets irrespective of who owns the collection system or undertakes the collection. Materials collected from businesses not designated as public spaces would be considered as commercial and industrial waste.

Proposal 2: Packaging.

To encourage waste prevention by giving powers to the Scottish Government to make regulations on packaging which would set statutory targets on retailers for packaging reductions.

**Question 1 : Do you consider that legislation should be made in this area?**

SEPA considers it important that the specific application of any such measures are clear in their intent. SEPA does not support the introduction of
new measures on recovery (one way of reducing packaging waste) due to the risk of introducing inconsistencies or tensions in the existing UK regulatory systems for packaging. These may not be perfect but they are beginning to work. The cross UK nature of retailing would make this complex and probably highly unpopular.

There is adequate data from statutory returns from compliance schemes at a UK level to evaluate progress in packaging recovery, re-use and dematerialisation. However this is difficult to interpret in a purely Scottish context.

SEPA would suggest the following approach:

- an increased obligation on wholesalers and retailers acting in Scotland to provide improved data on the packaging material entering the consumer market in Scotland — this would improve our data as this tends to be produced at a UK company level and is therefore hard to partition into Scottish data.
- improved measures to penalise excess packaging — probably via a revised Essential Requirements Act in Scotland. This has proved to be an ineffective regulatory system and if designed appropriately would act to place pressure on packaging manufacturers, packer fillers and retailers to further reduce packaging.
- powers to enforce take back of specific packaging materials. This has proved highly effective in some Scandic countries for aluminium packaging for example. If we propose this we should seek for them to be general ‘take back’ and ‘deposit return’ powers as it would be useful in other non-packaging areas such as batteries and some HHW materials (see Proposal 5).
- consideration could also be made for retailers above a certain size to have deposit facilities either in or within the vicinity of their premises to enable packaging materials to be deposited for recycling. This is to some extent linked to the issues raised in Proposal 1.

**Proposal 3: Specifying Recyclate.**

**Question 1 : Do you consider that legislation should be made in this area?**

SEPA would support legislation in this area to require public bodies to procure goods with a minimum specified recycled content.

Public bodies have significant procurement powers to influence the supply of products with higher recycled content. More effort needs to be made in closing the recycling loop, rather than just focussing on simply increasing recycling targets.

SEPA would have concerns as the practicability and resourcing implications of imposing such a requirement on businesses. It would be more practical to implement this through the manufacturers selling into the UK/EU market via existing producer responsibility powers. In SEPA’s view this would need to be
achieved at an EU level. However positive promotion of the benefits of green procurement to business should be ongoing and with increased commitment. Consideration should be given to imposing a requirement on any private bodies that supply goods or services to the public sector. This supply chain pressure would be one practical way to influence businesses directly.

There is a need to continue support towards recyclate quality via ISO or PAS or British Standards to ensure that the use of recyclate does not diminish quality standards. There is similarly a need to undertake significant awareness raising to overcome current perceptions that recycled products are inferior quality.

**Question 2: If so, what form should that legislation take?**

• The legislation should lay down the nature of the materials and the contracts to which the duty would apply (including exemptions and whether the requirements would not apply to contracts below a certain value) with a particular focus on paper and paper products (towels and tissue); container/packaging glass; a wide range of plastic consumable goods; building works; grounds and road maintenance contracts. A similar obligation should apply when refurbishing offices and buildings. There is potential for enactment through Building Regulations for new build projects. Refurbishment contracts should also demonstrate that reuse of existing furniture and WEEE has been explored before new products are bought.
• The legislation should be developed in partnerships with experts in sustainable procurement rather than solely from a waste angle. The legislation would need to be based on a clear life cycle analysis of the various product areas to be addressed. Price comparisons would need to be made to quantify the cost to the public sector. Similarly procurement methods should be investigated which would act to reduce the costs of such a requirement through high volume purchasing contracts.

Key elements of any such legislation would include:

1. Type/definition of organisations to be covered.
2. Key product areas to be targeted.
3. Product standards specifying the minimum recycled content.
4. Monitoring and record keeping requirements for verification.
5. Any necessary enforcement powers.

SEPA recommends that consideration should be given to the implementation of such a requirement via a Scottish wide Agency based on some existing body with a national procurement function.

**Proposal 4: Waste Prevention Plans.**

*The responses to the following questions are taken as a whole below:

**Question 1: Do you consider that legislation should be made in this area?**
Question 3: what public bodies and businesses should be covered?

Question 2: If so, what form should that legislation take?

SEPA considers that legislation is required in this area but largely only for public bodies and larger companies. Public bodies are readily controlled within the wider public estate and as such should be required to demonstrate best practice and best value by driving down the costs of waste management within the public estate.

In general SEPA does not agree that such a requirement should be placed on smaller business for the following reasons:

- The administration of such a scheme would be burdensome on both business and the administering authority
- The operation of the market with disposal costs rising sharply should be trusted to change behaviour with the support of well targeted resource efficiency programmes. In tandem to this carbon and emission trading schemes will act to focus attention on resource efficiency.

SEPA however sees two specific areas where we would support the implementation of waste prevention plans on business:

- We would support an extension of the powers under Pollution Prevention & Control (Scotland) Regulations 2000 to address waste prevention in currently regulated industries.
- In addition to the above, consideration could be given to extending this duty to other large companies in Scotland (delineated by either turnover or employee number) with these powers integrated with those set out above in proposal 3 on specifying recyclate. This may then filter down the supply chain as these companies seek to improve supplier performance. This avoids the implementation of such a duty on SMEs which due to their number would require disproportionate efforts to both monitor and administer and would probably raise questions on the benefits of such regulation in an era of less and better regulation.
- We would support the mandatory implementation of Site Waste Management Plans (SWMP5) with the enforcing body identified. As a national organisation SEPA could be a suitable body to fulfil this enforcement role, helping to ensure the creation of a level playing field. In addition, SEPA already regulates or has an established relationship with many of these industries. SWMP development and enforcement should also be linked to Health and Safety legislation as they also regulate construction sites.

Site Waste Management Plans:

- Site Waste Management Plans should mirror what is happening in England where any new development (costing more than £300,000) to submit a Site Waste Management Plan at Planning Stage.
- Implementation of the SWMP legislation in England should be fully assessed in order to ensure that any legislation in Scotland is as effective as possible
Proposal 5: Deposit and Return.

Question 1: Do you consider that legislation should be made in this area?

SEPA considers that legislation should be made in this area. Such mechanisms are powerful consumer behavioural change drivers. More research is however required into the barriers which prevent businesses from introducing this type of system so that this can be addressed in the future.

Question 2: If so, what form should that legislation take?

• SEPA would suggest the development of general powers that would place a take back responsibility on retailers of specific products or powers to implement a deposit refund scheme on retailers of specific products.

Question 3: Your views on the practicalities of such schemes in Scotland?

• A deposit system would work but for recycling not return for re-use. Re-use containers tend to have double transport miles (to the retailer and back), increased use of raw materials (need to be more robust) so more lorries to transport (because they are heavier) and increased use of detergents and water (need to be cleaned).
• Full life cycle analysis would have to be undertaken to ensure that the measures were contributing to improving the environment impact of products. We should seek to understand why a once strong deposit and return system on bottles died out. What were the business reasons for these measures not continuing?
• The scheme would have its major applications in non-packaging areas (perhaps with the exception of aluminium containers due to the very high energy savings). Products such as batteries, small electrical items and some HHW products would in our view benefit from deposit refund schemes.
• We believe the public would respond well to such schemes and this would greatly assist recovery in these areas some of which produce problematic wastes.

Careful consideration would need to be given to the structure of any deposit refund system. This requires a central collection agency to hold deposit funds and allocate funds based on returned products. This could prove costly to administer. However a number of working models exist that could form the basis of an options assessment.

Proposal 6: Mandatory Waste Data Returns from Business.

Question 1: Do you consider that legislation should be made in this area?

SEPA strongly supports a statutory requirement on waste producers to provide data on waste arisings. Increasingly with the complexity of global
resource pressures a far clearer perspective on what materials are flowing through the Scottish economy which then arise as waste materials is needed. An improved understanding of this would assist in identifying a more rapid response to specific resource pressures. Such a measure would also act to focus business on its resource use and provide opportunities for cost savings.

The following applies:

• The principal area where waste data is still lacking is for the waste produced by business, as there is currently no way to collect this directly. A limited amount of information on business waste arisings is available through Special Waste Consignment notes and through the returns for the Scottish Pollutant Release Inventory (SPRI).

• The information on business waste arisings is needed to:
  — aid national policy development;
  — aid in the assessment of capacity needs for the tertiary treatment of residual wastes and in improving technology choices for such treatment;
  — support policy development in organisations such as local authorities, enterprise agencies and others;
  — monitor change and policy impact;
  — help the development of the new National Waste Plan;
  — provide data for planning applications and investment in waste infrastructure;
  — identify potential benefits for businesses
  — and meet internal and external reporting requirements including the Waste Statistics Regulations.

• Currently SEPA does not have sufficient, detailed data to adequately satisfy a number of these. There is a need for information on the type of waste, the quantity of waste, the geographical origin of the waste and the Standard Industrial Classification (SIC) code of the business producing the waste.

• SEPA has attempted to fill this lack of information in two ways; first, directly, by carrying out national business waste surveys and second, indirectly, by using information gathered by the quarterly licensed/permitted waste management site returns. Both have their drawbacks.

(1) The principal issue with the survey is that it does not provide sufficiently accurate data for SEPA’s needs and those of its stakeholders. For example the 2006 survey showed that the total business waste produced in Scotland in 2006 was estimated to be 7.64 million tonnes with a 95% confidence interval of 2.60 to 13.42 million tonnes. This was mainly because of the poor response from businesses to the survey. A portion of Scottish businesses, about 29,800, were surveyed and there was a usable response rate of 10.8 % (3,232). This represented only 2.3% of all businesses in Scotland. It was clear from the survey that some businesses who replied had little knowledge of their waste. The cost of a survey would be about £80,000 at present values.
The information collected by the quarterly licensed/permitted site returns is good but only deals with the waste managed. It does not collect any information on the producer of the waste and only limited information on its geographical origin. Because of possible double counting issues is also not possible to get completely accurate figures for the waste produced.

• Whilst it would be unfair to place too much of a burden on business it does not appear unreasonable to require businesses, particularly larger ones, to have a knowledge of their waste and to report this to SEPA. This would complement the good work already carried out by Scottish local authorities in increasing waste recycled and reducing waste to landfill. Businesses are part of Scottish society and should be expected to contribute towards a zero waste Scotland. They contribute over two thirds of the annual waste arisings in Scotland.

• There are a number of ways that the reporting burden could be reduced. For example:

— There could be a de minimus limit under which businesses would not be required to report: of the 148,000 businesses in Scotland in 2006 only 6,680 had 50 or more employees and over 82,500 had less than five. Another approach would be to set a limit based on annual turnover in a similar way to the packaging waste obligations. The limit could be set to balance the need for information with the need to keep the burden on industry to a minimum.
— SEPA is currently developing an online data collection system for statutory returns, through the Operator Data Returns project. Businesses could potentially use this system for reporting data to SEPA, eliminating the need to create a new data collection system.
— An alternative approach for collecting the information could be to carry out compulsory business waste surveys on a third of all Scottish businesses annually. This would provide sufficient information for SEPA’s needs.
— A further alternative would be to undertake a root and branch review of the Duty of Care system and implement it effectively.

• SEPA does not consider such a duty to be a burden to business. Businesses themselves are likely to benefit in a number of ways from this statutory reporting including:

— identification of cost reduction opportunities through waste minimisation and increased recycling;
— benchmarking their performance against others in their sector;
— an enhanced image and reputation by being able to prove good environmental practice;
— and improved dialogue with the Government and SEPA;
— more aware of potential future resource pressures (and risks) arising from a rapidly globalising economy;
— access to education materials/initiatives associated with this obligation.

SEPA believes that placing a statutory duty on businesses to report on the waste they produce would provide the information needed by SEPA
and its stakeholders, and more importantly help progress towards a zero waste Scotland, ultimately improve the environment and make Scottish business more profitable and robust in terms of future resource pressures.

• SEPA recognises that the introduction of a new system comes with challenges. There will be a need for a promotional campaign aimed at publicising the benefits to business. Guidance (written and verbal) will need to be available for businesses and on going support will need to be provided. There may be initial problems with the quality of returns and with non-returns. However, from the SEPA Waste Data team’s experiences in introducing and operating the quarterly licensed/permitted waste management site returns these can be overcome relatively quickly by supporting the businesses.
• DEFRA is currently consulting on a proposal to add the requirement to report the SIC code of the waste producer to the waste transfer note. If this requirement was introduced the SIC code could be requested by a licensed/permitted site when waste is transferred for recovery or disposal. This would be reported in the returns made by licensed waste management facilities to the Environment Agency.
• This type of system could work in Scotland but would increase substantially the workload on both SEPA and the waste management industry, Its main strength is that it builds on an established system but there may be some reluctance from the waste management industry. SEPA’s Waste Data team believes that this methodology could provide the information required but that it removes the need for businesses to have knowledge of and be responsible for the waste they produce.

Proposal 7: Other Measures to encourage Waste Prevention, including action on single-use carrier bags.

Are there any other areas, not covered by this consultation, where legislation could be made to increase recycling and promote waste prevention?

SEPA considers that consideration should be given to the following additional areas for potential regulatory powers:

A local tax or levy on disposable and single use products should be considered when there are alternatives e.g. disposable picnic ware, razors, nappies, and cigarette lighters. This could include single use plastic or paper bags. However in this latter case SEPA believes we should see how the voluntary code of conduct agreed with national retailers is working prior to implementing any such action on carrier bags;

• Reduced VAT on products that have a high content of recyclate;
• Consideration should be given to encourage products to have a built in 5 year warranty to encourage repair rather than planned obsolescence. We again note that this would not be a devolved matter with significant implications at an EU level;
• Repair services should be VAT free;
• The implementation of landfill bans. SEPA however notes this can be addressed with existing powers;

SEPA considers that resource management is ultimately about materials management. As such powers should be developed that could be used to require specified materials to be managed in ways that represent the Best Practicable Environmental Option (including carbon management benefits).

General Comments

Whatever legislation is developed there needs to be a communication plan and guidance linked to it. The more engagement and guidance provided the better the legislation will be implemented.

SEPA is disappointed to see that the proposal for direct variable charging for waste has been withdrawn from proposals. Householders should equally apply to the Polluter Pays principle and be more aware of the impact that their wasteful activities have. It seems to be more of political decision to pull this option, which is concerning when some difficult and often unpopular political decisions need to be made if we are to seriously move Scotland towards a Zero Waste society. It is difficult in SEPA’s view to justify the challenging recycling targets placed on municipal authorities without the requisite powers to change public behaviour.

The resourcing implications of enforcing legislation also need to be given careful consideration and, where possible, SEPA would support the review of similar legislation with the other UK administrations that could result in consistency of UK legislation and greater environmental benefits.

SEPA
3 October 2008
I will address the one area where I believe I have something to offer and that is under sections 52 – 61 which covers Waste Reduction and Recycling, and specifically, section 59 relating to “Charges for supply of carrier bags”. Why this appears anywhere in this Bill and particularly under waste reduction remains a travesty of our democratic process. The Scottish Parliament has already in 2004 – 2006 spend an estimated £2,000,000 of taxpayers money investigating a proposed Environmental Levy on Plastic Bags Bill and unanimously rejected that Bill for very clear unambiguous reasons that to do so would create substitution of lightweight plastic bags by heavier bulkier and more inefficient carriers which was clearly and quantifiably proved to be counterproductive in reducing waste. Whilst Section 59 is all encompassing and non specific as to the material from which the carrier bags are manufactured, there is no doubt that measures already undertaken to reduce the number of bags used (as endorsed by all four UK environment Ministers) has inevitably increased the weight of product used, the bulk of the product used and defeat the very intention of the measure suggested.

There have already been two long and costly “consultations” undertaken by Parliament on this issue. The first when examining the proposed Levy Bill elicited over 1100 responses, over 1000 of which specifically said “no” to a levy on plastic bags. The second, on the Implementation of Zero Waste proposals, stated that “the proposal relating to single-use carrier bags only received support from a minority of respondents”. Both indicated clear majority opposition to the idea of having to pay for carrier bags. It is therefore undemocratic to include such a measure when the issue has already twice been consulted upon, and unanimously rejected by Parliament.

Furthermore, all of the major UK retailers have already signed up to a voluntary code of conduct in 2007, instigated and endorsed by the Carrier Bag Consortium (www.carrierbagtax.com), which required retailers to reduce the ENVIRONMENTAL IMPACT of carrier bags by the end of December 2008 by 25%. This has not yet been officially reported upon (WRAP have however indicated that the target has been exceeded) but the retailers involved have now undertaken with the UK Government to reduce the NUMBERS of carrier bags by 50% from the base line in mid 2006, by the summer of 2009.

You will all have seen and understood the retailer campaigns being run, including being asked if you need a bag, to bring back the previously used bag, to pay for a carrier bag, to buy alternative products, jute, cotton, nylon, bags for life, woven polypropylene and nonwoven polypropylene, and the occasional switch to paper from plastic in non food applications.
All of these campaigns are been promoted as being “better for environment” and more “ecologically friendly” so why did the Scottish Parliament unanimously reject that in 2006?

The answer is a combination of many reasons which are listed below and expanded in further detail for your understanding. Be aware that it is only the lightweight polyethylene (plastic) supermarket carrier bag that is actually being targeted under this scheme as it is the one which is most in use throughout the UK, and no other type of bag has shown any reduction with all the substitute products having increased availability and use.

Accordingly, a reduction of 50% (as prescribed by the agreement mentioned above) in the number of carrier bags will probably

1. Increase the weight of bags used in Scotland from 10,610 tonnes to 38,343 tonnes per annum
2. Increase the bulk and cubic capacity of bags used in Scotland from 27,660 cubic meters to 232,476 cubic meters per annum of product.
3. Increase the weight of transit packaging from 704 tonnes to 4,100 tonnes per annum
4. Increase the number of lorries - full (unlikely to be full) 20 ft lorry loads from 3,457 to 29,059 per annum
5. Increase the number of full pallets moving around our country from 76,064 to 639,306 per annum
6. Increase the amount of carcinogenic exhaust fumes from vehicles as a result
7. Increase the traffic congestion in our cities, towns and countryside as a result
8. Increase the incidence of road kill of our animals and probably humans
9. Contravene the Kyoto principle, the Bali agreement, the Posnam agreement, EU, UK and the Scottish targets set for Carbon Dioxide, Methane and other greenhouse gas reductions, by increasing their emissions.

This is a much increased and greater environmental cost than that which was estimated in 2006 as the substitute products for the lightweight carrier bags being replaced which are all being sold in today’s retail market are far heavier, bulkier and incidentally more expensive than was anticipated in 2006.

These are more accurate figures from those which the Environment and Rural Development Committee (ERDC) reviewed in 2006, as we now know what substitute products have been introduced, and when this potential disaster was understood by them, they had the foresight to understand the damage to the environment that they were being asked to make into law. Thankfully they intelligently voted unanimously against this ill conceived idea. Further consequences not able to be quantified by me, inevitably include more exhaust fumes, more traffic congestion, more road damage, more wildlife and probably human road kill as well.
Sadly the damage does not end there. In that significantly fewer lightweight supermarket carrier bags are available, the public will be forced to replace their re-use which, according to WRAP pre the introduction of the Code of Conduct, stood at between 74 and 80 %, with alternative truly single use products. These are likely to be an increased use of plastic black bin bags, pedal bin and swing bin liners, nappy bags, dog dirt bags, and food, freezer and sandwich bags to carry lunches and sandwiches to work, all of which will negate any perceived benefit from the introduction of charges to reduce lightweight plastic carrier bags.

Detailed analysis of the calculations based on actual weights of products currently available and, estimated usage based on information obtained in the market place, are attached for your perusal. They show clearly the position as it was for Scotland alone in 2006/7 and as it is likely to be in mid 2009 with the products currently available. Back up sheets show the product analysis with weights and the packaging and bulk calculations for all products. To really frighten yourselves, multiply all figures by 13 to arrive at the UK damage which will be inflicted on our Environment.

Do not be misled by either the tacit mildly reluctant acceptance by the retailers of this required reduction in number of bags or that they are anything other than ecstatic and enthusiastic about these plans to reduce free carrier bags. Please take time to understand the following,

1. The retailers reduce their costs by reducing the number of bags they give away “free”. In the UK when there is a 50% reduction in number, that is tantamount to Government handing them extra net profit annually of £100,000,000
2. Should they charge 5p for the remaining lightweight bags (as M & S do) they will save another £50 - £120 million per annum, less what they generously give of the public’s money to charity after deducting the costs of the bags, an administration cost, and the VAT remitted to the Treasury. The ever suffering public believes all their 5p is going to charity, and it most certainly is not.
3. They now sell many different types of alternative bags, jute, cotton, heavyweight plastic, woven and non woven polypropylene and nylon bags, all making significant profit for the retailers.
4. They are seen to be “generous” giving the “net proceeds to charity”. It’s the PUBLIC’S money they are donating without any contribution from them.
5. They are perceived to be “doing good for the environment” when, if you understand this letter, they are actually damaging it.

This remains a shrewd commercial decision rather than a studied philanthropic one for the retailers.

These are some of the quantifiable DIRECT environmental costs which will occur by simply reducing the number of lightweight supermarket bags in
circulation. The unquantifiable, but inevitable, increased damage from points 6 – 10 above, will be hugely significant.

There are further INDIRECT costs to the environment as well. In Eire, when they introduced a €15 cent plastax (now increased to €24 cents per bag) in 2002, the whole retail experience changed. No plastic bag was exempt from the tax other than small bags under approximately 250 x 375 mm. As a consequence, there was, and remains a visual and almost universal change from plastic to paper bags in the non food retailers. Boots, Mothercare, Next, Topshop, Evans, Miss Selfridge, M & S, Topman, Burton, Debenhams, to name but a few, all changed from plastic to paper in Eire only, whilst retaining plastic in their UK operations. Furthermore, in Eire, many of the paper bags had to be laminated with polypropylene (another plastic) to stop them disintegrating when wet and avoiding ink transfer onto clothes when carried. Yet another unintended consequence of the tax was therefore using more plastic than saving.

In the Irish food supermarkets the whole retail presentation of food altered with all fruits, vegetables, pies, bakery products and deli products changing from being sold loose, to being sold in collation packs, so that they were not contaminated by being placed in the dirty, reusable non-plastic substitute carrier bags inevitably soiled by milk spills, dirt absorbed from the pavement, soap residues and other unsavory unhygienic contaminants (this is a public health hazard waiting to happen).

You simply cannot buy loose fruit or vegetables in an Irish supermarket – they are all now prepackaged in plastic trays and plastic clam shells, wrapped inevitably in shrink film. To give you some indication of the crass stupidity of this decision, 4 bananas in an Irish supermarket are now presented on a plastic tray, covered in shrink film with two paper adhesive labels attached thereto, one showing country of origin and the other the price. The weight of all that packaging is equal to 7 times the weight of a UK supermarket check out carrier bag and 16 times the weight of a fruit and vegetable carrier we use at present. The packaging consisted of 4 different base materials which rendered the waste very difficult to recycle. These changes WILL inevitably happen in the UK if the public increasingly do not have free carrier bags supplied at the checkout.

The Irish turn a blind eye to these massive hidden waste increases, please do not make the same mistake by ignoring these inevitable consequences for Scotland.

Recently, the Environment and Rural Development department announced a £5 million fund availability over a two year period for improving material recovery facilities and to develop a home market for plastics reprocessing, and inform us that they will be working to significantly increase public awareness of waste issues, including reprocessing carrier bags. Whilst I am truly encouraged that Parliament is at least making some attempt to address the plastics issue, the inclusion of plastic carrier bags under this funding is
totally unnecessary and compounds a glaring lack of knowledge of facilities already available within Scotland.

May I respectfully remind you of the statement from John Langlands, the MD of British Polythene Industries, a major Scottish Plc, at the evidence taking on the failed attempt to levy a charge on plastic bags in 2005, whose recorded response to the Environment Committee, including Mr. Lochhead the current Environment Minister, on October 26th 2005 was as follows:

“We are the largest recycler of polythene film in the UK and probably in Europe—we recycle about 75,000 tonnes of polythene film a year. If you can get it to us by whatever means, we can recycle it. The stuff that we cannot turn into refuse sacks or building film we turn into Plaswood, which we use to manufacture park benches and signs, for which we have won awards and which we sell to Scottish local authorities. That is a good use of recycled products and something that must be encouraged and developed in the community.”

This Scottish facility for recycling plastic film and carrier bags is and has been in place for over two decades. Why don’t local authorities use it? Also your Department should be educating these local authorities in an understanding of what is needed to instigate a collection service from the public which delivers what you seek without a penny of your £5 million allocation. Save the fund for hard plastics, ABS, PET, PP, PS and PVC, all of which are far more prevalent, both in tonnage and in bulk, in our waste stream than polythene film. It would be a very brave, and some will say stupid, businessman who, in these desperate times, would invest in recycling plastics or paper with such uneconomic price levels for these products coupled with surplus raw material product already available worldwide.

Plastic is environmentally easily and economically recycled, using less resource than any of the substitute products both initially and on recycling, and parliament should be encouraging continued use of lightweight bags rather than reducing their use which leads to further damage to the environment from substitute products.

The Government should be far more proactively encouraging the public to reuse their lightweight plastic carrier bags where hygienically possible, and to recycle them in the plethora of disposal units now visible in the forecourts of most major supermarkets. It should demand and encourage Local Authorities to instigate a collection from householders of plastic carrier bags. It should provide educational literature for schools aimed at encouraging the intelligent use, reuse and recycling mantra on plastic bag use, and not demonising them. The carrier bag industry, more specifically the plastic carrier bag industry, is under attack from all sides

1. The UK Customs and Excise impose import duties on imports ranging from 3% to 25%
2. The EU has imposed additional anti-dumping duty on plastic bags ranging from 5% to 29%
3. Towns and villages attempt to force a ban plastic bags which is legally unenforceable, as confirmed by Jane Kennedy, the UK’s Environment Minister (Hansard Monday 19 January 2009)

4. Government in Westminster regards them as evil with the Prime Minister stating that he “wants to get rid of plastic bags”

5. Government in Scotland specifically includes them in their Zero Waste initiative and again specifies them in the draft Climate Change (Scotland) Bill

6. A two year campaign, voluntarily undertaken by all the major retailers to reduce the ENVIRONMENTAL IMPACT of carrier bags by 25% then subsequently changed to 25% in NUMBER of carrier bags without consulting the parties involved.

7. A further extension to that policy to reduce the NUMBER of carrier bags by 50% from the 2006 base level (around 1 billion carrier bags in Scotland) by summer of 2009.

All aimed at reducing what you must think is a massive part of our household waste findings.

The reality is that household waste arisings in Scotland amount to some 3,500,000 tonnes annually, of which, in 2006, ALL plastic carrier bags accounted for less than 8,500 tonnes per annum. At that time, paper and card based household waste accounted for 850,000 tonnes and with the demise of a paper maker in Fife that claimed to recycle over 100,000 tonnes per annum, that figure is actually around 950,000 tonnes of paper waste per annum. The voluntary scheme mentioned in point 6 above has (as agreed by WRAP) been met and exceeded, therefore reducing the tonnage of plastic to less than 6,400 tonnes per annum.

This now represents less than 0.2% of waste arisings and why should time and energy be wasted on such an insignificant percentage of waste when there is a mountain of paper waste and other identifiable component groups like food requiring more immediate action.

Furthermore, the reduction by 50% of the NUMBER of carrier bags used in Scotland, will have consequences which will hugely damage the environment of our country as the public are forced, by ill conceived Government policy, to reduce the number of lightweight bags in use only to substitute them with heavier reusable bags made from paper, jute, cotton, woven and non-woven polypropylene. This is not just a possibility – it has and continues to be happening right now. If even half of the surviving 50% of the carriers remain lightweight supermarket carriers then these unintended consequences are already damaging our environment.

Do not close your mind to these consequences and understand that they ARE ALREADY HAPPENING, and as a result, the Kyoto protocol, the Bali agreement, the EU targets for carbon dioxide and methane gas reductions all will be significantly more difficult to achieve as this new mountain of waste, enough to cover the pitch at Hampden to a depth of
30 meters every year, will generate significant increases in both these greenhouse gases and more if the landfill physical conditions are met.

In terms of transport here are some facts: One 20 ft container will hold approximately:-

1. 1,700,000 lightweight plastic supermarket bags or
2. 300,000 heavyweight plastic “bags for life” o
3. 70,000 equivalent strength paper carrier bags or
4. 45,000 woven polypropylene plastic carrier bags or
5. 35,000 non woven polypropylene plastic carrier bags or
6. 22,000 jute carrier bags (with laminated plastic lining) or
7. 30,000 cotton carrier bags

Please relate these numbers to storage, transport and disposal logistics.

Serious awareness should also be understood about the “down weighting” which continues unabated in all forms of packaging and manufacturing today: the substitution of glass bottles by plastic bottles: the change from cardboard collation packs to plastic packs, the lightening of motor cars, and all forms of public transport by changing from steel bodywork, bumpers and interior fittings to plastic panels: shrink film and plastic vacuum packs replacing cardboard cartons; plastic pallets replacing wooden ones: paint pots changing from steel to plastic; fruit and vegetable transit packaging to avoid damage and extending food shelf life changing from paper and cardboard to plastic; paper carriers changing to plastic carriers; soup tins changing to plastic cartons and pouches; metal pipes changed to plastic, wooden and metal windows changed to plastic, are just a few of the changes seen recently.

Why? – simply to reduce packaging waste, reduce overall weight for transport considerations and increase energy efficiency, preserve products from spoiling and transit damage, increase shelf life, reduce theft, increase efficiency and preserving resources - all of these are achieved by down weighting and all are achieved by changing from various materials to plastic. What this section of the draft Bill will do is increase the weight and bulk of the product and in many cases increase the complexity and variety of materials used, rendering them more difficult to recycle – clearly going against all that is happening in the market place to use less of the world’s resources and become more efficient. The Courtauld Commitment, a voluntary agreement, launched in 2005, between WRAP and the major grocery retailers has as one of its aims, that the signatories must seek ways to reduce the weight of packaging. This Bill will be doing exactly the opposite.

Do not be taken in or take decisions under the mistaken belief, that we will save any oil as a result of this projected change. Polyethylene (plastic) bags are manufactured from by products, naphtha and ethylene, resulting from the distillation of oil and gas into fuel. Accordingly, for as long as we drive cars, use buses, trains, aircraft and bikes or switch on an electric light, these by products will be produced and if not used in the manufacture of plastics, it would be flared off into the atmosphere.
My overview of the targets set by the draft Bill is that they are commendable but probably unrealistic and therefore unachievable and accordingly are likely to concentrate efforts in the wrong direction. We should be encouraging solutions to deal with the possible 2 degree warming estimated to occur within the next 100 years, for example bringing more current unproductive cold agricultural land into producing additional food and revenues. Continue to seek alternative energy solutions by all means, but do not ignore the opportunities which such warming will bring.

There will be an enormous cost to the people of Scotland (and to the rest of the World) in the cause to reduce emissions, in the perhaps mistaken belief that in so doing, we will address the problem of climate change. I do not profess to be an expert in this field, but I would recommend that every member of the Committee, in order to gain a comprehensive alternative view to that which is currently in vogue on this issue, reads the following books on the subject of Climate Change, which will undoubtedly change their perspective of what they are attempting to achieve.

1. The Skeptical Environmentalist by Bjorn Lomborg published in 2001
2. Cool It by Bjorn Lomborg as an update published in 2007
3. An Appeal to Reason by Nigel Lawson, former Chancellor of the Exchequer

Lomborg, a Danish statistician regarded by Time magazine as one of the 100 most influential persons on Earth, comprehensively and with unchallenged statistical facts, destroys Al Gore’s “An Inconvenient Truth” analysis of the problem, and whilst Lomborg does not deny that there is a slight warming of the earth, he provides historical evidence suggesting that this is a natural, perfectly normal, repeating cycle. These three books explode the many myths associated with the current hysteria on climate change and that we are responsible for it. Lomborg’s view is that the cost of fighting climate change cannot be justified by the likely benefit, and that there are more pressing problems for the world to address. He proves, for example, that many more people die from winter cold than would perish in future from summer heat waves, and that climate change will, therefore, save more lives than it costs. He also proves that the reduction in numbers of polar bears is caused by humans killing them and has nothing whatsoever to do with global warming.

This draft Climate Change Bill has many sensible and very demanding targets for the country to meet. However there is no justification for the continuing attack on the ubiquitous plastic carrier bag as such a move will only make those targets much more difficult to meet.

Contrary therefore to what is proposed in the draft Bill, Parliament should avoid the stigma of introducing a Bill which increases environmental damage and produces even more carbon dioxide and methane gases, by not only encouraging the use of lightweight plastic bags, but also their sensible re-use and highlighting their recycling properties, for the simple reason that they are
clearly the most efficient environmentally friendly product currently available for transporting retail purchases home.

Should you require any further information or understanding of these issues, I am usually, business permitting, available for an honest and open discussion. Should any detailed consultation or evidence taking be required, then I would wish to be considered by the Committee as part of the oral evidence taking.

J Neil Young
Director.
Simpac Ltd
13 February 2009
### Base Position at start of Code of Conduct on Carrier Bags - Mid 2007

<table>
<thead>
<tr>
<th>PRODUCTS</th>
<th>Weight per million of carrier bags in tonnes</th>
<th>Number of carriers used annually in millions</th>
<th>Weight of all carriers in mid 2007</th>
<th>Weight of secondary packaging per million carriers in mid 2007</th>
<th>Cubic capacity per million bags in cubic meters</th>
<th>Volume for Transport purposes and Landfill purposes in cubic meters</th>
<th>Number of 20 foot containers equivalent required for single journey</th>
<th>Number of trips each product makes on roads per consumer</th>
<th>Number of full pallets for deliveries</th>
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<tr>
<td>HOPE supermarket bags under 10kg/1900</td>
<td>7.35</td>
<td>94</td>
<td>1000</td>
<td>6,909</td>
<td>0.4</td>
<td>376</td>
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<td>LDPE carrier bags for life and fashion</td>
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<td>Woven polypropylene C bags</td>
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<td>Non-woven polypropylene C bags</td>
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<td>1</td>
<td>940</td>
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<td>Jute carrier bags</td>
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<td>3</td>
<td>2,200</td>
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<td>Cotton carrier bags</td>
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<td>0.01</td>
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<td>28</td>
<td>3</td>
<td>1,180</td>
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<td>Others (nylon, bamboo etc)</td>
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<td>1</td>
<td>275</td>
<td>5,375</td>
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Base number of carriers in millions: 1000

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<thead>
<tr>
<th>Cubic meters of transport required</th>
<th>27,660</th>
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<tr>
<td>Total number of 20 ft containers required</td>
<td>988</td>
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<tr>
<td>Number of FULL wagon load journeys required</td>
<td>3,457</td>
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<tr>
<td>Number of FULL pallets required</td>
<td>76,064</td>
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</table>
## Estimated Position at end of 50% reduction in Number of carrier bags

### June 2009 PRODUCTS

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight per million carriers used annually in 2009</th>
<th>Number of carriers in mid 2009</th>
<th>Weight of packing per million carriers in 2009</th>
<th>Weight of secondary packaging of all carriers in mid 2009</th>
<th>Cubic capacity per million bags in cubic meters</th>
<th>Volume for Transport and Landfill purposes in cubic meters</th>
<th>Number of 20 foot containers equivalent required for single journey</th>
<th>Numbers of trips each product makes on roads per consumer deliveries</th>
<th>Number of full pallets for deliveries</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDPE supermarket bags under 10kg/1000</td>
<td>7.35</td>
<td>500</td>
<td>1.838</td>
<td>0.40</td>
<td>100</td>
<td>15</td>
<td>3,750</td>
<td>134</td>
<td>469</td>
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<tr>
<td>LDPE carrier bags for life and fashion</td>
<td>34.90</td>
<td>500</td>
<td>873</td>
<td>2.60</td>
<td>70</td>
<td>50</td>
<td>1,250</td>
<td>45</td>
<td>156</td>
</tr>
<tr>
<td>Paper carrier bags with handles</td>
<td>100.21</td>
<td>500</td>
<td>4,328</td>
<td>10.00</td>
<td>400</td>
<td>525</td>
<td>21,000</td>
<td>750</td>
<td>2,625</td>
</tr>
<tr>
<td>Woven polypropylene C/bags</td>
<td>121.03</td>
<td>500</td>
<td>4,641</td>
<td>12.00</td>
<td>400</td>
<td>670</td>
<td>26,000</td>
<td>957</td>
<td>3,350</td>
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<tr>
<td>Non-woven polypropylene C/bags</td>
<td>111.03</td>
<td>500</td>
<td>4,473</td>
<td>14.00</td>
<td>500</td>
<td>940</td>
<td>37,000</td>
<td>1,343</td>
<td>4,700</td>
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<tr>
<td>Jute carrier bags</td>
<td>272.25</td>
<td>500</td>
<td>10,690</td>
<td>28.00</td>
<td>1,120</td>
<td>2,200</td>
<td>60,000</td>
<td>3,143</td>
<td>11,000</td>
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<tr>
<td>Cotton carrier bags</td>
<td>240.00</td>
<td>500</td>
<td>9,600</td>
<td>28.00</td>
<td>1,120</td>
<td>1,160</td>
<td>47,200</td>
<td>1,066</td>
<td>5,500</td>
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<tr>
<td>Others (nylon, bamboo etc.)</td>
<td>60.00</td>
<td>500</td>
<td>1,500</td>
<td>10.00</td>
<td>250</td>
<td>275</td>
<td>6,975</td>
<td>240</td>
<td>859</td>
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<tr>
<td><strong>Totals</strong></td>
<td><strong>100.00</strong></td>
<td></td>
<td><strong>38,343</strong></td>
<td><strong>4,100</strong></td>
<td></td>
<td><strong>252,475</strong></td>
<td><strong>8,303</strong></td>
<td><strong>29,659</strong></td>
<td><strong>639,306</strong></td>
</tr>
</tbody>
</table>

- Cubic meters of transport required: 252,475
- Total number of 20 ft containers required: 8,303
- Number of FULL wagon load journeys required: 29,659
- Number of FULL pallets required: 639,306

### Reduction in NUMBER of carriers: 500,000,000

### Increase in environment effect

<table>
<thead>
<tr>
<th></th>
<th>Tonnes</th>
<th>Tonnes</th>
<th>Cubic meters</th>
<th>Containers</th>
<th>Lorry loads</th>
<th>Pallets</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>27,733</td>
<td>3,396</td>
<td>204,816</td>
<td>7,316</td>
<td>26,602</td>
<td>563,243</td>
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</table>
## Carrier Bag Analysis by Weight - Dec 2008

<table>
<thead>
<tr>
<th>HDPE Supermarket Carriers</th>
<th>LDPE Supermarket bags for life</th>
<th>Weight per 1000 bags in Kgs</th>
<th>Paper carrier bags from retail stores.</th>
<th>PAPER Average weight by size in Kgs per 1000</th>
<th>Woven polypropylene carrier bags from retail stores.</th>
<th>Weight per 1000 in Kgs</th>
<th>Non-Woven polypropylene carrier bags from retail stores.</th>
<th>Weight per 1000 in Kgs</th>
<th>Jute carrier bags from retail supermarkets.</th>
<th>Weight per 1000 in Kgs</th>
<th>Cotton carrier bags from retail stores.</th>
<th>Weight per 1000 in Kgs</th>
<th>Other - Nylon and polyester carrier bags from retail stores.</th>
<th>Weight per 1000 in Kgs</th>
</tr>
</thead>
<tbody>
<tr>
<td>TESCO</td>
<td>6.80</td>
<td></td>
<td></td>
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<td>ASDA</td>
<td>6.80</td>
<td>31.00</td>
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<tr>
<td>Sainsburys</td>
<td>7.10</td>
<td>33.60</td>
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<tr>
<td>Morrisons</td>
<td>8.70</td>
<td>35.40</td>
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<tr>
<td>Marks &amp; Spencer</td>
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<td>39.60</td>
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<tr>
<td>House of Fraser - small</td>
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<tr>
<td>House of Fraser - Medium</td>
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<td>Jane Norman</td>
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<td>House of Fraser - Large</td>
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<td>Jane Norman</td>
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</tbody>
</table>

### Weight per 1000 in Kgs

<table>
<thead>
<tr>
<th>TESCO</th>
<th>6.80</th>
<th>31.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASDA</td>
<td>6.80</td>
<td>31.00</td>
</tr>
<tr>
<td>Sainsburys</td>
<td>7.10</td>
<td>33.60</td>
</tr>
<tr>
<td>Morrisons</td>
<td>8.70</td>
<td>35.40</td>
</tr>
<tr>
<td>Marks &amp; Spencer</td>
<td>39.60</td>
<td></td>
</tr>
<tr>
<td>House of Fraser - small</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office</td>
<td></td>
<td></td>
</tr>
<tr>
<td>USC</td>
<td>37.20</td>
<td>53.60</td>
</tr>
<tr>
<td>House of Fraser - Medium</td>
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<tr>
<td>Jane Norman</td>
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</tr>
<tr>
<td>Office</td>
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<td>Poste Mistress</td>
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</tr>
<tr>
<td>USC</td>
<td>60.20</td>
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</tr>
<tr>
<td>d2</td>
<td>64.40</td>
<td>101.43</td>
</tr>
<tr>
<td>House of Fraser - Large</td>
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</tr>
<tr>
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<td></td>
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</tr>
<tr>
<td>Office</td>
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<td>----------------</td>
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</tr>
<tr>
<td></td>
<td>229.50</td>
<td>83.30</td>
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<tr>
<td></td>
<td>29.40</td>
<td>139.60</td>
</tr>
<tr>
<td>AVERAGE WEIGHTS</td>
<td>7.35</td>
<td>34.90</td>
</tr>
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</table>
## Carrier Bag weight and packaging Analysis

<table>
<thead>
<tr>
<th>PRODUCTS</th>
<th>Weight per million bags in tonnes</th>
<th>Weight per empty cartons (net of bags) kgs</th>
<th>Number of cardboard cartons per million bags</th>
<th>Weight per million bags of secondary packaging</th>
<th>Cubic meters capacity per million bags</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDPE supermarket bags under 10kg/1000</td>
<td>7.35</td>
<td>0.40</td>
<td>1,000</td>
<td>0.40</td>
<td>15</td>
</tr>
<tr>
<td>LDPE carrier bags for life and fashion</td>
<td>34.90</td>
<td>0.70</td>
<td>4,000</td>
<td>2.80</td>
<td>50</td>
</tr>
<tr>
<td>Paper carrier bags with handles</td>
<td>108.21</td>
<td>1.00</td>
<td>10,000</td>
<td>10.00</td>
<td>525</td>
</tr>
<tr>
<td>Woven polypropylene C/bags</td>
<td>121.03</td>
<td>1.20</td>
<td>10,000</td>
<td>12.00</td>
<td>670</td>
</tr>
<tr>
<td>Non-woven polypropylene C/bags</td>
<td>111.83</td>
<td>1.40</td>
<td>10,000</td>
<td>14.00</td>
<td>940</td>
</tr>
<tr>
<td>Jute carrier bags</td>
<td>272.25</td>
<td>1.40</td>
<td>20,000</td>
<td>28.00</td>
<td>2200</td>
</tr>
<tr>
<td>Cotton carrier bags</td>
<td>240.00</td>
<td>1.40</td>
<td>20,000</td>
<td>28.00</td>
<td>1180</td>
</tr>
<tr>
<td>Others (nylon, bamboo etc)</td>
<td>60.00</td>
<td>1.00</td>
<td>10,000</td>
<td>10.00</td>
<td>275</td>
</tr>
</tbody>
</table>
I wish to object to section 59 of the Climate Change (Scotland) Bill as the consequences of introducing any charge for carrier bags is that more waste and carbon dioxide will result. This section should be excluded. The inclusion of Section 59 will see a massive increase in bags such as paper, jute, cotton and nylon which cannot be recycled thereby increasing waste.

Shaws Fine Meats
27 February 2009
RURAL AFFAIRS AND ENVIRONMENT COMMITTEE

CLIMATE CHANGE (SCOTLAND) BILL

SUBMISSION FROM MARGARET SMEATON

Kindly register my objection to the section of the proposed Bill which relates to carrier bags.

The Environment Department is presumably supposed to be protecting the environment, yet we are expected to suffer the ignominy of paying a tax for out carrier bags at the supermarket which has been specifically chosen by the Scottish Government in 2006 to result in more damage to the environment by the substitution of smelly, bulkier and heavier alternatives.

If we have no free plastic bags we will just have to bur plastic bin liners instead, costing us more of our hard earned net of tax, earnings, and by doing so will only increase the amount of raw materials used. Is this not simply madness?

Margaret Smeaton
18 February 2009
Please register my objection to the section in this Bill (Section 59) which gives power to the Scottish Ministers to introduce charges for carrier bags.

We in Scotland have already seen this plea for legislation rejected by Parliament and spent time and taxpayers money doing so.

Lightweight carrier bags are being touted as “single use” by our Environment minister Richard Lochhead. If they are, then more fool him for not reusing them as most of the public already do. Even his own DEFRA colleagues acknowledge that 80% are reused at least once.

Now he wants to tax these efficient bags for no other reason than to educate the public. What drivel emanates from Government — pray tell us uneducated masses when was the last time the imposition of a tax educated anyone on a specific policy other than to educate them that their Government is grasping at straws.

Pray tell the world, who is it that wants more taxes which will result in damage to the environment on already stretched incomes, when we are being advised we should be trying to help the environment?

D Sutcliff, K McArthur and S Smith
24 February 2009
Please register my objection to the section in this Bill (Section 59) which gives power to the Scottish Ministers to introduce charges for carrier bags.

We in Scotland have already seen this plea for legislation rejected by Parliament and spent time and taxpayers money doing so.

Lightweight carrier bags are being touted as “single use” by our Environment minister Richard Lochhead. If they are, then more fool him for not reusing them as most of the public already do. Even his own DEFRA colleagues acknowledge that 80% are reused at least once.

Now he wants to tax these efficient bags for no other reason than to educate the public. What drivel emanates from Government — pray tell us uneducated masses when was the last time the imposition of a tax educated anyone on a specific policy other than to educate them that their Government is grasping at straws.

Pray tell the world, who is it that wants more taxes which will result in damage to the environment on already stretched incomes, when we are being advised we should be trying to help the environment?

A Tierney
26 February 2009
Please register my objection to the section in this Bill (Section 59) which gives power to the Scottish Ministers to introduce charges for carrier bags.

We in Scotland have already seen this plea for legislation rejected by Parliament and spent time and taxpayers money doing so.

Lightweight carrier bags are being touted as “single use” by our Environment minister Richard Lochhead. If they are, then more fool him for not reusing them as most of the public already do. Even his own DEFRA colleagues acknowledge that 80% are reused at least once.

Now he wants to tax these efficient bags for no other reason than to educate the public. What drivel emanates from Government — pray tell us uneducated masses when was the last time the imposition of a tax educated anyone on a specific policy other than to educate them that their Government is grasping at straws.

Pray tell the world, who is it that wants more taxes which will result in damage to the environment on already stretched incomes, when we are being advised we should be trying to help the environment?

P Timmins
26 February 2009
I wish to register my disapproval of the inclusion of Section 59 of the aforementioned Bill.

I am at a loss to understand why so called educated people continually lambaste lightweight plastic carrier bags.

These bags are made from waste products i.e. Naphtha & Ethylene which is produced during the refinement of oil into gasoline etc. These products would otherwise be flared off (burnt) and indeed used to be, until the invention of Polyethylene and other related plastic products.

So they are immediately at birth, in their raw polymer state, Eco friendly by utilizing a waste product.

Furthermore, they are Clean, Safe for Food Use, Cost Effective, Strong, Suitable For Purpose, Lightweight, Small Carbon Footprint to produce & distribute, Have Hundreds of Secondary Uses AND when no longer serviceable are 100% recyclable.

There is no other product that has those credentials.

There is a huge market for recycled polymers and demand outstrips supply. We already have in Scotland (though our ministers don’t seem to know it) the largest recycler of polymers in Europe who are literally screaming for more product. So, why is it that most councils in Scotland do not have the facility to recycle ANY plastics, let alone polyethylene? Surely, with scrap polymer fetching £350 / Tonne on the open market it makes financial sense for the councils to be generating income from this product rather than sending it to landfill. Instead they continue to collect thousands of tonnes of paper and coloured glass that nobody wants and invariably ends up in landfill anyway!

Did you know that a 2 Litre plastic milk bottle will make (if recycled) 12 lightweight carrier bags? Or 18 in the case of a large bottle of Squeezy or Fair Liquid! How many of these go to landfill every day? You will be gobsmacked when you find out the answer. Should we not be banning these? Or indeed the estimated 800,000 disposable nappies that go to landfill in Scotland EVERY day?

If indeed this bill is about Climate Change then we should be looking at CO2 & METHANE emissions. These are without any question of doubt the main cause of Global Warming caused by Climate Change.
Neither of them are caused by plastic bags!!

Section 59 has no place in this Bill.

Alistair M. Tough.
29 February 2009
I am writing to object to section 59 of the Climate Change (Scotland) Bill as the consequences of introducing any charge for carrier bags would be disastrous for the environment in terms of the extra waste and carbon dioxide that will result. This was all investigated in 2006 by an independent committee and was found not to be a viable solution to the environmental concerns we all have. The possibility that this is going to be re-visited again is just ridiculous. Enough time and expense has already been spent on this topic.

In these times of financial hardship, many small businesses are struggling to keep their business going. Their priority is to reduce costs to their business and in effect, what you are proposing is to limit their choices, insisting with legislation that they commit financially to more expensive packaging for their products at the point of sale, which in effect will increase their expense and ultimately not resolve the waste and Co2 issues.

Many alternative, so called long term carrier bag solutions, do not last due to poor workmanship. These bags are then thrown away and do not decompose. To my knowledge these bags are mainly made in India and Asia. There is a polythene manufacturing base in the UK that will be destroyed - more people out of work - while we as a country will then be advocating the importing of products made by workers from other countries. In this time of growing unemployment does the Scottish Parliament want to be responsible for adding to the jobless figures? **This is not the time to be introducing this.**

In my opinion, further investment in recycling facilities is required by local councils and a more uniform approach to "wasteful packaging" rather than singling out carrier bags and demonising them. I hope that you will consider my opinion, which is shared by many of my colleagues, friends and family.

Thank you

Carri-Ann Walker
19 February 2009.
RURAL AFFAIRS AND ENVIRONMENT COMMITTEE

CLIMATE CHANGE (SCOTLAND) BILL

SUBMISSION FROM DR ROBERT B WALKER

The arrogance of Environment Minister, simply beggars belief. He informs us the public want Government to do something about the carrier bag issue and so he invidiously includes powers to deal with such bags in the proposed Climate Change (Scotland) Bill.

The fact of the matter is that already there have been two official consultations on the subject of carrier bags; one received over 1200 individual responses of which over 1100 were specifically against the introduction of a levy or tax on plastic carrier bags. The second stated categorically that the proposal relating to carrier bags (section 59 in the Bill) “only received support from a minority of respondents”

If the Government were to be honest enough to ask the nation, if the introduction of a projected tax of over 600% on a product which was currently given away free was on their personal wish list, they would be told to check in to the nearest mental institution. (Though perhaps on reflection, members of the Government are already sitting in one such!)

This is yet another example of Government choosing to ignore facts in favour of political spin and of aggravating an issue in a manner which will inevitably produce more waste and unwelcome greenhouse gas emissions - contrary to the Kyoto Protocol, The Bali Agreement, the Posnam accord and subsequent EU requirements on reducing carbon dioxide emissions. The less than honest approach and provisions of section 59 in this Bill are grossly irresponsible.

This measure will increase carbon dioxide emissions, increase methane emissions, increase tonnage of waste, increase landfill requirements and increase transport requirements from 76,000 pallets per year running around Scotland to 639,000 pallets running around Scotland.

Section 59 has no place within the Climate Change (Scotland) Bill. This section 59 in the proposed Bill should be eliminated in its entirety. Please register my objection accordingly.

Dr Robert B Walker
24 February 2009
Please register my objection to the section in this Bill (Section 59) which gives power to the Scottish Ministers to introduce charges for carrier bags.

We in Scotland have already seen this plea for legislation rejected by Parliament and spent time and taxpayers money doing so.

Lightweight carrier bags are being touted as “single use” by our Environment minister Richard Lochhead. If they are, then more fool him for not reusing them as most of the public already do. Even his own DEFRA colleagues acknowledge that 80% are reused at least once.

Now he wants to tax these efficient bags for no other reason than to educate the public. What drivel emanates from Government — pray tell us uneducated masses when was the last time the imposition of a tax educated anyone on a specific policy other than to educate them that their Government is grasping at straws.

Pray tell the world, who is it that wants more taxes which will result in damage to the environment on already stretched incomes, when we are being advised we should be trying to help the environment?

P Walker
26 February 2009
I wish it to be recorded that I object in the strongest possible terms to the inclusion of Carrier Bags within the proposed Climate Change (Scotland) Bill.

It was clearly stated by the previous Environmental and Rural Development Committee (ERDC) that the environmental objectives in introducing a charge could not be met and to proceed with the inclusion of such a proposal in the Climate Change (Scotland) Bill without any further robust evidence is a condemnation of the scrutiny and conclusions reached by the ERDC.

It has already been proven, categorically, that the introduction of such a proposed charge will see a substantial increase in the waste findings in Scotland and in doing so will see the Scottish Government incur the most severe penalties under EU agreements. Those penalties will run into millions of pounds which will ultimately have to be met by the Scottish taxpayer.

Christine Walker
February 2009
Executive Summary
WRAP Scotland welcomes the opportunity to respond to the *Climate Change (Scotland) Bill*, launched by the Scottish Government.

In summary, our three key points are as follows:

- WRAP Scotland welcomes the introduction of a section dedicated to waste management in the *Climate Change (Scotland) Bill*. We applaud the decision of the Scottish Government to link resource efficiency and waste management with the climate change agenda.

- We would like to take this opportunity to refer back to the previous consultation responses that WRAP Scotland submitted to the Scottish Government, which can be found in the annex to this response.

- We would like to highlight that the Scottish Government might need to introduce legislation in order to ensure the creation and smooth implementation of the enforcement authority in charge of monitoring the deposit and return scheme, as stated in paragraph 58(7)(i) of the *Climate Change (Scotland) Bill*. 

Introduction to WRAP & WRAP Scotland

1. WRAP (the Waste & Resources Action Programme) is a not-for-profit UK company providing recycling and resource efficiency programmes for Defra, the Scottish Government, the Welsh Assembly and the Northern Ireland Assembly. The organisation was formed in 2000 to implement a number of the actions set out in the Government White Paper *Waste Strategy 2000*. 

2. WRAP works in partnership to encourage and enable businesses and consumers to be more efficient in their use of materials, and to recycle more things more often. This helps to divert waste from landfill, reduce carbon emissions and improve our environment.

3. Since its creation, WRAP’s work has contributed to reductions in greenhouse gases (CO2, but also methane), by decreasing the amount of waste going to landfill, promoting recycling, creating markets for recycled materials and encouraging waste minimisation.

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4. Consistent with the adoption of the Zero Waste Policy by the Scottish Government, WRAP has established a specific WRAP Scotland team to lead and develop dedicated programmes in Scotland to support the Government, local authorities, businesses and community sector in the delivery of increased waste prevention, recycling, reuse and composting infrastructure and services.

5. This consultation is, therefore, highly relevant to our work.

GENERAL COMMENTS ON THE CONSULTATION

6. WRAP Scotland welcomes the introduction of a section dedicated to waste management in the Climate Change (Scotland) Bill. We applaud the decision of the Scottish Government to link resource efficiency and waste management with the climate change agenda.

7. We would like to take this opportunity to refer back to the previous consultation responses that WRAP Scotland submitted to the Scottish Government, which can be found in the annex to this response.


9. We believe that this previous response gives a comprehensive picture of WRAP Scotland’s position on the management of waste in Scotland in respect to the areas highlighted in the proposed Climate Change (Scotland) Bill.

10. WRAP Scotland would like to confirm that any proposed Scottish deposit and return scheme, as outlined in paragraph 58(2)(b), will return the full deposit to the customer. To our knowledge there are a number of schemes around the world which only a proportion of the deposit is returned to the consumer thus allowing income to be generated to cover the costs of administering the scheme.

11. Finally, we would like to highlight that the Scottish Government might need to introduce legislation in order to ensure the creation and smooth implementation of the enforcement authority in charge of monitoring the deposit and return scheme, as stated in paragraph 58(7)(i) of the Climate Change (Scotland) Bill.

Submitted by:
WRAP
5 March 2009
CONSULTATION ON PROPOSALS FOR A SCOTTISH CLIMATE CHANGE BILL:
A CONSULTATION DOCUMENT

Response from WRAP
(Waste and Resources Action Programme)

Executive Summary
WRAP welcomes the opportunity to respond to the Consultation on Proposals for a Scottish Climate Change Bill, launched on 29 January 2008 by the Scottish Government.

Our response focuses on the environmental benefits of recycling and waste minimisation activities, and suggests that these should be considered as important elements of the response to the challenge of climate change.

Introduction to WRAP

1. WRAP (the Waste & Resources Action Programme) is a not-for-profit UK company providing recycling and resource efficiency programmes for Defra, the Scottish Government, the Welsh Assembly and the Northern Ireland Assembly. The organisation was formed in 2000 to implement a number of the actions set out in the Government White Paper Waste Strategy 2000.

2. WRAP works in partnership to encourage and enable businesses and consumers to be more efficient in their use of materials, and to recycle more things more often. This helps to divert waste from landfill, reduce carbon emissions and improve our environment.

3. In particular, WRAP Scotland supports the Zero Waste Agenda of the Scottish Government to create a zero-waste, resource-efficient society. To achieve this, WRAP is working in collaboration with several Scottish delivery bodies.

4. Since its creation, WRAP’s work has contributed to reductions in greenhouse gases (CO₂, but also methane), by decreasing the amount of waste (and, in particular, biodegradable waste) going to landfill, promoting recycling, creating markets for recycled materials and encouraging waste minimisation. WRAP is in the process of setting up CO₂ reduction targets for

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each of our programmes, to start from June 2008, when our next Business Plan comes into operation.

5. This consultation is, therefore, highly relevant to our work.

**General Comments**

6. WRAP welcomes the creation of a Scottish Climate Change Bill as a key commitment from the Scottish Government to tackling the effects of climate change. Also, we applaud the challenging targets proposed, and the Scottish Government’s commitment to creating and enabling new means of reducing emissions.

7. We note that the Scottish Government intends to review the National Waste Plan, as well as to consult separately on legislative measures to include in the Scottish Climate Change Bill. However, we would like to take this opportunity to comment on the measures identified in the Scottish Climate Change Bill.

8. The draft Scottish Climate Change Bill focuses greatly on energy efficiency as the main method of cutting CO\textsubscript{2} emissions. However, we believe that there should also be a strong focus on having a sustainable waste strategy in place, as well as resource efficiency and sustainable consumption, and production policies and measures.

9. To illustrate how important is to have a good waste strategy, it is worth noting that, according to WRAP and Defra calculations, current levels of recycling in the UK save more than 18 million tonnes of CO\textsubscript{2} a year through avoided primary material production – equivalent to the annual use of five million cars, or 14\% of UK transport sector emissions\textsuperscript{3}. In the case of Scotland, municipal waste recycling saved 1.2 million tonnes of CO\textsubscript{2}\textsuperscript{4}, which is equivalent to taking 395 000 cars off the road for one year in Scotland, or 18\% of cars in Scotland.

10. Regarding resource efficiency, over-consumption will result in higher-than-necessary greenhouse gas emissions, regardless of the efficiency of production and transportation. Therefore, an effective climate change strategy needs to address resource efficiency and demand measures, as well as supply efficiency measures.

11. A range of new and existing techniques can be used to address non-energy and non-CO\textsubscript{2} greenhouse gas emissions. In particular, measures to improve resource efficiency can have a high impact on CO\textsubscript{2} and non-CO\textsubscript{2} emissions savings. We have highlighted three of these below:

- Waste minimisation
- Recycling; and
- Food waste minimisation.

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Waste minimisation

12. The top rung of the waste hierarchy is waste minimisation or waste reduction, where actions are taken to stop waste from arising in the first place. Actions during a product’s life cycle can result in greenhouse gas emissions at the point of extraction, processing, transportation, manufacture, use and disposal. If a product is used only once or is used inefficiently, the energy and greenhouse gas emissions from the preceding and following steps will be sub-optimal.

13. Given that, on average, one tonne of finished product requires the extraction from the ground of around ten tonnes of material\(^5\), the material savings to be made through waste minimisation are obvious. However, what is perhaps less obvious is the embedded energy associated with finished products – in other words, the energy it took to produce them – and the potential that waste minimisation has to save this embedded energy.

14. As an example, the manufacture of one tonne of primary aluminium requires 55 gigajoules (15,400 kilowatt hours) of energy\(^6\). Now if, through waste minimisation activities (such as eco-design), the lifetime of an aluminium product could be doubled, this would cut the waste of embedded energy by 50% over the lifetime of the new, longer-life product.

15. The sustainable design and use of products can provide significant benefits across all sectors of society. The manner and rate of resource consumption can be addressed through Government initiatives (e.g. the phasing-out of conventional light bulbs), legislation and taxation policies.

16. WRAP has worked with 112 local authorities in England and Scotland to provide over 1.6 million home composting bins since 2004. As a result, more than one-third of English and Scottish households are now composting at home, thanks in part to WRAP support. And each person who composts at home saves not only the embedded energy in the compost they would have otherwise had to buy commercially, but also avoids the emissions of methane (a greenhouse gas 23 times more powerful than CO\(_2\)) that their organic waste would have generated in a landfill site.

Recycling

17. In May 2006, WRAP published *Environmental Benefits of Recycling*\(^7\), a specialist review of international studies which shows how increased recycling is helping to tackle climate change. The report shows that in the vast majority

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\(^5\) See, for example, The Strategy for Sustainable Farming and Food: Facing the Future (Defra, 2002), page 11 (in relation to food production).


of cases, the recycling of materials has greater environmental benefits than incineration or landfill.

18. As mentioned in paragraph 9, the current recycling figures for Scotland are equivalent to taking 18% of cars off the road in Scotland. In the case of the UK, the current rates of recycling these materials saves 18 million tonnes of CO₂-equivalent greenhouse gases per year⁸, which equates to taking 5 million cars off UK roads⁹.

19. The message of this 2006 study is unequivocal. Recycling is good for the environment, saves energy, reduces raw material extraction and combats climate change. It has a vital role to play as waste and resource strategies are reviewed to meet the challenges posed by European Directives, as well as in moving the UK towards more sustainable patterns of consumption and production, and in combating climate change by reducing greenhouse gas emissions.

20. As recycling rates increase, the CO₂ savings will also increase as a result. According to a recent Defra report, every UK household could reduce CO₂ emissions by 540 kg per annum through increased recycling¹⁰. WRAP’s work on increasing the number of committed recyclers should help households to move towards this target.

Food Waste Minimisation

21. Savings can also come from avoided food waste, reduced energy consumption and reduced demand for raw materials. These savings are typically higher than recovering energy through incineration or other means, as they conserve the embedded energy (and greenhouse gases) represented by the materials.

22. Regarding food waste, WRAP estimates that the 6.7 million tonnes of food waste produced by householders in the UK every year is responsible for 30 million tonnes of CO₂ equivalent over its life¹¹. Even assuming that half of this food waste is inedible (e.g. bones), the potential exists to avoid 15 million tonnes of CO₂ equivalent.

23. In Scotland, WRAP’s internal research¹² estimates that around 650,000 tonnes of food waste are produced by Scottish households every year. This is the equivalent of 2.9 million tonnes of CO₂ emissions a year.

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¹⁰ DEFRA (2008) A Framework For Pro-environmental Behaviours


¹² WRAP estimate based on 19% food waste calculated for England.
WRAP’s Love Food Hate Waste campaign\(^{13}\) highlights the environmental costs of the food wasted in Scotland.

24. Reducing this wastage, as well as food wasted in commerce and industry, can have a significant impact on emissions of nitrous oxides and methane, the two main greenhouse gases other than CO\(_2\).

25. Eunomia’s report *Dealing with Food Waste in the UK*\(^{14}\) stresses that the best environmental option is to have a separate collection of food waste coupled with anaerobic digestion. As well as producing energy, this option contributes to reducing the tonnes of waste that go to landfill.

**Conclusion**

26. There is a danger that when discussing how to tackle climate change, the most obvious areas, such as energy efficiency measures, become the focus of the discussion.

27. Resource efficiency measures can also contribute directly to the mitigation of the UK’s greenhouse gas emissions. Research has shown that activities such as recycling, reduction of food waste and waste minimisation have a clear and direct impact on the total emission of CO\(_2\), methane and other gases that contribute to climate change.

28. We would therefore urge the Scottish Government to ensure that the Scottish Climate Change Bill’s remit is wide enough to consider the wider resource efficiency and sustainable consumption and production agendas in taking its work forwards.

Submitted by:
Policy Officer
WRAP
www.wrap.org.uk

25 April 2008

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\(^{13}\) [http://www.wasteawarelovefood.org.uk/index.asp](http://www.wasteawarelovefood.org.uk/index.asp)

CONSULTATION ON POTENTIAL LEGISLATIVE MEASURES TO IMPLEMENT ZERO WASTE

Response from WRAP

(Waste and Resources Action Programme)

Executive Summary
WRAP welcomes the opportunity to respond to the Consultation Paper on Potential Legislative Measures to Implement Zero Waste, launched on 25 July 2008 by the Scottish Government.

In summary, our three key points are as follows:

- WRAP welcomes the efforts that the Scottish Government is making to move towards a Zero Waste society and to implement the necessary measures to achieve this goal.

- WRAP operates at the top end of the waste hierarchy, which gives priority to reducing waste at source, reusing products and recycling materials.

- WRAP believes that the decision to introduce legislation in the seven areas highlighted is for the Scottish Government to decide. However, WRAP strongly encourages making every single effort to reduce the waste our societies produce, recycle as much as possible and minimise our greenhouse gas emissions.

Introduction to WRAP

29. WRAP (the Waste & Resources Action Programme) is a not-for-profit UK company providing recycling and resource efficiency programmes for Defra, the Scottish Government, the Welsh Assembly and the Northern Ireland Assembly. The organisation was formed in 2000 to implement a number of the actions set out in the Government White Paper Waste Strategy 2000\(^\text{15}\).

30. WRAP works in partnership to encourage and enable businesses and consumers to be more efficient in their use of materials, and to recycle more things more often. This helps to divert waste from landfill, reduce carbon emissions and improve our environment.

31. In particular, WRAP Scotland supports the Zero Waste Agenda of the Scottish Government to create a zero-waste, resource-efficient society. To achieve this, WRAP is working in collaboration with several Scottish delivery bodies.

32. WRAP operates at the top end of the waste hierarchy, which gives
priority to reducing waste at source, reusing products and recycling materials.
One of the major programmes within our current business plan aims to
address waste reduction issues as they arise in the food sector. WRAP
introduced the Courtauld Commitment in July 2005 as a means of securing
the commitment of major retailers to concrete actions to address packaging
waste reduction.

33. Since its creation, WRAP’s work has contributed to reductions in
greenhouse gases (CO₂, but also methane), by decreasing the amount of
waste going to landfill, promoting recycling, creating markets for recycled
materials and encouraging waste minimisation.

34. This consultation is, therefore, highly relevant to our work.

General Comments

35. WRAP welcomes the efforts that the Scottish Government is making to
move towards a Zero Waste society and to implement the necessary
measures to achieve this goal. We applaud the challenging measures
proposed as a key commitment from the Scottish Government to tackling
some of the causes of climate change.

36. WRAP notes that a Zero Waste society does not only emphasise the
reduction of the use and consumption of resources. Actions during a product’s
life cycle can result in greenhouse gas emissions at the points of extraction,
processing, transportation, manufacture, use and disposal. If a product is
used only once or is used inefficiently, the energy and greenhouse gas
emissions from the preceding and following steps will be sub-optimal.

37. Given that, on average, one tonne of finished product requires the
extraction from the ground of around ten tonnes of material\(^{16}\), the material
savings to be made through waste minimisation are obvious. However, what
is perhaps less obvious is the embedded energy associated with finished
products – in other words, the energy it took to produce them – and the
potential that waste minimisation has to save this embedded energy.

38. As an example, the manufacture of one tonne of primary aluminium
requires 55 gigajoules (15,400 kilowatt hours) of energy\(^{17}\). Now if, through
waste minimisation activities (such as eco-design), the lifetime of an
aluminium product could be doubled, this would cut the waste of embedded
energy by 50% over the lifetime of the new, longer-life product.

\(^{16}\) See, for example, The Strategy for Sustainable Farming and Food: Facing the Future (Defra, 2002),
page 11 (in relation to food production).

\(^{17}\) Dahlström, K., Ekins, P., et al. (2004) Iron, Steel and Aluminium in the UK: Material flows and their
economic dimensions. Policy Studies Institute, London and Centre for Environmental Strategy,
University of Surrey, available from:
PROPOSAL 1: Duties on Public Bodies and Business to Provide Recycling Facilities

Question 1.1 Do you consider that legislation should be made in this area?

39. WRAP believes that the decision to introduce legislation in this area is for the Scottish Government to decide. However, WRAP strongly encourages small and large businesses to have recycling schemes and to have separate materials collections on their premises, since it has been proven to have many benefits, not only for the environment, but also for the reputation of the businesses.

40. WRAP’s *SME Recycling Feasibility Trials Evaluation Report* concluded that 97% of those who work for an employer that started a recycling scheme on its premises are satisfied with the scheme mainly because it is easy to maintain and implement. Additionally, over a third of businesses involved said recycling had improved their reputation within the local community. Furthermore, recycling was perceived as a cost-effective method of dealing with the business waste, simply because it was often cheaper when compared with general waste disposal. In many cases, businesses were able to save money on services like paper recycling. Finally, 36% explained that another benefit of recycling at work was the general feel good factor from doing something useful and worthwhile.

1.2. If so, what form should that legislation take?

41. WRAP has no views on this issue.

PROPOSAL 2: Packaging

2. 1. Do you consider that legislation should be made in this area?

42. WRAP has no opinion on the need to introduce legislation in the field of packaging in order to encourage packaging waste prevention. However, WRAP has played a major role in introducing the Courtauld Commitment, a voluntary agreement between WRAP and major UK grocery organisations, aimed at working towards creating less packaging. The Courtauld Commitment is a powerful vehicle for change, and in 2008, has led to zero growth in packaging despite increases in sales and population.

43. As regards packaging, we believe that there are significant opportunities to promote the use of packaging technology as a means of achieving further packaging reduction whilst, at the same time, helping the public to consume more of the food that they buy, thus wasting less of it.

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http://www.wrap.org.uk/downloads/SME002_-_final_evaluation_report_-_web_version_-_11_03_08.603a0c3d.5154.pdf
2. 2. If so, what form should that legislation take?

44. WRAP has no views on this issue.

**PROPOSAL 3: Specifying Recyclate**

3. 1. Do you consider that legislation should be made in this area?

45. WRAP supports any scheme that provides reliable and up-to-date information to the consumer, so that he or she is empowered to make informed decisions. Consequently, WRAP would welcome the proposals to require the specification of a minimum percentage of recyclate material.

46. WRAP is currently working, under the auspices of the Courtauld Commitment, in order to develop consistent labelling that informs consumers how widely packaging items are recycled.

3. 2. If so, what form should that legislation take?

47. WRAP has no views on this issue.

**PROPOSAL 4: Waste Prevention Plans**

4. 1. Do you consider that legislation should be made in this area?

48. WRAP strongly believes in working on the top of the waste hierarchy, waste minimisation or waste reduction, where actions are taken to stop waste from arising in the first place. Consequently, WRAP welcomes any waste reduction measures that implement changes in the way our society creates waste.

49. For example, the sustainable design and use of products can provide significant benefits across all sectors of society. The manner and rate of resource consumption can be addressed through Government initiatives (e.g. the phasing-out of conventional light bulbs), legislation and taxation policies.

50. However, we consider that it is for the Scottish Government to decide whether making legislation is the most effective way to achieve the desired outcomes.

4. 2. If so, what form should that legislation take?

51. WRAP has no views on this issue.

4. 3. What public bodies and businesses should be covered?

52. WRAP has no views on this issue.
PROPOSAL 5: Deposit and Return

5. 1. Do you consider that legislation should be made in this area?

53. WRAP believes that it is for the Scottish Government to decide. WRAP’s\(^{19}\) report on refillable packaging and refill systems concludes that such systems have the potential to:
   - Divert a significant quantity of discarded packaging from landfill each year;
   - Provide significant savings for the retailer; and
   - Provide added value to the customer.

54. Refills are well established in the UK for stationery products such as pens, ink cartridges and toners. Some household cleaners and laundry products are also available in refills.

55. However, there is a significant opportunity to expand the refill product range in the UK, provided that social attitudes can be changed with good point-of-sale literature/advertising. Many food and non-food products in the UK could utilise a refill system if suitable pack technologies were available.

5. 2. If so, what form should that legislation take?

56. WRAP has no views on this issue.

5. 3. Your views on the practicalities of such schemes in Scotland?

57. WRAP has no views on this issue.

PROPOSAL 6: Mandatory Waste Data Returns from Business

6. 1. Do you consider that legislation should be made in this area?

58. The availability of detailed data would be welcomed, but we believe that it is for the Scottish Government to decide.

6. 2. If so, what form should that legislation take?

59. WRAP has no views on this issue.

6. 3. Do you have any views on the kind of businesses to be covered?

60. WRAP has no views on this issue.

PROPOSAL 7: Other Measures to Encourage Waste Prevention, Including Action on Single-Use Carrier Bags

7.1. Do you consider that legislation should be made in this area?

61. WRAP believes that there are many measures that can be introduced to encourage waste prevention. For example, promote the repair of electronic equipment or support the use of reusable nappies.

62. Regarding carrier bags, we believe that it is for the Scottish Government to decide if legislation should be introduced. WRAP would like to see a substantial reduction in the environmental impact of free single-use carrier bags. Recent developments show that there is now clear momentum from retailers, although more clearly work needs to be done.

63. In February 2007, WRAP, the UK Governments and 21 of the UK’s leading high-street and grocery retailers\(^{20}\) reached an agreement to reduce the environmental impact of carrier bags by 25% by the end of 2008.

64. One year on, interim results indicate a 14% reduction in the environmental impact of carrier bags as measured by the use of virgin plastic. The total number of bags used by the signatories was reduced by one billion bags from 13.4 billion to 12.4 billion. However, performance had been very variable, with retailers reporting activity ranging from a 70% reduction in virgin plastic use to an increase of 22% in one case\(^ {21}\).

65. The carrier bag agreement between retailers and Government highlights valuable examples of ways forward, such as the maximum amount of reuse for carrier bags, the widespread adoption of bags for life and the use of recycled content in bags.

7.2. If so, which areas should these powers cover?

66. WRAP has no views on this issue.

7.3. Are there any other areas, not covered by this consultation, where legislation could be made to increase recycling and promote waste prevention?

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\(^{20}\) Asda, Boots, Co-operative Group, Debenhams, DSG Retail Ltd (Dixons and Currys), Early Learning Centre, E H Booths & Co Ltd, Halfords plc, Home Retail Group, John Lewis Partnership (John Lewis and Waitrose), Marks & Spencer, The Musgrave Group plc, Next Group plc, Nisa Todays, Primark Stores Ltd, Sainsbury's Supermarkets Ltd, Somerfield Group, Spar (UK) Ltd, Tesco, Travis Perkins (Wickes), Wm Morrison Supermarkets plc

\(^{21}\) WRAP (2007) Joint Statement on Reducing the Environmental Impact of Carrier Bags

[http://www.wrap.org.uk/retail/about_us/carrier_bags.html](http://www.wrap.org.uk/retail/about_us/carrier_bags.html)

WRAP (2008) Carrier Bag Statement

67. There are many areas where more could be done. WRAP would be happy to support the Scottish Government with any measure that is taken forward.

WRAP
9 October 2008
I am astonished to find that the question of charging for carrier bags is being brought before Parliament, now for the third time in as many years.

Firstly The Environmental Levy on Plastic bags (Scotland) Bill was rejected after 2 years and much of my money being spent on it, resulting in thankfully the Committee investigating it rejecting it as it would have produced more waste had it proceeded.

Secondly the proposer again reintroduced his Bill last year only to have a flea put in his ear by Parliamentary colleagues who denounced him as being “arrogant” as he attempted again to introduce the same Bill which had been rejected.

Now, for the third time it rears its head, not in quite the same format, but under section 59 of the subject proposed Bill.

The lead Committee in this Bill is the Transport, Infrastructure and Climate Change (TICC) committee who are charged with examining and reporting upon it.

Transport — This section 59 will produce the equivalent in Scotland of a minimum of 560,000 EXTRA pallet journeys annually thundering around the country. How many extra lorries will be used for this?

Infrastructure— Implementation of Section 59 will produce more damage to roads, more urban and countryside congestion, more carcinogenic exhaust fumes, waste thousands of extra tonnes of fuel, produce more road kill and stress as a direct result.

Climate Change — Increase in heat generated by extra transport, increase in carbon dioxide from landfill from the extra waste generated from bulkier and heavier alternative products, increase in methane emissions from landfill when the products eventually degrade.

What part of “this measure in this Bill will produce and has been proven to produce more waste, more carbon dioxide emissions and more methane emissions” don’t you understand? All of these consequences will inevitably lead to increasing Climate Change and accordingly this section 59 should be removed from this Bill without any further waste of taxpayers money being spent on what has already been rejected by Parliament.

Ailsa Young
23 February 2009
I wish to specifically request that the powers requested under Section 59, allowing charges to be made now and at any time in the future for carrier bags of whatever shape or size, is clearly an abuse of the power of democracy. Were this section be allowed to pass into law, then the democratic process would have no further say in this matter and charges could be introduced overnight.

There are jobs at stake in Scotland here, around 500 people were estimated to depend on the manufacture, import, storage, and distribution of just plastic bags so the figure for all types of bags must be considerably higher.

This matter has already been discussed over two years (2004-06) by the Scottish Government at great expense to the taxpayer and found to be inconsistent with improving the Environment. More waste was agreed by the Government to be produced, more greenhouse gas emissions and more transport required to carry the heavier bulkier and more environmentally UNFRIENDLY products around our country.

Section 59 of the proposed Bill simple has no place in the proposed Bill which, I presume, is intended to improve the effect of Climate Change. This section has a negative effect and should be discarded completely.

James Nairn Young.
23 February 2009
RURAL AFFAIRS AND ENVIRONMNT COMMITTEE

CLIMATE CHANGE (SCOTLAND) BILL

SUBMISSION FROM ABERDEENSHIRE COUNCIL

Question 1:
What are your views on allowing the Forestry Commissioners to enter into joint ventures, with the intention of participating in renewable energy programmes on the national forest estate?

Aberdeenshire Council Response:

- We are in agreement with this proposal. As the largest landowners in Scotland, Forestry Commission Scotland (FCS) has a significant opportunity to undertake renewable energy projects which can help to tackle climate change. In order to benefit fully from these potential renewable energy projects, FCS should be able to enter into joint ventures.

- We are of the opinion that forestry should remain the main land use on FCS land and that any joint ventures entered into should be sensitive to the existing land use. Opportunities for joint ventures into biomass energy projects should be encouraged.

- Income generated from joint ventures should be ring fenced to fund woodland expansion in order to meet the Scottish Forestry Strategy target of 25% woodland cover in Scotland by the second half of this century.

Question 2:
What are your views on allowing Scottish Ministers and Forestry Commissioners to offer leases and cutting rights over parts of the national forest estate?

Aberdeenshire Council Response:

The national forest estate is a valuable resource for the people of Scotland and it is imperative that it remains as such, regardless of who holds the lease for the land. We would wish the following points to be noted:

- Any lease of land in the national forest estate should ensure the land continues to be managed for forestry and retained as such and does not automatically open the forest up for other development opportunities.

- It is understood the desire is to see up to 25% of the national forest estate leased to one single entity in a long lease of up to 75 years. Leasing should be through an open tendering process. It may be advantageous to
consider splitting the leased forest block into two lots in order to encourage competitive tenders from indigenous bidders.

- The lease agreement should incorporate break points to enable regular review throughout the tenure. Ideally, an up-front lump sum payment should be secured in exchange for cutting rights, particularly in these times of corporate financial uncertainty, but consideration could be given to bids from bona fide indigenous applicants offering staged payment terms linked to actual harvesting activity.

- In order to meet climate change objectives, it is extremely important that income generated from leasing of sections of the national forest estate should be ring-fenced for forestry, particularly for woodland expansion.

- We welcome the portfolio analysis carried out to date by FCS to help identify suitable forests for leasing and are assured that this analysis has objectively identified the most appropriate 25% of the national forest estate for leasing which is commercially productive and therefore attractive to investors but with only limited public benefits. The package of national forest estate properties offered should however incorporate some smaller, more remote and less productive woods to avoid FE being left with a multiplicity of rump fragments which are very expensive to manage.

- There is a need to consider the impact of the proposals upon indigenous timber buyers and processors who have made significant and recent investment in new mills in areas likely to be affected and who are already suffering from reduced demand due to the significant reduction in house-building. It will be necessary to ensure timber from leased forests will continue to be offered on the open market (for at least 20 years) as supplies from local rump fragments will be inadequate to maintain the viability of the local timber processing industry. Open tendering should also maximise sales value for the successful lessors. It is important to point out that it may be necessary to accept a lower offer for the leased forest estate in order to safeguard the indigenous processing industry as it would be disastrous to accept a higher offer from a power company looking for co-firing supplies.

- It is essential that the very best improved genotype planting stock is used so that timber produced can compete with imported material. This should be a condition of any lease(s).

- The FCS has made significant advances in recent years in managing their forests for biodiversity and public access to meet the objectives of the Scottish Forestry Strategy and in adherence to the UK Forest Standard. It is extremely important that these achievements are maintained and that proactive management is continued. We welcome the assurance that the lease holder will be subject to the same duties as FCS in respect of the Land Reform (Scotland) Act and the Nature Conservation (Scotland) Act.
The identity of potential leasers will attract wide publicity. It will essential to ensure that the successful bidder is completely reputable and able to demonstrate their credentials in delivering forest management to the highest environmental standards and in community relations and partnership working.

Large sections of the national forest estate are extremely well used by the public for formal and informal recreation. While the Land Reform (Scotland) Act provides a right of responsible access which would ensure access continued regardless of how the land was leased, there is a public perception that land leased off would result in the forest being closed to the public. We support the use of the portfolio analysis in identifying areas of forest for leasing as those where the public benefits are at the lowest, however notwithstanding that we welcome the assurance that the forest would still be able to host a multiplicity of uses.

The importance of community acquisition of land through the National Forest Land Scheme should not be overlooked and it is important that proposed leasing arrangements do not jeopardise opportunities for this. Although it is unlikely that there will be a community interest in the areas of land selected as suitable for leasing, it is important that local communities are given an opportunity to identify their interest in any small sections of forest prior to the area being leased.

Question 3:
What are your views on (i) transferring the proceeds from leases and cutting rights to a not-for-profit trust, for investment in woodland creation; (ii) transferring the landlord’s interest in this land to a not-for-profit trust (iii) Minister’s stipulating the constitution of such a not-for-profit trust.

Aberdeenshire Council Response:

i. The proceeds from leases and cutting rights should be ring-fenced for forest expansion in order to meet the target of 25% forest cover in Scotland by 2050. We agree that transfer of the proceeds from the lease(s) to a not-for-profit trust, for investment in woodland creation would be the best option. Every opportunity should be taken to maximise the value of the trust including consideration of charitable status.

ii. We are concerned about the public accountability of a membership led voluntary body being responsible for a national body’s landlord interest. We are of the opinion that this would not be necessary.

iii. For the sake of public accountability, we are in agreement with this proposal. Any such trust must be properly constituted with balanced representation.
Question 4:
Are there other actions which need to be taken, or are there other changes in legislation which need to be made, in order to allow the public and private forestry sector to contribute to Scotland's target of reducing emissions by 80% by 2050? If so, please outline what these are.

Aberdeenshire Council Response:

- **Woodland expansion**
  The current grant scheme is not attracting sufficient interest to meet the targets of new planting, however we acknowledge the current review of the SRDP and await the outcomes of that. Flexible incentives such as regional challenge funds and/or locational premiums should be considered. There is a real need for continuity of grant schemes which ensure stability and allow for familiarisation and confidence in the process.

- **Greater support for nursery and maintenance sectors**
  There is great potential to boost the indigenous forest industry and drive economic benefit across the whole of Scotland by encouraging the forestry sector (both private and public) to contribute to Scotland’s target of reducing emissions by 80% by 2050. However, support is needed for many sectors of the industry.
  
  There are limited resources within both the indigenous forest nursery sector and establishment contractors to respond to potential increase in demand after years of decline. Nurseries are unwilling to grow plants speculatively, there is a long lead time for production and they are very sensitive to changes in planting programme timetables. There will be a need for the trust to award growing contracts for planting stock.
  
  There is considerable scope for improvement in productivity of forests through quicker restocking after harvesting. Increased use of local contractors would be welcomed and immediate replanting of sites following timber harvesting would result in higher levels of activity, employment and carbon sequestration.

- **Carbon Off-Setting**
  The opportunities arising from carbon offset money should be captured and utilised with Scotland. Currently much of the money from major industrial corporations operating within Scotland is going elsewhere (although credit is due for the Scottish Forest Alliance scheme). A properly accredited and audited scheme requires to be established.

- **Biomass Incentives**
  Biomass energy projects should be given increased incentives as they represent an excellent renewable energy resource specifically linked to the forest industry. Incentives should be given to projects which seek to add value, which use the best stock and increase thinnings for biomass.

- **Partnership Working**
In seeking to find the best ways of creating new woodland, all opportunities for partnership working should be considered. Partnerships of private/public/trust bodies should be welcomed depending on what will attract the greatest benefit in each specific situation.

Aberdeenshire Council
27 February 2009
Summary
Scotland has some of the finest open and historic landscapes in Europe. These are important both to local communities and tourists from around the world. The forestry provisions of the Climate Change Bill are based on the assumption that expanding woodland cover is one of the most effective ways of combating climate change. Archaeology Scotland believes the environmental and economic cost of altering our open rural landscapes has not been properly considered.

Scotland is important internationally for its moorland habitats, open vistas and extensive archaeological & historic landscapes. It is these landscapes that are most at risk from new plantations with ploughing or mounding corrugating the landscape, inhibiting access and destroying the habitats and archaeological landscapes that have been forming since the last ice age. These landscapes attract visitors from outside the country and support our tourist industry. Increasing woodland cover in Scotland will remove carbon from the atmosphere within the 30-year plantation cycle, but this must be balanced with other interests in the countryside, whether the production of food or the retention of our open and iconic historic landscapes. The latter have been formed over thousands of years, both in response to previous climate change and human actions. Archaeology Scotland believes that the inclusion of forestry provisions within the climate change bill are based on the proposal to increase Scotland’s woodland cover to 25% by 2050 at a rate of 10,000 hectares of new planting per annum. This was only an aspiration in the Scottish Forest Strategy and now appears to have become a target. Extra funding is now being sought through challenge funds to increase the rate of planting to achieve this. While it is natural for the forest industry to argue for increased funding for this sector, Archaeology Scotland would question whether this is necessarily the best use of government funding in response to climate change. Proposals to expand woodland cover should form part of a much wider debate on rural landuse and its social and economic value to the Scottish people.

1. Do you envisage that the Forestry Commission could play a greater role than it does at present in reducing greenhouse gas emissions or in alleviating or responding to the effects of climate change? If so, what suggestions would you make?

Forestry Commission Scotland does excellent work at present on promoting responses to Climate Change both in supporting community responses and industrial level activities. If the attitudes developed within FCS were more prevalent across rural Scotland, behaviour change in response to climate change would be more extensive. Of course FCS could spend extra funding...
on climate change responses but this has to be balanced with spending in other sectors.

2. Do you consider that either of the Government's consultation proposals (on entering into joint ventures and on leasing cutting rights) would enhance the Forestry Commission's role in dealing with greenhouse gas emissions and climate change?

Archaeology Scotland is not convinced that the proposal to lease cutting rights will necessarily increase FCS’s role in responding to climate change. The business case for this has not been made and it is unclear what the impacts of such activity would be.

3. Do you envisage any implications for nature conservation, biodiversity or recreational interests from the two proposals and, if so, what are they?

Archaeology Scotland is concerned that the excellent work that FCS currently carry out in support of environmental protection and social activities within the national estate would be at risk if the income from the leased land was earmarked exclusively for climate change activities. We would include in this category landscape and the historic environment, as too often biodiversity is used a short hand for the environment when a much wider definition should be used. FCS is the largest manager of Scheduled Ancient Monuments in Scotland, having responsibility for 328 Scheduled Ancient Monuments, 30 Listed Buildings, 16 Designed Landscapes and 8,000 unscheduled sites. FCS agreements to manage positively the monuments in its care would be put at risk by this proposal, as it remains unclear how far FCS commitments to landscape, environment and recreational access would be transferable in practice or how they could be enforced.

4. Do you believe there are any implications for rural employment from the two proposals and, if so, what are they?

Archaeology Scotland believes that there will be reduction in rural employment from the leasing proposal. Commercial companies buying the lease of the proposed woodlands would have to reduce current costs to create a profit and though TUPE agreements may maintain employment in the short term we do not see these as being sustainable in the long term.

5. Do you have any other views on these two proposals from the Government?

As expressed above, Archaeology Scotland believes that a fully-costed business case with a comprehensive Strategic Environmental Assessment should have been carried out before inserting these proposals into the Climate Change Bill. The Scottish Government should produce an integrated rural land use strategy before committing one sector alone to major structural change. Such a rural strategy must include and evaluate historic environment, tourism, landscape, recreation and community interests as well as farming, forestry and biodiversity concerns.
Precise values on landscape and heritage to local communities, Scotland and the rest of the world are difficult to produce but the following survey shows the relative importance of cultural heritage to the tourist economy of Scotland. **Tourism Scotland Survey 2005**


<table>
<thead>
<tr>
<th>Activities undertaken (at all)</th>
<th>UK Holiday Trips (%)</th>
<th>Overseas Holiday Trips (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visiting castles, monuments, churches etc.</td>
<td>39</td>
<td>83</td>
</tr>
<tr>
<td>Hiking/Hillwalking/Rambling/ Other walking</td>
<td>33</td>
<td>39</td>
</tr>
<tr>
<td>Visiting museums, galleries, heritage centres, etc.</td>
<td>29</td>
<td>58</td>
</tr>
<tr>
<td>Swimming</td>
<td>21</td>
<td>5</td>
</tr>
<tr>
<td>Field/Nature Study</td>
<td>17</td>
<td>9</td>
</tr>
<tr>
<td>Watching performing arts (including cinema)</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Golf</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Visiting Theme Parks/Activity Parks</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Traditional Regional Music Events</td>
<td>7</td>
<td>n/a</td>
</tr>
<tr>
<td>Fishing</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

See also VisitScotland’s [The Visitor Experience 2007 & 2008](http://www.visitscotland.org/research_and_statistics/leisure_visitors/visitorexperience.htm)

Provisions for Forestry in the Climate Change (Scotland) Bill

There is concern over the Government's proposal to create long term leases over Forestry Commission land. There are other ways of providing resources for forestry in Scotland, through joint ventures and grant schemes. This has been lacking for the last 2 years. The government's proposals give no security on whether cash from leases would remain with the Commission and in forestry. The proposal would fragment the Forestry Commission and create inflexibility for the future. The Forestry Commission has been and continues to be central to the development of the forest industry in Scotland.

1. Do you envisage that the Forestry Commission could play a greater role than it does at present in reducing greenhouse gas emissions or in alleviating or responding to the effects of climate change? If so, what suggestions would you make?

Answer: Yes

The Forestry Commission given the resources could increase the planting of new productive woodlands and enhance the management of existing ones by themselves and the private sector. Such woodland can be used in construction and the making of other artefacts which use less energy than other building materials and store carbon.

The proposals to plant 10,000ha per annum should be at least two thirds productive species. It should be recognised that new planting has decreased over the last 10 years and that wind farm developments have resulted in significant cutting of woodlands thus reducing our national resources.

2. Do you consider that either of the Government's consultation proposals (on entering into joint ventures and on leasing cutting rights) would enhance the Forestry Commission's role in dealing with greenhouse gas emissions and climate change?

Answer: The joint venture proposals should be supported, always provided that the income remains with the Forestry Commission and is used for forestry and forestry support (planting and management); thus increasing productive woodlands for carbon benefits.

The leasing/cutting rights should not be supported. The removal of 25% of the Forestry Commissions productive woodland (33% of income) would fragment our national forest and would increase the Commission's unit costs and threaten resources for research which benefits the whole forestry sector. There would be significant cost of setting up leases and monitoring them.
75 year leases have been proposed, this is not related to rotation length. Tenants would therefore be required to manage woodlands they had replanted, and would not harvest and wish for extensions or sale. It would in practice be privatisation.

There are proposals that there should be one, or possibly two tenants. Unlike FC, a tenant might 'mothball' potential timber supplies at times of lower prices thus disrupting the supply chain. Such tenants would be unlikely to enter into long term contracts (LTC). Saw millers would then be reluctant to invest. (They are currently regarded as among the most efficient saw millers in Europe). There would also be job losses. None of this would be beneficial for carbon storage.

3. Do you envisage any implications for nature conservation, biodiversity or recreational interests from the two proposals and if so, what are they?

Answer: No, provided the UK forestry standard applies.

4. Do you believe there are any implication for rural employment from the two proposals and, if so, what are they?

Answer: Joint ventures could create new jobs. Land easing proposals would result in the loss of expertise with the loss of jobs in FC. The affect of loss of confidence by the timber industry could result in job losses and a slow down in sawmilling investment.

5. Do you have any other views on these two proposals from the Government?

Answer: Continue to progress joint ventures on the basis that cash realised would remain in the forestry sector (FC and private sector)/

I am happy to discuss these matters in more detail

Jean Balfour
Jan 2009
As a person involved in conservation land management for over 15 years, I would like to submit some comments for your consideration regarding the consultation for proposals involving the public forest estate in the Climate Change (Scotland) Bill;

1. *Do you envisage that the Forestry Commission could play a greater role than it does at present in reducing greenhouse gas emissions or in alleviating or responding to the effects of climate change? If so, what suggestions would you make?*

I believe that the Forestry Commission Scotland (FCS) has a pivotal role to play in leading the forestry sector in helping to mitigate against climate change. The national forest estate is and should continue to be managed in the public's best interests and the challenges of climate change, the long term impacts of which are still unknown, require a long term and considered approach to land management. I believe that the short term aim to release funds to help deliver political targets is not in the best interests of the public, the forests or climate change. This is because the private sector is driven by market forces, which are likely to lead to increased harvesting of timber for economic gain resulting in an increased loss of stored carbon rather than longer rotations that the FCS operate or, may I suggest long term retention of standing timber to help keep carbon locked up. FCS is in a unique position in the forestry sector being able to demonstrate best practice to land managers, be supported in developments by Forest Research and operate the national forest estate with economics, recreation and the environment all treated as a high priority.

At this time, taking the opportunity to review best land management practice in light of climate change should be wide ranging and include conservation of peatlands, restoring them to active bogs and from carbon emitters to carbon sinks again. Consideration should be given to broadleaf planting as well as short term carbon capture in conifers to support wildlife as it responds to climate change and where possible woodlands could be designated for long term retention instead of harvesting.

2. *Do you consider that either of the Government’s consultation proposals (on entering into joint ventures and on leasing cutting rights) would enhance the Forestry Commission’s role in dealing with greenhouse gas emissions and climate change?*

I believe that reviewing the legislation and allowing FCS to enter into joint ventures would be very beneficial to the organisation and to the Scottish Government. The potential income from windfarms on FCS land for example would generate significant additional income that may be invested in
woodland expansion, wider environmental and public benefits and help reduce the FCS operational deficit.

I strongly disagree with the proposal to lease cutting rights, particularly in view of the non-existent information provided by the Scottish Government to support its case. Leasing the most productive areas of the national forest estate will reduce the income generated by FCS to help support its work, is likely to increase the operational deficit if, as we are reassured, the standard and level of recreational and environmental service is to be maintained at current levels and will, I am sure, lead to a reduction in the standards of management of the leased areas. As I mentioned above, with economics being the number one driver in the private sector, thinning and felling rotations are likely to become shorter, reducing the effectiveness of the forest in storing carbon.

There have been moves within FCS in recent years to carry out habitat restoration of peatland habitats and this is very unlikely to take place under the private sector without additional funding in the form of SRDP payments or reductions in the value of the lease agreements. I am concerned that if the private sector were sufficiently motivated to apply for SRDP payments, then the complex and competitive scheme would be even more thinly spread than it currently is.

3. **Do you envisage any implications for nature conservation, biodiversity or recreational interests from the two proposals and, if so, what are they?**

I would envision the potential for positive benefits coming from joint ventures, both from increased income, but also from partnership working with the private sector and local communities.
I would expect a negative impact on nature conservation and management for biodiversity in leased areas under the private sector, because without external funding it is not in their interests to invest time and effort in these measures. I can't comment on the recreational impact in the leased areas as I understand that they would be the more remote and less visited areas, but I would be concerned about the knock on impact to the rest of the national forest estate from the reduction of income from these most productive areas. The loss of SRDP money to these areas to help support work that is currently done in-house by FCS would also result in a negative impact on the environment and rural business in the wider countryside.

4. **Do you believe there are any implications for rural employment from the two proposals and, if so, what are they?**

Rural employment may be increased through partnership working, whether through more FCS staff to facilitate these partnerships, or staff or local contractors on the ground to implement practical projects in the forests. Operationally, FCS varies in its approach across Districts, either harvesting timber themselves and selling at the roadside, or selling timber standing which is then harvested by contractors. I don't know what is the best approach economically or for rural employment.
FCS is not market led like the private sector has to be but, I believe, helps to support aspects of the private sector through difficult times, continuing to harvest timber and sending this to sawmills to help keep the trade going. If the timber price drops below an economic threshold then the private sector have no choice but to stop harvesting, putting the industry at risk.

5. Do you have any other views on these two proposals from the Government?

I would like to suggest that when the SRDP funding is reviewed, that payments for woodland expansion are significantly increased to make landowners and land managers more interested in new planting, e.g. new shelterbelts, small copses, targeted links to improve habitat linkage, etc...Despite significant funding, it would appear to be difficult for FCS to purchase a sufficient number of large areas of land (in the central belt at least) to achieve the targets set by Government in the time scale and is it more likely that far more numerous, but smaller plantings by farmers and landowners would help contribute to the target far more effectively? The Conservancy and bodies such as Central Scotland Forest Trust or The Woodland Trust do have a very significant role in this sort of expansion.

Peatland restoration should be factored in as part of the work to reduce emissions and help to lock up carbon - FCS in Scottish Lowlands have a large raised bog resource which should be restored to active peat bogs.

To expand native woodland in the uplands, a tougher stance on deer control should be developed to reduce deer numbers to allow recolonisation with scrub and woodland.

Careful consideration should be given to the establishment of new woodlands to ensure that a combination of native broadleaved trees as well as quick growing conifer species are utilised to help lock up carbon in both the short and longer term.

Stephen Blow
28 January 2009
ConFor (Confederation of Forest Industries) represents forestry and wood using businesses from nurseries and growers to wood-processing end-users. It has by far the largest membership of any representative body in the sector and works closely with members who own and/or manage the majority of Scotland’s actively managed non-public forests and who process the large majority of wood from those forests.

**Delivering a low carbon economy**

In the context of the current consultation on the Climate Change Bill it is important to recognise that the forestry and wood-using sector is well positioned to help deliver the Bill’s aim of developing a low carbon economy in Scotland. The sector contributes nearly £1 billion a year to Scotland’s economy\(^1\), provides employment for 20,000, in particular in rural areas, and has capacity for growth.

The sector is one of the few in Scotland that can boast that the more it expands the greater carbon benefit it provides.

This benefit is realised through planting trees in the right places, and using wood to substitute for more energy-intensive materials. Unutilised wood or solid wood at the end of its useful life can also be used to generate renewable energy.

In order to inform its response to the consultation ConFor organised a number of meetings for businesses across the sector to be briefed on the consultation and to feed into ConFor’s response. Over 100 people attended, and we have received numerous comments that have been used to inform this paper. We therefore trust that this response will be given due weight when being considered by the Committee.

**Climate Change (Scotland Bill) – proposals on forestry**

1. *Do you envisage that the Forestry Commission could play a greater role than it does at present in reducing greenhouse gas emissions or in alleviating or responding to the effects of climate change? If so, what suggestions would you make?*

   As part of the Scottish forestry and wood-using sector the Forestry Commission (FC) is already playing a valuable role in responding to the challenges of climate change. More can be achieved through a greater focus

\(^1\) cebr report for the Forestry Commission and ConFor (2006)
on partnership activity with the private sector, in part because these businesses can deliver outputs more cost effectively.

As an example, the FC is currently raising £15m a year to deliver 2,000 hectares of planting (£7.5m per 1000 ha). £15m in grants to the private sector would deliver 5,000 ha (£3m per 1000 ha).

The FC should support and help deliver a more coherent approach to climate change mitigation. Current activities by FC focus overwhelmingly on supporting the development of the wood fuel market, and do not do enough to promote the use of wood in construction where the carbon and employment benefits are greater.

The public sector should take a lead in promoting the greater use of wood in construction, in particular through its use in public buildings and publicly-funded house building. The FC should do more to recognise and promote the benefits of a hierarchy of wood use that sees wood fuel make its most appropriate contribution to a low-carbon economy in Scotland.

Through the FC’s role in research, it has the capacity to do more to support silvicultural and tree breeding improvements that will make forestry more profitable and increase its carbon impact, as well as supporting the greater use of wood products.

2. Do you consider that either of the Government’s consultation proposals (on entering into joint ventures and on leasing cutting rights) would enhance the Forestry Commission’s role in dealing with greenhouse gas emissions and climate change?

The FC is already able to undertake renewable energy projects on its land and therefore the big opportunity from both joint ventures and leasing (or an alternative mechanism) would be the opportunity to raise additional money - in the case of leasing by realising, upfront, the value of the estate. This money could be used to deliver increased new planting through the private sector.

It is likely that any forest considered for leasing (or an alternative) would be composed of productive softwoods. While the private sector believes it can manage such forests more efficiently, and against the same standards as the FC, this would make only a minor difference to their role in carbon sequestration.

ConFor would wish to raise one important point regarding renewable energy projects on forest land, in particular wind farms. There is potential for a significant loss of productive forest with consequent negative carbon impacts. ConFor has pressed for action to minimise forest loss and to ensure that compensatory planting takes place.

3. Do you envisage any implications for nature conservation, biodiversity or recreational interests from the two proposals and, if so, what are they?
There may be impacts where a renewable project joint venture results in a loss of forest area. Productive softwoods provide valuable biodiversity benefits that are rarely properly recognised.

If leasing of commercial forests owned by FC was to take place we would expect little or no impact on nature conservation, biodiversity or recreation. It is expected that any areas to be leased would have no significant recreational use such as mountain biking or visitor centres, and that the current level of access would remain as provided for under legislation. The Land Reform Act applies equally to private and publicly owned land.

The leased forests would be productive softwood forests and therefore would be managed in that manner by a lease-holder. The same standards of management would apply – the Government’s UK Forestry Standard, and most likely the independent certification standard UKWAS that the private sector, FC, environmental and access groups all endorse.

Questions have been raised about lost potential to secure new and additional biodiversity benefits from these forests or on the cost to groups, such as car rally organisers, of exceptional use of these forests. It is important to note that the FC does not provide public goods for free. These are paid for by public subsidy to the FC. The private sector, including forestry businesses and organisations such as RSPB and Woodland Trust, is able to provide additional benefits if public subsidy is available.

4. Do you believe there are any implications for rural employment from the two proposals and, if so, what are they?

If the joint venture proposal went ahead and this raised additional funding which could be used in forestry then this will have a positive impact on jobs overall.

Leasing of 100,000 ha, if it was undertaken, would result in some displacement of employment between the public and private sectors.

If, and there are currently no guarantees, money raised from leasing and joint ventures was made available to deliver increased new planting then this would stimulate additional employment – see answer to question 5 below.

5. Do you have any other views on these two proposals from the Government?

The proposal to lease forests contains insufficient information on which to determine its impact on Scotland’s forestry and wood-using businesses. ConFor would wish to reiterate the central message from its response to the consultation, that:

- there is benefit in delivering increased new planting;
- this could be delivered by a variety of mechanisms and requires improvements to the SRDP;
• ConFor is keen to utilise both its and its membership’s expertise in developing a way forward that addresses legitimate concerns raised.

In terms of delivering new planting we would note that good information is available on where and how best to establish new forests to maximise carbon sequestration while securing other economic and environmental benefits. Current sustainable management standards provide a firm basis for Scotland to really begin to achieve a target of 25% forest cover.

ConFor recognises the benefit of delivering this within the context of a broad land-use policy. However, there is land currently available and planting a very small part of this now while developing a policy to guide future activity is vital to help secure jobs in the sector at a time of economic downturn.

Internationally agreed climate change targets focus on 2050. If Scotland planted 15,000 hectares a year with 9,000 ha being productive softwood forests then it would deliver the Government’s target of 25% forest cover by 2050 and provide significant, additional carbon benefits - up to 33.5 MtC.

**TABLE:** Estimated carbon sequestration for additional productive and broadleaf forest under new planting regimes of 10,000 ha/yr and 15,000 ha/yr from 2010 to 2050

<table>
<thead>
<tr>
<th>Planting regime over period 2010-2050 inc.</th>
<th>Productive softwoods</th>
<th>Broadleaves</th>
<th>Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>New planting (ha/yr)</td>
<td>Carbon sequestration (MtC)</td>
<td>New planting (ha/yr)</td>
<td>Carbon sequestration (MtC)</td>
</tr>
<tr>
<td>10,000 ha/yr</td>
<td>6000</td>
<td>15.5</td>
<td>4000</td>
<td>6.9</td>
</tr>
<tr>
<td>15,000 ha/yr</td>
<td>9000</td>
<td>23.2</td>
<td>6000</td>
<td>10.3</td>
</tr>
</tbody>
</table>

NB On a sustainably managed basis, at 10,000 ha/yr, the total additional forest would continue to sequester 1.1MtC/yr after 2050, and 1.6MtC/yr on a 15,000 ha/yr planting regime.

Such a planting programme would secure significant jobs and investment benefits. For productive softwood forests this is estimated at around 180 new jobs in planting and up to 900 for harvesting, transport and wood processing. Current investment in the sector is running at £100m a year and this would increase significantly.

**Increased use of Scottish wood**

Wood products are low energy materials that can save significant amounts of carbon when substituted for other building materials. Research shows that average savings of 0.8tCO2e can be achieved by replacing 1m³ of concrete/bloc/bricks with 1m³ of sawn timber. Long-term wood products also

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provide a benefit through their potential storage capacity, estimated at 0.9 tCO₂ in 1 m³ of wood³.

ConFor calculates that over the period to 2050 the additional productive forest area achieved from planting 9,000 ha/yr of productive softwoods could provide, based on current proportions, an additional 33.5 M m³ timber available to the construction market. This then gives the potential for substitution of materials delivering emissions savings of 27 mtCO₂. This would be a tremendous resource for Scotland.

Wood can also be used to generate renewable energy. ConFor has campaigned for this to focus on wood that currently has no market, and to promote its use locally and in generating heat. It has also noted that carbon and jobs benefits are higher in solid wood products, not least because these can be used and re-used, and then be made available to generate energy at the end of their useful life. There is a danger that current and evolving public policy could provide such large incentives to burn wood that jobs are lost and the carbon emissions potential of wood is not fully realised.

Scottish broadleaves and softwoods

ConFor represents people who own and work with broadleaf woods. We support efforts to manage broadleaf woods sustainably and to develop markets for hardwoods. It is important, however, when talking about climate change mitigation, jobs and investment to recognise the scale and potential of Scotland’s diverse forest and wood-using businesses.

Including Scots Pine, Scotland produces over 6 million tonnes of softwood each year, while hardwood production, including non-native species, is just over 400,000 tonnes for the whole of the UK with the majority of this estimated to be in England.

Scotland is internationally competitive in growing softwoods and producing wood products that have a large market and where there is scope for significant growth. The businesses in the sector are mainly Scottish owned or headquartered.

The sector is unusual in that it combines successful, modern manufacturing with land management that is governed by environmental standards that are second to none.

The sector suffers from an image hang-over from the planting of last century, driven by the FC which did not deliver the multi-purpose forests that are being established today. Those single-species, forest blocks are now being restructured to improve their biodiversity and visual impact. Using lessons learnt from the past there is scope now for a modern forestry and wood-using sector that all Scotland can be proud of.

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³ Dr A Fruhwald, Hamburg University in CEI-Bois (2006) Tackle Climate Change: Use Wood
Unfortunately Scotland’s broadleaf woods are largely unmanaged and provide limited amounts of timber for wood fuel and for small businesses that produce furniture, flooring, etc. The potential for use in construction is limited by the lack of quality trees and the established, highly competitive operations on mainland Europe that dominate the hardwood market. This will not change in the near future as hardwoods take up to 150 years to grow (against 40 for softwoods).

There is scope for development of the broadleaved resource and of hardwood markets, but by far the largest opportunity for sustainable growth and climate change mitigation sits with the softwood resource, and public policy and its delivery must reflect that.

Stuart Goodall
ConFor
29 January 2009
As a retired forester who spent all his career in the private sector I am pleased to have the opportunity to comment on the proposals on forestry in the Climate Change (Scotland) Bill and do so as follows on the five questions posed:-

1. In so far as it is believed that the growing of trees – although some doubt the efficacy of the growing of conifers in Northern latitudes for this purpose – help to lock up carbon then I have no objection to the F.C. expanding its planting programmes but suggest greater emphasis should be given to growing timber producing hardwoods which will help to reduce our reliance on importing timber especially from rain forest areas. In this connection I would draw the committee’s attention to the recently announced research to be undertaken by the University of Edinburgh into the precise locations of where carbon is being produced and released into the atmosphere.

2. I am totally opposed to the egregious proposal to lease out 25% of the F.C.’s most productive forest to the private sector – the ‘boring’ parts according to Mike Russell, the Environment Minister, in a recent contribution to the Scotsman. (It is alarming to learn how the Scottish Government view commercial activity). My reasons are as follows:-
   a) I have no confidence that the timber areas leased will not be undervalued – most of the State assets which have been disposed of to date have been grossly under valued.
   b) The highly successful wood utilisation industry – sawmills, pulpmills, and board mills – rely heavily on continuous supplies which the F.C. is able to provide; The private sector will not do likewise as is evident at the present time when timber prices are so low.
   c) It is argued by the critics of the F.C. that they require a substantial subsidy from the taxpayers. I suggest that if 25% of their commercial forest is removed they will in effect become more indebted.

3. Some of the most productive / profitable conifer forests on the West of Scotland are also popular and important to the local tourist industry. There is absolutely no doubt that the F.C. has a more open door policy than the private sector and even when they are welcoming it is usually because they have been well rewarded by the public purse.

4. In fact the F.C. does not presently have as good a record in employing ‘workers’ as previously with much of the work now being done by contractors but there is no evidence to support the view that the private sector will do any better. In the past the F.C. was the main source of training for foresters and workers for the forest industry and it is to them that the private sector owes its awareness of and support for conservation, biodiversity and health and safety.
5. The F.C. have over the past 90 years built up one of the most successful publicly owned industries in the World and the Scottish Parliament earns no credit in attempting to plunder their success for its ill thought out schemes to justify it bankrupt energy policies.

Peter M. Fairweather MICFor
28 January 2009
The Forestry Commission Trade Unions (FCTU) have submitted a full response to the Consultation on the Scottish Climate Change Bill, but we aim in this response to focus on the five questions posed in the Questions for Consultees from the Committee and have answered them in the order set out.

Question 1. Greater role for Forestry Commission Scotland (FCS)

FCS has built up a significant capital asset from the funds allocated by Government over its 90 year history and it has already started to use this asset to contribute to Climate Change planting targets. There is scope to do more on this. The current programme known as ‘Repositioning’ is to raise £15m per year over the three years of the Public Expenditure round from 2007-8 to 2009-10. This is focussed on areas of forest which contribute least to the aims of the 2006 Scottish Forestry Strategy (SFS). The money has then been used to acquire new planting land in areas closer to communities or where planting can contribute to the 10,000ha target for Scotland.

The key aspect to selection of these sites is that it considers all three of the legs of sustainability – economic, social and environmental. It is only when a scoring system shows low values in all of these, that they are considered for sale. The impact on staff is minimal as sales are dispersed around Scotland and there is no element of flooding a market. At the moment, the investment market in woodland is good and prices realised meet expectations.

Question 2. Effects of Joint Ventures and Leasing on FCS role in climate change.

Joint ventures have been widely accepted as allowing added value to the role of FCS. While they can only lease land for non-forestry purposes at present, this provision in the bill will generate greater opportunities for FCS to facilitate developments, particularly in wind and hydro power generation. Initial survey of the FCS estate has shown great potential and income from this should flow in the period about 5-10 years from now.

Leasing as presented by the Consultation document has been widely condemned by the public and is opposed very strongly by the Trade Unions. It considers only the economic aspect of sustainability and fails to recognise the added value of FCS staff in areas where the environment has less natural attractions for environment and tourism. Considerable staff resource and funding has been put into remote rural areas such as the Galloway Forest Park by such ventures as the 7Stanes Mountain Biking facilities.

Question 3 Implications for Nature Conservation or biodiversity.
Joint ventures could release funds for additional planting and if this is the right trees in the right place, as set out in the SFS, could have great benefits for the environment, with protection of peatlands and other Priority Habitat Types currently under threat from over-grazing, opportunities for expansion of native woodlands and increased development of the woodland environment which has been so successful in allowing parts of Perthshire to be badged as ‘Big Tree Country’

With respect to tourism, the success of the Joint Venture between FCS and the Caravan and Camping Club GB in creating ‘Forest Holidays’ has shown the potential for this provision to be added to future Scottish legislation not linked purely to Climate Change.

Question 4 Implications for Rural Employment.

There is provision under the National Forest Land Scheme (NFLS) for communities to buy areas of FCS land, but this means many small communities cannot consider this option due to the large sums of capital they would have to raise. A better option would be to allow them to enter into Joint Ventures with FCS to lease the land or work in partnership with FCS to generate local employment opportunities. Heat generation from woodfuel is a particularly good example, with the necessity to increase the use of local sources of fuel and Combined Heat and Power schemes. The reduction in transport on fragile rural roads would be of particular benefit. Leasing as proposed at present will take this opportunity away from some of the most remote communities as the private manager is unlikely to have the same public benefit priorities as FCS.

Question 5 Other views.

We have set out our views above and welcome the opportunity to subject these to questioning by the Committee and expand on the detail on 11th February.

Forestry Commission Trade Union
4 February 2009
GENERAL COMMENTS

1 This consultation is to be welcomed. It strongly argues the role of forestry in helping to combat climate change and it is important that that role be fully maximised as well as gaining the support of the Scottish people. The Minister for Environment is to be applauded in bringing forward this debate and the crucial role for forestry.

2 The proposal to offer leases and cutting rights over parts of the national forest estate, has however resulted in a vigorous debate both within and outwith the forest industry, not to mention Commission employees themselves. The proposal represents a fundamental sea-change in the way the estate is managed. It is of concern that such a significant proposal has “come out of the blue” and is perhaps premature given that FCS is currently undertaking a wider options review of the national forest estate.

3 For FCS to pursue any significant programme of woodland creation will be dependent on the availability of suitable and affordable land. This is seen as a potentially major constraint and perhaps puts the argument for incentives (existing and additional) to be mainly placed with existing land owners and occupiers.

4 It is reported that leasing some 25% of the national forest estate could provide some £200M for reinvestment. It is not clear if the current economic downturn has been factored into the above assumptions. Timber prices have fallen some 25% in the past six months and are likely to fall further.

5 There is no guarantee that all sums raised would necessarily go into forestry related climate change activities. In the event that £200M was made available, it is unlikely that the forestry industry would be able to spend such a sum in one financial period.

6 The annual net cash cost of FCS is around £90M (08/09). Timber receipts are crucially put against that cost These amounted to some £43M in 08/09. The potential, very significant loss of receipts (estimated in the order of a third and perhaps more given likely sawlog content) places real concern over the ability of FCS to continue its present function and the delivery of multiple benefits to the Scottish people.

7 It is not clear if any lease and cutting rights agreement will require the timber to supply Scotland’s wood processing sector or if it will be
RESPONSE TO SET QUESTIONS

Question 1: What are your views on allowing the Forestry Commissioners to enter into joint ventures with the intention of participating in renewable energy programmes on the national forest estate?

Response: The Highland Council (THC) warmly welcomes the opportunity for the Forestry Commissioners to enter into joint ventures with developers and local communities and subject to the following considerations:

- Secure and maximise opportunities to benefit from joint ventures, including an equity stake in investments.
- Joint ventures that involve community ownership.
- Extend range of joint ventures to include biomass, especially wood fuel.
- Appraisal process requires to consider development on peat and carbon flux issues.
- Public Sector Reform Bill may offer a wider use and benefits from joint ventures.
- Working with Carbon Trust (‘Partnership for Renewables’) to develop and manage on site renewable energy projects.
- Opportunity for partnerships with LA’s in providing heat and power for local communities.

Question 2: What are your views on allowing Scottish Ministers and Forestry Commissioners to offer leases and cutting rights over parts of the national forest estate?

Response: THC has very strong reservations over these proposals and does not support them. A criticism of the consultation paper is that it offers limited detail, and no business case to underpin the proposals. THC main concerns are as follows:

- Lack of business case – to demonstrate overall public benefit and forestry’s contribution to climate change.
- Scale of proposals and control retained by one party.
- Impact on the function and funding of the remaining part of the national forest estate.
- Loss of regional presence.
- Impact on the stability and development of timber markets as presently underpinned by FCS.
- Impact (immediate and longer term) on FCS employees and the communities they live in.
- Loss of community acquisition opportunity through the National Forest Land Scheme.
• Loss of a wider range of non-market benefits as provided through FCS and which will be greater than provided through any lease arrangement.
• No guarantee that funding raised will be placed specifically to forestry related climate change measures.
• Potential for further leases.
• Member states of the E.U. have generally supported and protected their national forests.

Question 3: *What are your views on (i) transferring the proceeds from leases and cutting rights to a not-for profit trust for investment in woodland creation; (ii) transferring the landlord’s interest in this land to a not-for profit trust; and (iii) Ministers stipulating the constitution of such a not-for profit trust.*

Response: Please refer to the response to Question 2.

• What problem does the Trust resolve – option of increased accountancy flexibility to FCS?
• How will it operate – membership, structure and powers?
• How do you guarantee that Trust reflects public interest?
• Results in reduction of other Government funding?

Question 4: *Are there other actions which need to be taken, or are there other changes in legislation which need to be made, in order to allow the public and private forestry sector to contribute to Scotland’s target of reducing emissions by 80% by 2050? If so, please outline what these are.*

Response:

• Fully maximise opportunities for joint ventures.
• Consideration of only cutting rights over a greatly reduced scale and range of sites.
• Opportunities for some considered and limited expansion of the 'Repositioning Programme'.
• Early and significant refinement of SRDP, including simplified application and approval process.
• Targeted funding (e.g. Locational Premiums).
• Early revisit of fiscal support to encourage increased investment level and industry confidence.
• Active encouragement of agricultural sector to plant trees and use wood fuel.
• Proven benefits of communities and FCS working together to deliver a wide range of rural benefits (Sunart Oakwood Initiative).
• Woodland creation partnerships with other public agencies and land based organisations (e.g. SNH, MOD, Scottish Water, National Trust, RSPB, Woodland Trust).
- Audit of public land suitable for woodland creation.
- Maintaining and enhancing carbon stocks in trees or soils through longer term management and role of unmanaged woodland.
- Redistribution of Government spending to forestry.
- Carbon Trading.
- Opportunities of ‘Futures Market’ in raising funds at this time.
- Urgent need for an integrated Land Use Policy.
- Early update of Indicative Forestry Strategies with a clear promotion for woodland creation.

The Highland Council
28 January 2009
RURAL AFFAIRS AND ENVIRONMENT COMMITTEE

CLIMATE CHANGE (SCOTLAND) BILL

SUBMISSION FROM ICF

The Institute of Chartered Foresters (ICF) appreciates the opportunity to comment to the committee on the forestry proposals under section 47 of the Climate change (Scotland) Bill.

ICF is the only Chartered Institute for forestry and arboriculture in the UK. Its members work in all aspects of forestry and forest management in both Forestry Commission Scotland (FCS) and the private sector.

ICF strongly supports (a) powers for FCS to enter into joint ventures with developers on forestry land. ICF notes (b) that powers are also sought to lease cutting rights to more commercial parts of the national forest estate. Leases whether for forests or cutting rights raise a number of issues which as yet have not been clarified.

ICF would in general wish to see some constraints on overall enabling powers to Ministers, to safeguard forestry and forest resources in Scotland.

Turning now to the specific questions:-

1. Do you envisage that the Forestry Commission could play a greater role than it does at present in reducing greenhouse gas emissions or in alleviating or responding to the effects of climate change? If so, what suggestions would you make?

Yes, given resources. FCS could increase new planting along with management of existing forests. It could also support the private sector in doing so. (It should be noted that there has not been a grant scheme for two years and the new SRDP scheme is both bureaucratic and difficult to operate).

2. Do you consider that either of the Government’s consultation proposals (on entering into joint ventures and on leasing cutting rights) would enhance the Forestry Commission’s role in dealing with green house gas emissions and climate change?

Answer: (i) Joint Ventures would be beneficial and allow for innovation. It would also create significant resources to the benefit of Question (1) above. (ii) Leases are proposed for 25% of Forestry Commission Scotland estate which equates to approximately 33% of FCS income. This will increase Forestry Commission Scotland unit costs. If these are 75 year leases they will be expensive to monitor and will create inflexibility for the future. Roll over of leases or sale may result.
3. Do you envisage any implications for nature conservation, biodiversity or recreational interests from the two proposals and if so, what are they?

No, provided the lessee is compelled to subscribe to the UK Forestry Standard, and any future amendments to it, an acceptable minimum level multipurpose management would be maintained.

4. Do you believe there are any implications for rural employment from the two proposals and, if so, what are they?

Forestry provides significant jobs in rural Scotland and in sawmills and processing plants. (The saw milling sector is one of the most efficient in Europe). Joint Ventures can only be beneficial in employment terms since they stimulate activity. However, leases of forested land/cutting rights to others would reduce the FCS holdings significantly and increase its unit costs. It could mean the loss of regular timber contracts to the timber trade, thus reducing employment and risking investments made or planned by the timber trade. The Forestry Commission has been and remains crucial in making available steady flows of timber to saw millers and processors.

5. Do you have any other views on these two proposals from the Government?

Proposals for leasing/cutting rights have so far been without detail or consideration of the many issues that could arise. This is a matter of concern. ICF would be ready to discuss these further.

ICF
26 January 2009
RURAL AFFAIRS AND ENVIRONMENT COMMITTEE

CLIMATE CHANGE (SCOTLAND) BILL

SUBMISSION FROM DUNCAN IRELAND

Re: Response to the Climate Change (Scotland) Bill - Proposals on Forestry

The Forestry Commission was established in 1919 with the purpose of increasing Great Britain's forest cover. With pressure on limited timber reserves during the First and Second World Wars the main aim of the afforestation programme the Commission was charged with was to provide a strategic reserve of timber.

When Great Britain developed a nuclear deterrent the need for a strategic reserve of timber was removed, but the demand for forests remained due to new objectives. Scotland has always contributed significantly to the total coverage of British forestry and the national forest estate has adapted to meet new objectives while steadily increasing in area. The Forestry Commission's role has seen it respond to changing demands; health, recreation, environment, education and landscape benefits have been embraced by the organisation.

Throughout these changing objectives the Forestry Commission has been able to adapt because of the huge variety of forest and habitat types that comprise the national forest estate. The diversity of our forests has provided the steady foundation to adapt to changing demands and only through maintaining control over the entire forest estate will the Forestry Commission be able to provide the sort of forests that will have the flexibility to respond to current forest objectives such as reducing climate change and those of the future, as yet unknown. This is the essence of sustainability.

The process of forest expansion has not been achieved without mistakes; huge public backlash resulted across Scotland from the planting of the 'Flow Country', with negative habitat consequences. Against the spectre of the Flow Country afforestation the Forestry Commission has striven to regain public support. Faced with a public highly in-tune with environmental issues improving its public image has been a long process with huge developments made in environmental habitat creation and recreation provision.

Maintaining the versatility of forestry to respond to changing forest objectives is not a case of dogmatically maintaining 'risk adverse' management. It is a case of safeguarding a resource that has taken nearly a century to establish since the founding of the Forestry Commission. A resource that has been hard won and achieved through large public investment on behalf of the people of Scotland and that through its current size and diversity has the flexibility to adapt to our changing needs.

Leasing the most productive components of the national forest estate in
Scotland will threaten the security of sustainable management provided by the Forestry Commission. The leasing proposal has the potential to be another ‘Flow Country’ disaster with all the associated political fallout for comparatively little economic gain.

The people of Scotland to whom the national forest estate belongs have the right to a forest reserve that is safeguarded in perpetuity to provide them with the multitude of objectives they place on this vital resource. This is too great an asset to risk putting under control of commercial companies that are solely motivated by profit, not the needs of the Scottish people. Entering into leased cutting rights would not enhance the Forestry Commission’s role in alleviating climate change and the political, financial and environmental repercussions of so doing would be negative.

Best practice standards exist to which all forests in Scotland should be managed in order to achieve recognised certification. However, achieving exceptional standards for environmental and recreation management above minimum certification criteria is where the Forestry Commission have set their standard, delivering world class public access and environmental management for Scotland.

All this is at risk if the Forestry Commission loses the revenue from the most productive 25% of the national forest estate. There is no guarantee that revenue for the proposed leasing scheme will be used for future afforestation and while many climate change reduction initiatives may be supported by the anticipated revenue this is no substitute for our existing safeguarded tangible forest asset.

Leasing the most profitable of the nations forests to private companies would place huge economic power in their hands with no safeguards for the timber processing sector which the Forestry Commission has always safeguarded by maintaining the flow of timber despite poor prices. The strategy of any company set on maximising the financial benefit of forestry assets would be to halt timber production during depressed timber prices with terrible consequences for the forestry harvesting and processing industries. These industries are vital for rural employment. The consequences for rural employment and resulting political backlash should not be underestimated in a nation where resentment for historical injustice to the rural population still resound.

For nearly one hundred years the Forestry Commission has been the custodian of the national forest estate in Scotland. The proposals of the Climate Change (Scotland) Bill allowing leasing of this most valuable asset risk failing the people of Scotland and Great Britain, and compromising the sustainability of forestry in this country for the next century.

Duncan Ireland
27 January 2009
I. What are your views on allowing the Forestry Commissioners to enter into joint ventures, with the intention of participating in renewable energy programmes on the national forest estate?

In principal James Jones & Sons Ltd ("JJSL") does not have any objection to the proposal of participation in renewable energy programmes. The renewable energy programmes should however be backed up by proven scientific evidence that the outputs are likely to yield lower CO2 emissions and meet the Government targets.

For this proposal to be widely accepted by the entire Scottish forestry industry there needs to be ecoconditionality between all of the government’s aims and targets. This will require an approach that balances all the environmental and economic needs of the entire supply chain. Legislation and standards must be clearly defined to safeguard all of the interests and variances that exist between sectors.

There are some fundamental issues which would need to be addressed which would ensure unqualified support:

1. Will the afforested land area that might be designated to renewable energy programmes be replaced in other areas? This is vital to ensure a net increase in forested area to maintain carbon sequestration from forests in the UK.
2. There are currently a large number of wind farm proposals awaiting, or having been granted, planning approvals. This has meant that a significant volume of standing timber will be felled in a very short period of time, and sold to a market that is currently contracting (mill slowdowns, mill closures, additional downtime, redundancies, poor end user demand etc.). This is clearly devaluing the financial returns to the Forestry Commission when it can least afford diminishing revenues. The principal projects are per the following table:

<table>
<thead>
<tr>
<th>Site</th>
<th>Volume</th>
<th>Proposed completion date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bien an Turk, Argyll</td>
<td>80,000T</td>
<td>August 2009</td>
</tr>
<tr>
<td>Arracliach, Ayrshire</td>
<td>150,000T</td>
<td>Infrastructure to be completed 2009</td>
</tr>
<tr>
<td>Clyde</td>
<td>350,000T</td>
<td>September 2010</td>
</tr>
<tr>
<td>Harestanes, Ae</td>
<td>150,000T</td>
<td>Start 2010</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>730,000T</strong></td>
<td></td>
</tr>
</tbody>
</table>

3. Significant volumes such as these being marketed in a short period of time create problems for the entire supply chain.
a. Dislocation of harvesting machinery (currently a major issue)
b. Dislocation of haulage contractors (currently a major issue)
c. Disturbance on other long term contract agreements (currently a major issue)
d. Effect on price throughout the supply chain (currently a major issue)

4. Where areas are deforested for renewable energy programmes what action will be taken to ensure certification of the harvested timber? There is evidence currently that much of this volume will be unlikely to be certified (Reference: UKWAS Interpretation Panel. Note 7. October 2008). How will this issue be resolved?

5. Will the revenue generated by these joint ventures be ring fenced back in to new replanting schemes or will the revenue stream be utilised to fund other renewable energy programmes? What guarantees will be provided?

6. Failure to restock felled areas or to replant new areas will create uncertainty in the sawmill and panel board sectors and will result in the postponement, or more likely the cancellation, of any major processing investment programmes.

7. Who will be granted the ultimate responsibility for decision making, regulation and arbitration on these investments and programmes:
   a. FCS?
   b. Government?
   c. Ministers?
   d. Trusts?
   e. JV Partners?

8. Will the Forestry Commission, in the future, be allowed to sell standing or harvested timber to the proposed joint ventures even if it is an equity participant? What conditions will be applied to ensure competitive tendering?

9. What conditions will be placed on energy generators looking to clear fell large land areas?
   a. Restocking
   b. Comparable land coverage of forestry on alternative sites
   c. Certification issues also apply to this point as per point 4 above.

10. On page 5 of the Paper, the following statement is made: “...and, if it were possible to release capital from the estate, this could provide additional funding for woodland creation. Both these opportunities are currently constrained by legislation, but suitable provisions in the Scottish Climate Change Bill could help remedy this.”
   a. The current repositioning programme already releases capital by selling off certain areas with the intention of purchasing land for more productive forestry.
   b. The “suitable provisions” should therefore be capable of ring fencing the proceeds and providing the “additional funding” required.

There is significant concern within the timber processing sectors that a headlong rush in to renewable energy programmes will starve the sector of
roundwood, particularly of the smaller diameter logs. The small roundwood harvested from the UK’s forests contribute the following key facts:

1. JJSL has invested more than £100M in sawmilling capacity in Scotland over the past 25 years and sales of pallet and packaging products account for more than 40% of turnover per annum.
2. 8,000 direct jobs in the UK in the wooden pallet and packaging sector
3. These jobs are supported by more than 20,000 direct and indirect jobs in the UK sawmilling and forestry sector.
4. In UK 60M wooden pallets are produced per annum and the majority of the UK’s pallet boards are supplied directly from UK grown forestry and processed in UK owned sawmills.
5. In Europe 400M wooden pallets are produced per annum.
6. In Europe wood packaging provides a market for almost 20% of timber production.

Due consideration must be given to the processing sectors to ensure that they remain vibrant and able to support UK pallet producers. Demand for UK produced pallet and packaging is very elastic. The biomass sector through economies of scale, government subsidies and purchasing power could squeeze the competitiveness of UK sawmill producers and restrict the flow of palletwood and small roundwood timber. Two key recent statements support the view that the two sectors can exist together, but requires thorough scrutiny:

1. “If 30% of the waste wood currently sent to landfill were used, it would generate 2,600 Gwh of electricity and save 1.15M Tonnes of CO2 equivalent emissions.” (Defra, Waste Strategy for England, 2007)
2. “Forestry…can make a significant contribution to reducing greenhouse gas emissions…by using wood as a substitute for energy intensive materials.” (UK Government, Securing the Future – Delivering the UK’s Sustainable Development Strategy, 2005)

The Government should also not be blinded to the supply chain benefits that the wood processing sector provides towards mitigating climate change, particularly in the construction sectors. Failure to support the sawmilling and panel board sectors would represent a gross misjudgement and would prevent architects, specifiers, house builders and contractors from meeting the challenges of zero carbon housing and high scoring environmental profiling. The following are key statements which should not be overlooked:

Whilst renewable energy programmes can meet Government targets, these should not disguise the benefits that trees and forestry have on the environment. A few key facts are listed below:

1. Commercial woodlands absorb 1T of CO2 per m3 of growth (Edinburgh UNECE/FAO, State Centre for Carbon Management)
2. On average trees absorb a tonne of carbon dioxide for every cubic metre’s growth – and they produce almost three quarters of a tonne of oxygen – helping to create the air we breathe.
3. Other respondents will argue more coherently the scientific facts and benefits.
4. Substituting a cubic metre of wood for other construction materials (concrete, blocks or bricks) results in savings of between 0.75 and 1.1 tonne CO₂.

5. A tonne of brick requires four times the amount of energy to produce as sawn softwood, concrete five times, glass six times, steel 24 times and aluminium 126 times.

6. 3 tonnes of CO₂ can be saved by using timber frame from the 20 tonne CO₂ footprint of a typical 3 bedroom detached house.

7. Wood also provides a more cost-competitive solution to achieving higher ratings levels for the Code for Sustainable Homes, through the materials credits.

8. Waste wood from the demolition of buildings at the end of their life can provide a useful bioenergy resource as a substitute for fossil fuels.

9. Using waste wood as a carbon neutral energy source increases the CO₂ benefit of using wood as a construction material in the first place and will be reflected in even better LCA scores.

10. Already the advantages of timber frame, the lower on-site labour costs, the reduced construction time, earlier weather-tight conditions and reduced snagging, have led to significant growth in timber frame’s share of the UK’s new housing starts.

11. Timber frame now accounts for over 22%, from just 12% at the beginning of the decade.

12. 'The thermal conductivity of softwood timber is typically some 6 times lower than brickwork or heavyweight concrete block, over 8 times lower than concrete, almost 400 times lower than steel and over a thousand times lower than aluminium.' This means wood is more effective at preventing heat loss than any other mainstream construction material. TRADA, Energy Efficient Housing – A Timber Frame Approach, 1989

In conclusion, JJSL does not object to the Government’s Climate Change aspirations and targets. However, the following key points must be agreed to unless the Government wishes to see the contraction of rural employers, a vibrant industry and a sector which contributes significantly towards carbon emission reductions:

1. Funds raised must be ring fenced within the Forestry Sector, both now and in the future. Legislation will be required to safeguard this core premise.

2. Where afforested land is converted in to other forms of renewable energy programmes, replanting equal to or greater than the felled forestry must be carried out.

3. Where commercial forestry is removed, a proportionate amount of commercial replanting must be carried out.

4. Renewable energy programmes must be phased and planned to avoid the wholesale “dumping” of felled material on to the market at any one time.

5. A solution to the certification problems must be agreed before a headlong rush into clear felling, without commercial restocking, is carried out.
6. Clear felling windfarm areas, and burning the material is not a viable solution.
7. Further clarification is required on what the definition of “joint ventures” means.
8. The effect of continuing subsidies, ROC’s etc on the energy sector’s ability to pay more for log classes which have an intrinsic value to the processing sector must be fully evaluated and considered.
9. Will the joint venture partners be eligible to participate in the lease and cutting rights too?

II. What are your views on allowing Scottish Ministers and Forestry Commissioners to offer leases and cutting rights over parts of the national forest estate?

The offering of leases and cutting rights is not a new proposal, and the Consultation Paper offers no real guidance on the strategic direction that is likely to be adopted. There are 19 principal concerns which are laid out below:

1. Michael Russell stated on 4th December 2008 that he would agree to the establishment of a working group to look at the terms of any lease. If this working group does not materialise or is censured in some way, JJSL will not support the consultation process or the resultant Bill. Without a working group, clear terms of reference and assurances that the findings will be pursued, industry has no confidence that its genuine concerns will be heard or acted upon.

2. JJSL is supportive of Government Scottish Forestry Strategy objectives and especially of increased woodland cover. A critical balance of commercial vs non commercial species must be maintained in order to provide the long term security to the processing sector.

3. Do these Scottish Forestry Strategy objectives however require the dismembering of FC to achieve the stated objectives?

4. Government objectives can be delivered just as well by a combination of State and Private forests.

5. FES incurred a deficit of £29.1M (2007-08), despite an income increase of £5.4M to £42.1M from sales of timber. Leasing off 25% of the most productive land and forestry will only exaggerate any future FES deficits and reduce future income streams.

6. Will money raised from leases be hypothecated to more woodland cover and in particular productive forestry?

7. It would appear that any money raised could be utilised in other climate change objectives for a low carbon economy. From a processors perspective this will be unacceptable and could result in a tightening of supply, and the slow death of a currently vibrant rural economy.

8. There are clear examples, historical and present, where the private sector has withdrawn from harvesting and marketing of wood where log prices drop below a particular level.

9. Already within the first few weeks of 2009 JJSL is aware of a number of private forestry investors who will not be bringing timber volumes to
market. One investment portfolio harvested in excess of 200,000T in 2008 and have indicated that they will withdraw from a similar programme planned for 2009. Private growers have the liberty to do so, but this will increase the already intolerable margin pressure on the sector.

10. It is stated that the lease will be for a period of 75 years? Will the lease be transferable and tradeable? What safeguards would the Government instigate to prevent any tenant receiving a significant capital gain on disposal? Would the Government participate in any capital gain?

11. If the lease is tradable how could the Government control any subsequent tenants? How could the Government prevent a subsequent tenant from operating in ways which could be detrimental to the forestry sector?

12. It is suggested that a term of 75 years has been recommended by the Scottish Executive's Environment and Rural Affairs Department, and their financial advisors, and that a discount of 15% has been factored. A greater opportunity for competitive tendering and financial liquidity would be for shorter management contracts of say 5 years.

13. Which areas are likely to be leased?

14. If leases do not comprise entire Forest Districts, fragmentation of the remainder will inevitably lead to increased management costs on the remainder

15. If the areas are fragmented does this mean that there will be a greater probability of multiple owners, thereby increasing the uncertainty for processor groups?

16. If there are multiple owners leasing smaller areas of land this could increase the probability that timber is not brought to market in a managed and proactive fashion in a downturn.

17. Multiple ownership will create fragmentation and decrease transparency of production forecasting and forward management and harvesting programmes.

18. If the first lease is deemed to be a success by Government, there is a presumption that the remaining 75% of the plantation and productive forestry could be leased at a future date. What guarantees, if any, will the Minister provide that this will not take place? In the meantime considerable uncertainty will prevail in the industry and is certain to stifle vital rural development and investment.

19. There is no indication within the paper that gives any information on the possibility/probability that renewable energy programmes may exist or occur within the leased land. What provisions and conditions will be made to ensure that FCS benefits from the resultant revenue streams, rather than the tenant? What guarantees will be made that these revenue streams are committed back to replanting programmes?

The issue of Long Term Contracts is an extremely important area which will require full scrutiny from existing LTC holders. These have brought about stability and security to the sector and any removal of these, now or in the future, will negate the levels of support for the Bill.
1. What guarantees will be provided to current holders of Long Term Contracts?

2. Either direct replacements or other safeguarding Long Term Contracts contracts need to be adopted by any leaseholder.

3. The majority of LTC’s are contracted for 5 years with an option to extend for a further 5 year period. Any potential leaseholder could simply ignore or waive the “option” which make the Minister’s guarantees of honouring contracts meaningless without concrete safeguards.

4. Alternatively a mechanism of “right of first refusal” could be implemented to offer the current contract holders the opportunity to take up the volume allocations over longer durations. This would ensure stability of supply to processing companies.

5. What guarantees will be made to ensure that LTC’s will continue to be negotiated and issued during the consultation process? Failure to provide these vitally important mechanisms, particularly in the current climate, will diminish confidence amongst end users.

6. The majority of capital expenditure programmes are predicated on mutually convenient, long term contracts between FES and private enterprises to ensure continuity and security of supply. Failure to support these will result in a contraction of new investments.

The economic downturn in 2008 has been unprecedented and severe. As a result of consultation with industry representatives, FES agreed a series of measures that would provide some assistance to processor groups. This was published on 26th November 2008 by Brian Mahony, Director, Forestry Commission Harvesting and Marketing, in conjunction with Confor and UKFPA. Leasing off circa 25% of productive forestry will remove any fall back mechanisms that the Forestry Commission has provided and could result in large scale closures and companies entering into administration. The following key points were made:

1. “FC wish to see the forest industry delivered as intact as possible into the next upturn and request all involved to contribute to this goal.

2. In support of these principles the Forestry Commission will aim to support both movement of timber and cashflow by:
   a. Continuing to operate its normal contract and credit arrangements.
   b. Offering a constructive approach to agreeing reasonable extensions to existing contracts with the objective of securing completion as soon as is practically possible.
   c. Enabling customers to work existing higher priced contracts alongside more recently purchased lower priced contracts in order to reduce their impact on cashflow.
   d. Offering customers the opportunity to seek deferral of an agreed portion of sums due.
   e. Continuing to offer planned Sales Plan volumes to the market.
   f. Setting sale reserves based on a realistic view of the market. FC will be provided with monthly market price information from the Trade Associations.
g. Ensuring that harvesting contractors and hauliers are paid promptly in accordance with contract terms and conditions.
h. FC will enter discussions with any customers who request support.”

It is too early to state whether these measures have staved off any more redundancies, but this form of public/private collaboration and partnering would be severely limited in the future through the ownership dilution of the national Forest Estate.

The current consultation process refers to 25% of the National Forest Estate being leased. The following critical points need be addressed:

1. The areas under consideration are some of the most productive and profitable in the Estate and by current estimates could yield approximately 1M Tonnes per annum.
2. It is understood that in order to achieve this volume, the felled area will be eligible for grants thereby increasing the pressure on the already poorly functioning process.
3. The core commercial area of 150,000 hectares would yield in excess of 1m tonnes of timber per annum on a 50 year rotation. This programme of felling would clear some 3000 hectares per annum for restocking.
4. Based on the current SRDP grant rates for forest restructuring the lessee would be eligible for approximately £500 per hectare totalling £1.5m per annum. It is also conceivable that a private owner would seek additional grants for work required, and currently being carried out by FE, to meet UK forestry and certification standards. Applications and demands for grants would commence immediately after the approval of the lease.
5. Inevitably the additional requirement for this new area of “private” land will add to the existing burden and requirements for funding on this potentially oversubscribed SRDP scheme and lead to the significant dilution of existing grant rates or exclusion of valuable projects in the future.
6. Currently the "cost" of replanting felled areas, which is mandatory for felling and revenue generation to occur, is covered within FE budgets. Following the lease of forestry land from FES this cost will fall to the lessee under the support of current and future schemes. Overall the capitalised burden of this could be well in excess of £112M over the 75 year period of the proposed lease.

In conclusion, the following points need to be addressed:

1. The setting up of a lease “working group” to set out the conditions of the lease terms and conditions must include representatives from the processor sector.
2. A full cost benefit must be carried out in a transparent fashion to prove publicly that the leasing of 25% of the most productive and profitable forestry area is viable, and importantly to justify the cost structure of the remainder of FES/FCS.
3. Money raised from the lease MUST be ring fenced and utilised solely for the purpose of replanting and restocking and to meet the 10,000 hectare annual new woodlands target.
4. Full transparency of the areas chosen and an impact assessment carried out in relation to the impact on localised processors.
5. Multiple, fragmented ownership will not be supported.
6. Leaseholders must be beholden to the existing LTC’s and the options that currently exist to roll forward in the future.
7. Forward management and harvesting programmes must be publicly issued, pre lease, to ensure that the security and continuity of supply is guaranteed under new ownership.
8. Guarantees that the Government does not have plans to carry out further leases on the remaining 75% of productive forestry.

III. What are your views on (i) transferring the proceeds from leases and cutting rights to a not-for profit trust, for investment in woodland creation; (ii) transferring the landlord’s interest in this land to a not-for profit trust; and (iii) Ministers stipulating the constitution of such a not-for-profit trust.

The establishment of a trust could ensure that the safeguards that the processing and panel sectors require, but it appears to have been given little thought or definition by the architects and authors of the Consultation Paper. The following issues require to be considered:

1. A not for profit trust appears to offer little other than an additional layer of administration and significant cost, performing duties and functions currently being carried out by FES.
2. Under the correct safeguards a not for profit trust could act as a body which can define and manage the different and divergent views of all stakeholders in forestry.
3. What would FES do then?
4. What would be the cost of rationalising FES, and would the proceeds from the lease be utilised to meet the significant liabilities of a contraction of FES.
5. No mention has been made during the consultation process of the all the other important functions that FES conducts eg planning, recreation, forest research, climate change research, publications, PR etc. Who would assume the responsibility for all of these diverse and important functions?
6. The Scottish Executive’s Environment and Rural Affairs Department, and their financial advisors, appear to have ignored these important departments during the due diligence and appear to have concentrated solely on revenue generation rather than significant practicalities of setting up a not for profit trust which would operate in parallel and potentially in conflict with FES if it was set up.
7. Michael Russell stated on 4th December 2008 that he would agree to the establishment of a working group to look at the terms of a long term lease. JJSL would expect that this statement would apply equally to any not for profit trust due diligence.
IV. Are there other actions which need to be taken, or are there other changes in legislation which need to be made, in order to allow the public and private forestry sector to contribute to Scotland’s target of reducing emissions by 80% by 2050? If so, please outline what these are.

James Jones & Sons Ltd has looked at a number of different scenarios and options and would welcome the opportunity to discuss these in more detail. The forestry sector and the entire wood chain from cradle to cradle has a huge amount to offer to the Scottish emission reduction target of 80% by 2050. By potentially stifling the innovation, investment, R&D, employment and GVA contribution the Scottish Government, through disturbing the forestry distribution channels, will both hinder the industry and not meet the ambitious targets.

Through the pursuit of gaining a windfall gain of £200M the Government will be potentially jeopardising private enterprises and the entire rural economy for short term gain. This consultation does not provide the safeguards or the solutions.

There are a number of specific areas that should be considered, in addition to all of the comments already made in reference to the questions above:

1. A processing sector group meeting with the Minister to air concerns and to provide information on alternative propositions.
2. The timing of the proposal given the economic downturn
3. Implementation of the proposed improvement plan and continued development of the SRDP and grant mechanisms
4. Defence of UK processing sector to allow it to contribute to the low carbon economy eg construction, environmental profiling
5. Defend domestic, UK businesses
6. Simplify the process of changing land use from agriculture to forestry
7. Relax current restrictions to make more land available for new woodland creation
8. Review of the single farm payment mechanism and neutralise its effect of discouraging a change of land use to forestry
10. The environmental costs to any change in ownership
11. Social/Community impacts
12. Defend the work and outputs of Forest Research.
13. If FES in control of a single private operator – at an extreme all harvested production could go to Co-Gen.
14. Can FES be more efficient and cost-effective yielding greater returns to Government

James Jones & Sons Ltd
28 January 2009
On the subject of leasing this will have a negative effect on the long term viability of the FC. The leasing option should be removed from the bill. If such large areas in the South of Scotland are lost then future investment in recreation and conservation, will be badly hit. During times of recession the timber trade relies on the Forestry Commission maintaining supplies of timber even at a loss. This would not happen with such large areas leased off.

The FC should have the power to join in joint ventures on Hydro and wind farm schemes to gain a larger share of the cake. The increased revenue could then be used to purchase more land.

Gordon Kennedy
25 February 2009
I wish to air my views on the proposed bill to alter the forestry bill in relation to the climate change proposals.

I am in opposition to these proposals completely as I feel the government is using publicly managed forests to foot the costs towards reducing climate change emissions and meet targets previously set without budgeting for accordingly or making provision.

The decision to reduce carbon emissions and encourage future forestry expansion I do agree with but not at the expense of leasing or selling off one of our national assets.

Governments have claimed for decades that they will tackle climate change and initiate future forest growth in forestry since at least the early 90's with the Rio conference and subsequent Helsinki gathering. With proposals to increase forest cover by 10's of thousands of hectares per annum without ever reaching the targets claimed. Who's fault is this!

Forestry in the UK needs investment that is beyond doubt, however if these aspirations are to be met then surely they have to be tackled without reducing the national estate at the overall loss of the public's interest. Publicly managed and owned forests provide the benchmark for multiple use woodlands with social and environmental focus NOT primarily geared for financial gains for stakeholders and carbon credit seeking organisations whose primary interest is deflecting the bad publicity they face from unsustainable activities in poorer managed regions.

Sustainable forest management provides far more reaching benefits to the public through increased opportunities in recreation for public health and wellbeing without even touching on the benefits to overall biodiversity to our natural habitats and the sustainable natural resource they provide.

Reducing national and global carbon emissions and providing more naturally sustainable renewable measures means, to improve the effects on the earth's composition is and should be paramount to any governments integrity and should be given the level of importance it deserves. This is not going to be achieved through short sighted quick fixes that are dressed up as progress to score points.

I have no doubt that multi-national companies and organisations with their vast amounts of disposable moneys can be brought in through these proposals but at what real expense with seriously damaging effects to the public's interests in utilising public land and the freedom they currently provide.
Climate change is a very serious problem that needs to be addressed now and needs the full backing of the people, not headline seeking governments with no real true substance in its foundation. Money is tight in all areas at the moment with the exception of the oil and gas monopolies and their mega profits (what credit crunch are they involved in) but the future of our wellbeing and sustainability relies on investment now not the sale of one of our only assets that is at least trying to improve the opportunities for its stakeholders, the public.

The forestry commission at the very least are constantly attempting at working to provide opportunities for the public's benefit without financial gain, who else will provide this in reality.

John Mulgrew
26.02.09.
1) Do you envisage that the Forestry Commission could play a greater role than it does at present in reducing greenhouse gas emissions or in alleviating or responding to the effects of climate change? If so, what suggestions would you make?

As a land manager, producer and transporter of forestry products as well as a regulatory authority and producer of best practice guidelines there are a number of areas where the Forestry Commission could play a greater role. These include:

- Making greater use of existing landholdings for renewable energy generation, as proposed.
- Developing markets for wood products.

There is a need to create both local and national markets for timber products. Localised demand will encourage investment and better management of our woodland resource and limit the need for the transportation of products across the country. There needs to be a significant commitment to using more timber products in house building (including insulation products) and further assistance to put in biomass boilers in homes etc. Without development of the demand side we will have a lot of forests (that do help mitigate climate change) but no end markets for the raw material.

- Encouraging more land into forestry

More planting could be encouraged if it were allowed on land that receives Single Farm Payment. This would increase planting and would need no additional government investment.

Early indications suggest that the rate of take up of forestry options under Rural Priorities would be increased if the rates of payment were more attractive.

Woodlands in and around town (WIAT) should continue to be supported as they not only contribute to mitigating climate change but also help to absorb localised pollution and limit leisure travel by providing a full range of recreation facilities within easy travelling distance of major centres of population.

- Developing innovation and best practice in forest roads and timber transport
More sustainable forms of timber transport should be developed to reduce road haulage, specifically options and potential subsidies for rail and water transport should be investigated.

With increasing intensity of rainfall, greater encouragement should be given to non standard engineering solutions for forest roads. Improved designs must reflect the changing climate and aim to minimise erosion and land slippage.

2) Do you consider that either of the Government’s consultation proposals (on entering into joint venture and on leasing cutting rights) would enhance the Forestry Commission’s role in dealing with greenhouse gas emissions and climate change?

LLTTNPA supports the proposal to allow the Forestry Commissioners to enter into joint ventures to develop renewable sources of energy on the national forest estate. This appears, in principle, to be a practical way for the Forestry Commissioners to increase the profitability of the national forest estate while contributing to the mitigation of climate change.

The NPA supports joint ventures between FCS and local communities which provide opportunities for the development of sustainable and affordable community renewable energy schemes. The development of sustainable and affordable energy generation is particularly important for those rural communities, off mains supply, that remain heavily reliant on fossil fuels for heating. This will help to engage and empower communities, creating local solutions for some of the issues of climate change. Any income generated from joint ventures with developers and local communities should be used directly to fund further measures to mitigate climate change.

Within the National Park, medium (generating between 1MW and 20MW with multiple turbines) and small-scale (generating below 1MW) wind renewable energy projects will be supported where, the siting, design, access and scale of the proposal does not create a detrimental impact on the landscape, natural or cultural heritage or has any adverse impacts on local communities or the rural road network. Large-scale wind renewable projects are unlikely to be acceptable. Within the National Park boundary, small-scale (generating less than 1MW) are likely to be acceptable where there is no significant environmental or landscape impact. Energy generation from biomass heating or combined heat and power combustion plants are likely to be acceptable in the National Park where the siting, scale and design, future support infrastructure and production of raw materials, do not have adverse impacts on the natural or cultural heritage of the area or on local communities.

There is an urgent need to undertake a feasibility study on the national forest estate to assess the potential for income generation from renewable energy schemes taking into consideration development constraints. If the potential is sufficient to generate adequate funding for FCS to make a significant contribution to climate change mitigation, leasing of land may not be necessary.
3) Do you envisage any implications for nature conservation, biodiversity or recreational interests from the two proposals and, if so, what are they?

We would draw your attention to the potential impact on bats, a European Protected Species, of siting wind renewable projects within forestry. Early indications suggest that bats may be particularly vulnerable to the localised disturbance created by turbines and this requires further research before specific proposals are developed.

Other key species which may be impacted upon by micro-renewables and associated infrastructure such as tracks, borrow pits etc include red squirrels, otter, water vole, birds, such as raptors and some fish species etc. Guidance would need to be developed to minimise impacts on the natural heritage, prior to this policy being progressed.

The Forestry Commission and Forest Enterprise work to best practice guidelines and aim to combine economic forestry with biodiversity (this is a duty for them under the Nature Conservation (Scotland) Act 2004), minimising landscape impact, community involvement and access and recreation. It is difficult to see how commercial operators, to whom the biodiversity duty does, not apply, will be able to maintain this balance and continue to deliver to high standards.

Whilst land is unlikely to be removed from access rights, the provision of well managed, quality access provision; which is important for a visitor destination such as the National Park, is likely to deteriorate if large areas of the National Forest Estate are leased out.

The siting and scale of micro-renewables can have significant effects on landscape and biodiversity. Cumulative effects can combine to magnify these impacts. In dealing with a single landowner (the Forestry Commission) planning authorities will have greater ability to seek plans and appraisals which can address the potential for cumulative impact. This will become more complex if multiple interested parties come forward individually and potentially in competition.

4) Do you believe there are any implications for rural employment from the two proposals and, if so what are they?

The majority of woodland management is mechanised and involves time limited amounts of skilled/unskilled labour on individual sites. Consequently the majority of private woodland managers subcontract works and an increasing number use management firms to manage contracts and apply for state aid and subsidies where appropriate.

As such leasing arrangements are unlikely to have significant long term impacts on the number of permanent rural jobs in forestry.
Rural jobs might be increased if the number of local markets for wood produce were increased as more jobs could be created in the processing and finishing of products.

Micro-renewables are creating new jobs in manufacture and installation; however these are unlikely to be rural as staff are concentrated in manufacturing areas.

5) Do you have any other views on these two proposals from the Government?

The consultation document does not provide enough detail on the proposed offer of leasing and cutting rights over areas of the National Forest Estate to the private sector to fully comment on this proposal. However, we have concerns that the basic principal of selling cutting rights or leasing sections of publicly owned land undermines the concept of a National Forest Estate and may, in the long-term, undermine its economic viability.

Whilst leasing may release capital for the delivery of climate change objectives, the disposal of 25% of the most profitable estates may limit opportunities for FCS to cross subsidise work on their less profitable estates. It may also limit opportunities for savings arising from economies of scale.

As a theoretical argument, if the Forestry Commissioners wish to release capital then a case could be made for a disposal policy. This should look across the range of assets, rather than simply at the most profitable and might include small scale disposals to communities or investors. Income could then be used for future acquisition or planting schemes.

However, the NPA remains concerned that either leasing or disposal could undermine the concept of an economically viable, publicly valued National Forest Estate.

The NPA strongly supports the current consultation arrangements on FE Forest Design Plans. All current FDP’s have been subject to stakeholder engagement, including the NPA. FE has a strong policy commitment to improving the environmental value of the National Forest Estate, providing for recreation and conserving the historic environment above and beyond the minimum required by the UK Forestry Standard. The NPA is concerned that leasing of land to a third party, with the principal management objective of profitable timber production, will result in erosion of the environmental value and non-timber interests of the estate and the wider benefits forestry brings to the general public. The NPA is further concerned that leasing 25% of the Forest Estate may lead to pressure to increase timber production on the remaining forest estate, which again may result in a reduced commitment to conserving and enhancing non-silvicultural interests.

The proposal, as outlined in the Consultation Paper, does not discuss funding arrangements for management of the National Forest Estate by the private sector. If third party managers were to be eligible for funding through SRDP
(and any subsequent funding mechanisms), and it is difficult to see why leasing/cutting rights would be attractive to the private sector if funding were not made available for management, additional funding would need to be made available through SRDP for planting/management to minimise the impact on other landowners who would potentially be affected by the additional pressure on the limited funding currently available.

A rigorous selection process for leasing sites will need to be put in place to ensure that other interests are not compromised as a result of change of tenure and management objectives.

With reference to not-for-profit trusts, FCS is a public body, acting for the public interest, so the benefits of transferring profits made from joint ventures or leasing to a not-for-profit trust are not immediately apparent. Indeed, at first glance the added layer of administration may give little advantage.

FCS has led many Challenge Funds over the years and has proven this to be a workable and successful model for prioritising spending to achieve maximum public benefit. The NPA recommends the establishment of a Climate Change Challenge Fund, funded through the revenue received from joint ventures. A Climate Change Challenge Fund could finance a range of measures such as new planting or the use of forests to reduce emissions or mitigate the effects of climate change while keeping the money in the public domain and having it administered through a tried and tested mechanism.

Loch Lomond & The Trossachs National Park Authority
29 January 2009
View on Climate Change Bill. Question 11 Forestry.

I support the overall objectives of the bill but I am astonished and gravely concerned over the proposal to lease part of the forest estate. I set out below my reasons for my opposition to this part of the bill.

Summary

I believe that allowing Scottish Ministers and Forestry Commissioners to offer leases and cutting rights over part of the national forest estate is naïve and ill conceived. This part of the bill will result in the destabilisation of FCS, sawmills and wood processing units and represents poor value for money for the tax-paying public.

On November 4 all in the FCS were shell shocked when the bill was published and the implications of the section on cutting rights and leases became apparent. What is also worrying is the short timescale allowed to put through the legislation. There was no prior consultation or communication with FC staff, who could, at that stage, have pointed out the flaws in the proposals. We are now undertaking to do this retrospectively.

Reassurances have been given that not one square inch of public land will be sold. This is untrue as three sizeable blocks of FC woodland have been sold in the Tweed Valley since the turn of the year. This is described as repositioning, and there may be some merit in disposal of outlying blocks at the real market value but that is a minor concern compared to the leasing option.

To lease 25% of the forest estate for 75 years amounts to a sale of land as far as anyone over the age of 10 is concerned. The problems that I can foresee with this plan are as follows:

Accessibility

Rights of access are guaranteed under the SOAC legislation and the FC endeavour to minimise restrictions to access whilst forest operations are undertaken. A less accommodating landowner could use operational and health and safety issues to exclude the public from large areas of forest for long periods of time.

Sustainability

A commitment to ensure that any leased land would be managed under the UKWAS standard has been made. However it is unlikely that stewardship of the leased area would be improved by the change. The Commission often
exceed standards demanded by UK WAS. The standard is also most effective when adopted over a large-scale forest area for example management of forest corridors for red squirrel conservation.

**Commitments to timber markets.**

Many of today’s timber markets were created and developed after commitment by the FC to guarantee a supply of timber. The private sector seldom makes the same commitments preferring to market their timber when prices are at a premium. The area proposed for leasing amounts to around 35% of the commission’s production and thus timber markets could be jeopardised by the leasing option. At the present time the private sector have virtually stopped sale of timber and all markets are being kept going with FC timber.

**Value for money**

Let’s assume that the 100 thousand ha of woodland for lease is made up as follows:

- 25 thousand ha of fallow ground
- 25 thousand ha of 15 year old crops
- 25 thousand ha of 30 year old crops
- 25 thousand ha of 45 year old crops

The timber value alone of the 45-year-old crop could conservatively be expressed as follows. 45-year-old sitka spruce could yield 400 m³ per ha at a standing price of £15 per m³.

Therefore timber value alone on one quarter of the leased area would be 25000 x 400 x £15 = £150 million.

This probably equates to the value the Government would receive from the lease in current market conditions. That means that the lessor would get the 15 and 30 year old crops free. In addition he would be eligible for grant aid to replant the fallow ground and the newly felled ground. This does not demonstrate responsible management of public money.

**Consequences for FC staff.**

The minister has dismissed all concerns regarding job security by offering the ‘triple guarantee’ of no compulsory redundancies, transfer to an alternative FC post or transfer to the leasing company under the TUPE regulations. Transfer of staff within FC would be very expensive, as would be the selection process. If voluntary redundancies were offered to staff nearing retirement age this would also be costly. Meanwhile only the current administration has any confidence whatsoever in job (and pension) protection through TUPE.
Staff in the short term, would be employed by the leasing company, but the terms and conditions of employment would be quickly diluted and eroded. Job losses would follow thereafter.

**Devaluing of the forest estate.**

The Forestry Commission value is far in excess of the sum of its parts. Its worth for recreation (public health), landscape, bio-diversity and heritage is immense. It is well managed by the FC for the people of Scotland. This stewardship has endured since 1919 this proposal if adopted would undermine the future of FCS. The head office in Edinburgh has GB wide responsibilities. Leasing out a large area of the estate simply increases the unit cost of managing the balance of the portfolio.

**Use of cash raised.**

The Scottish Government has refused to give a mandate that money raised from the proposed lease will be used for forestry purposes.

**Achievement of Objectives?**

Whilst everyone must be concerned with the effects of climate change the uproar over the leasing option has diverted attention away from the laudable objectives of the rest of the legislation. Carbon capture is a complex issue and differing opinions exist within land based groups on the merit of increased tree planting. There is insufficient detail in the bill to make an informed decision. It is irresponsible to push through this legislation for a quick cash return.

**Conclusions and recommendations**

I accept that the climate change issue must be addressed and if our current Government required the FCS to raise money to assist in this aspiration we must do so. In my opinion the leasing option is a non-runner and therefore we must continue and if necessary accelerate the repositioning of the estate. However this must not include selling to raise cash quickly if the price of stocked land is depressed.

Sale of land may result in a requirement for fewer staff. Natural wastage and a reduction in recruitment could achieve this.

Opportunities with the renewable energy sector must be maximised and opportunities for partnerships sought out and vigorously pursued.

Stewart Mache
February 2009
Response of Munro Sawmills Ltd to RAE committee on Forestry proposals in the proposed Climate Change Bill

1. Do you envisage that the Forestry Commission could play a greater role than it does at present in reducing greenhouse gas emissions or in alleviating or responding to the effects of climate change? If so, what suggestions would you make?

Currently, because of environmental constraints the Forestry Commission replants only 70% of the woodland area it fells. The rest is open space, natural regeneration, ecological areas, slow growing hardwoods. In order to just maintain the existing forest cover large areas of new planting are required every year. The most effective carbon capture trees are fast growing conifers in plantations. If you are serious about carbon capture you have to embrace this idea, or we will end up with low density hardwood scrubland with little carbon capture potential.

This idea is unpopular but it must be faced that at the present time, because of environmental constraints, the Forestry Commission (and the Private sector) are losing productive forest and releasing more carbon from this sink.

How can new planting (and proper replanting) be stimulated? If the government attempts this it will be expensive and controversial. Current priorities are for environmental concerns, access, community woodlands, woodlands around towns etc. None of these issues aid carbon capture and have no direct benefit in what is, after all, a Climate Change Bill. It would be difficult and contentious for the government to buy large areas of land for planting. The solution has to be in the private sector where large areas of land are available for planting, and given the right incentives estate owners will be ready and willing to create new forests. This would have a direct and rapid effect with less controversy.

2. Do you consider that either of the Government’s consultation proposals (on entering into joint ventures and on leasing cutting rights) would enhance the Forestry Commission’s role in dealing with greenhouse gas emissions and climate change?

With regard to joint ventures we welcome any activity which will increase the viability of the Forestry Commission without impinging upon its normal commercial customers. Income from these sources should be put to use in maintenance and expansion of the national forest estate.

We have grave reservations on Forest Leasing. Handing 25% of the Forestry Commission estate to one leaseholder would seriously jeopardise investment in the timber processing industries currently supplied by these woodlands. In
the event of leaseholder default there would be no guarantee of proper replanting after felling and the carbon sink would be depleted. Rather than hand over woodlands to the private sector we feel the Commission should retain its productive woodlands and the Private sector should be encouraged to plant new woodlands.

3. Do you envisage any implications for nature conservation, biodiversity or recreational interests from the two proposals and, if so, what are they?

It would be harder for the Commission to regulate a leaseholder to comply with their environmental standards etc than it would be for them to retain control of the woodlands so, yes, these aspects would all suffer.

4. Do you believe there are any implications for rural employment from the two proposals and, if so, what are they?

The leasing idea would remove the need for local employment in the areas under question. The work would be done by contractors and city based managers with fewer people on the ground. There can be no guarantee that the leaseholder would continue to cut in hard times when sales are unprofitable. This would lead to discontinuity of employment rurally, and worse could precipitate the decline and collapse of wood processing industries in small towns and rural areas. (We are in Dingwall)

5. Do you have any other views on these two proposals from the Government?

We believe Forest Leasing is a bad idea for several reasons:

From the processors point of view it would lead to one leaseholder holding a huge area of Forest, effectively gaining control of the roundwood market in one particular area. The effect would be to stifle investment (who would invest with no security of log supply?) and to starve processors of raw material when times are hard and the roundwood price is low. Remember the UK timber industry is very much a commodity market and with only a 20% market share UK producer selling prices are set by import prices. If the leaseholder refused to sell for a period because of low prices the industry would collapse. It would be impossible to create terms that would force the leaseholder to sell in bad times. If the leaseholder were a foreign investment corporation it could export roundwood leaving the UK industry to sink without trace. If the leaseholder were an energy company (such as Drax or E-on) it could burn the total output of the forests and destroy the existing processors. If the leaseholder were a processing company it would have a virtual monopoly and destroy all competition in the industry. These and other points have all been eloquently made in a recent letter from Tom Bruce-Jones to the Minister, of which we were a signatory along with the majority of Scottish processors.
From the monetary point of view it is a massive gamble. Who knows what the price of timber will be over the next 75 years? Any leaseholder will take a conservative estimate of likely returns and bid accordingly. Therefore it is inevitable that the lease will generate less return than normal sales practice. Future generations will look back with anger at any government that leases an asset for so long a period for such a short term gain! Current long term contracts with the Forestry Commission are subject to constant price negotiation ensuring the maximum possible return at any one time. Thinking you can forecast and fix the price for 75 years would be foolhardy.

From the legal point of view it is fraught with danger. Attempts to ensure continuity of supply to processors would be very difficult as price would have to be negotiable and this would negate any conditions imposed on the lessee. Sanctions against the lessee for failure of contract on matters such as access, environment and replanting would be a minefield – and too late if breaches have occurred. And in hard times how could the lessee fulfill conditions if no income is available to do it? What happens if the lessee goes bankrupt or is subsumed into another organization, possibly abroad. There is a huge devil in all this detail and no obvious way to circumvent it.

From the timing point of view it is inopportune. Apart from all the above reservations there could not be a worse time to lease assets than the present. Our currency is on the slide; our economy is in recession. You will get the worst possible price. This is the time to hold non-monetary assets that will not devalue. What could be better than standing timber? Remember Gordon Brown selling off our gold reserves at the worst possible time? Do you want to be cast in the same light?!

Munro Sawmills Ltd
28 January 2009
Introduction

1. NFU Scotland recognises that the Minister for Environment, Michael Russell, launched a consultation paper outlining proposals on 4 November 2008 to generate funding in order to plant more trees as part of plans to increase the area of Scotland covered in woodland by the second half of this century.

2. In the consultation, Scottish Ministers are asking Forestry Commission Scotland (FCS) to work up options to create funds via the national forest estate in the name of tackling climate change, while also safeguarding the important public benefits that the estate generates throughout Scotland.

3. NFU Scotland acknowledges that the consultation relates to legal provisions in the Scottish Climate Change Bill that may help with these aims, such as the potential to give Ministers the power to modify certain functions of FCS. This is not of primary or overriding concern to NFU Scotland.

Summary

4. NFU Scotland has some major concerns that these proposals may well adversely impact on Scottish agriculture if they are given the go ahead. These can be summarised as

- NFU Scotland is extremely concerned by the potential adverse impact that these proposals may have on the future development of many rural areas where farming plays the principal and pivotal role in securing and enhancing a huge range of economic, environmental and social benefits.

- NFU Scotland considers that the final outcome of these proposals, skewing the funding balance within the Scotland Rural Development Programme (SRDP), could have a major impact on the entire Scottish agriculture industry - including upstream input suppliers and downstream processors - and all that it underpins in rural Scotland.

- NFU Scotland doubts very much whether this approach to tackling climate change will achieve anything positive. It is naive in the extreme to think that simply planting more trees on mainly agricultural land, to lock up carbon, will make a significant contribution in addressing what is a global and complex problem.

- Given the uncertain and variable impacts that climate change will have on Scotland, and globally, NFU Scotland considers that a far more
A sophisticated approach to tackling climate change is required - rather than simply expanding tree cover across productive agricultural land.

- NFU Scotland considers that it would be far more effective to divert funding to farm businesses in order that they can take informed and supported decisions so as to adapt agricultural practices and mitigate climate change impacts, and thereby deliver a range of wider rural development benefits as a consequence.

- NFU Scotland considers that agriculture's function could have an even greater positive impact if the policy environment in which farming and farmers currently operate in were more receptive to agriculture's primacy in both land use and tackling climate change.

- NFU Scotland believes better integration between currently separate policy themes such as farming and food, forestry, flooding and biodiversity - all of which are linked to land use and require some degree of spatial co-ordination and co-operation across different parcels of land and therefore different farms - must be pursued.

- NFU Scotland considers that there is a real need to avoid overly simple or naive policy approaches to tackling climate change - and the blunt tool of diverting resources to planting trees on good agricultural land falls right into that trap.

- Attention also needs to be paid to designing market mechanisms to promote mitigation - agriculture’s inclusion in an emission trading scheme should be explored.

- In what effectively becomes a land use debate, NFU Scotland firmly believes there must be a focus on preserving and enhancing the benefits delivered by active farming and food production - including those in relation to climate change.

- There is a limit to the uses that any area of land can deliver and the Scottish Government must recognise that if it is to reconcile concurrent policy aims.

**Background**

5. On 29 January 2008, the Scottish Government launched a consultation on its proposed Scottish Climate Change Bill that sets out a target to reduce emissions by 80% by 2050. It pointed out that the debate has clearly shifted in recent years from whether climate change is happening to what is causing it and what needs to be done about it.

6. It suggested that climate change presented major challenges for Scotland's land using industries, but that a well-planned and co-ordinated adaptation response would minimise the negative impacts and highlight potential opportunities.
7. The Climate Change Bill was brought forward to create mandatory climate change targets to, among other things, drive decisions in government and business, create and enable new means of reducing emissions and adapting to climate change, and provide a strong example to other countries.

Tackling Climate Change

8. NFU Scotland considers that the Scottish Government is well placed to influence many of the policy areas central to a strong mitigation and adaptation response in Scotland. NFU Scotland supports the development of a Scottish adaptation strategy to identify priority adaptation action required in Scotland and to clarify roles and responsibilities in achieving this action.

9. However, whilst the existence of climate change is widely accepted, there is still some uncertainty in the pace, pattern and magnitude of this change. Nevertheless, it is expected that, on average over the course of this century, annual temperatures will rise whilst precipitation will increase in winter but decrease in summer. In addition, the frequency and intensity of extreme events such as storms or droughts may increase, possibly sooner than changes to average conditions.

10. As a result, most areas in Scotland are likely to experience a longer agricultural growing season. Improved crop and grass growth will lead to new enterprises becoming viable as their biological limit extends northwards.

11. Conversely, the viability of some existing enterprises will reduce due to, for example, increased soil moisture deficits or heat stress. Equally, some existing and new weeds, pests and diseases will become more common in warmer and wetter conditions. Within this, there will be regional variation across Scotland - as with current conditions from north to south and west to east.

12. Therefore, given the uncertain and variable impacts that climate change will have on Scotland, and globally, NFU Scotland considers that a far more sophisticated approach to tackling climate change is required - rather than simply expanding tree cover across productive agricultural land.

13. NFU Scotland considers that it would be far more effective to divert resources to farm businesses in order that they can take informed and supported decisions in order to adapt agricultural practices and mitigate climate change impacts, and thereby deliver a range of wider rural development benefits as a consequence.

14. In responding to the challenge and opportunities posed by climate change, individuals and representative bodies across the farming industry have a key role to play.
15. In adapting to climate change, farmers and other land managers need to be aware of the potential positive and negative influences of climate change and adjust their business practices accordingly. For example, within-season adjustments to the timing of field and marketing operations and longer-term adjustments such as choice of livestock breed, mix of enterprise and business structure and land use system.

16. Farmers and other land managers also need to contribute to mitigation of climate change. This may require wider adoption of current best management practices, such as nutrient budgeting and energy efficiency informed by carbon and energy audits but, given appropriate policy support, more significant adjustment to the nature of agricultural land management could be achieved to provide ‘win-win’ outcomes.

The Balance of Land Use in Scotland

17. NFU Scotland is clearly of the view that Scottish agriculture and individual farm business can make a very positive contribution to tackling climate change. At the same time, the industry takes the principal role in rural development - not least through its contribution to local economies and delivery of other landscape and biodiversity benefits.

18. However, NFU Scotland considers that this function could have an even greater impact if the policy environment in which farming and farmers currently operate in were more receptive to agriculture’s primacy in both land use and tackling climate change.

19. NFU Scotland believes better integration between currently separate policy themes such as farming and food, forestry, flooding and biodiversity - all of which are linked to land use and require some degree of spatial co-ordination and co-operation across different parcels of land and therefore different farms - must be pursued.

20. This is essential because climate change issues can not easily be separated from other aspects of land use policy, or from broader sustainable production and consumption issues. It is essential that there is co-ordination and consistency of climate change policy across all other areas of the economy. In particular, adaptation and mitigation options need to be compared across, not just within, sectors to ensure comparability of true costs. NFU Scotland seeks clarity and consistency of approach to climate change targets and responses across all sectors.

21. In the short-run, the scope for modifying SRDP measures and funding must be explored to ensure that farming, as well as forestry, can play a lead role in tackling climate change. NFU Scotland considers that there is a real need to avoid overly simple or naive policy approaches to tackling climate change - and the blunt tool of diverting resources to planting trees on good agricultural land falls right into that trap.
22. Instead there is a need for policies structured to allow for localised flexibility, whilst achieving national aims. For the longer-term, attention needs to be paid to designing market mechanisms to promote mitigation - agriculture’s inclusion in an emission trading scheme should be explored.

23. The proposals for the forestry provisions in the Scottish Climate Change Bill also raise more fundamental questions of how Scotland uses its land. NFU Scotland firmly believes there must be a focus on preserving and enhancing the benefits delivered by active farming and food production - including those in relation to climate change.

24. Scotland’s farmland cannot reasonably be expected to deliver against all Scottish Government policies on food, flooding, climate change, tourism, access and inclusion without some trade-offs. If farmland is to deliver multiple public benefits, then there needs to be a proper evaluation of its worth backed by fully resourced and accessible measures that allow farmers to optimise that ‘value’ for the greater good.

25. The stated intention that this study does not focus on land ownership but instead looks at productivity is clearly welcome. While the findings of this study are not due to be presented until late next year, the fundamental changes taking place in Scotland’s hills and uplands means that decisions to address those changes need to be made on an ongoing basis rather than waiting until the study reports.

26. The Scottish Government must face up to the clear conflicts in land use that are raised by such proposals. Every year 1,200 hectares of ‘greenfield’ - an area the size of a large town - is lost to housing and industrial development. That development is generally taking place on some of Scotland’s most productive arable land, with that limited resource lost to food production forever.

27. At the same time, the Scottish Government has set itself the target of forestry coverage on 25% of Scotland’s land area. Any expansion in forestry area is likely to take place on ground traditionally used for grazing livestock. The Scottish Government, therefore, must also address whether the priority lies with active farming and food production - and all the rural development co-products that go with that - or elsewhere.

There is a limit to the uses that any area of land can deliver and the Scottish Government must recognise that if it is to reconcile concurrent policy aims.

NFU Scotland
3 February 2009
CLIMATE CHANGE BILL & THE NATIONAL FOREST ESTATE

The National Trust for Scotland (the Trust) welcomes this opportunity to comment on this consultation on forestry provisions in the current Climate Change Bill. The main comments are set out below under Consultation Questions as set out in the Consultation Proposal.

Introductory Comments

The Trust’s comments are informed by both its role as the conservation charity that protects and promotes Scotland’s natural and cultural heritage and its roles as property owner and woodland manager.

We recognise that climate change targets and increases in woodland cover have been included in national strategies on Climate Change and Forestry and in principle see merit in looking at how all sectors can make greater contribution to tackling climate change. The Trust has considerable concerns though about some of the proposals contained in the Consultation Paper and the way they are set out without adequate supporting information.

As a result the consequences and merits of the proposals cannot be adequately assessed and we see potential disadvantages and risk from the public perspective which we consider below. We also note that despite the new importance given to woodland expansion and concern for climate change at present only 6500 hectares of grant aided woodland on average is being created per year compared with some 14500 hectares in the 1980’s (Figure 4: Grant aided woodland creation over the last 40 years - ‘Discussion Paper on Woodlands Expansion in Scotland’ June 2008).

The rest of this letter gives the Trust’s responses to the specific questions raised in the call for written evidence.

Consultation Questions

The key points the Trust wishes to comment on are:

Q 1: What are your views on allowing the Forestry Commission Scotland (FCS) to enter into joint ventures, with the intention of participating in renewable energy programmes on the national forest estate?

FCS already undertakes joint ventures for renewable energy projects. The arrangements for any new joint venture are not clear and are set out in only the very broadest terms. However it is our understanding that there could be potential from joint ventures for FCS to offer greater added value, develop its project management expertise, increase its revenues and expand community engagement. The Trust would be in support of further consideration being given to enabling FCS to carry out more joint ventures including those for renewable energy programmes.
renewable energy generation as long as these follow appropriate planning and environmental assessment procedures, are located and sited appropriately with safeguards being met for landscape and other aspects of natural and cultural heritage.

Q 2. What are your views on allowing Scottish Ministers and the Forestry Commissioners to offer leases and cutting rights over parts of the national forest estate?
The Trust is concerned that little detail is offered to support the figure for additional income, which seems small in relation to the cost of renewable energy generation development, nor for justifications for the scale and time spans under consideration. The potential for the removal of such large areas of land for such a long time could erode the concept and the operation of a ‘national forest estate’. The Trust does not see adequate evidence that the changes proposed will bring the degree of benefit suggested nor that there has been any analysis of the risks that there may be for sensitive landscapes, protected woodlands, the public interest or for the operations of the FCS. FCS currently takes a strong lead in delivery for most woodland Biodiversity Action Plan priority habitats and species and has done much to develop its remit in relation to cultural heritage issues including protection of archaeological remains, historic but unlisted buildings, public access and recreational uses. These broader yet important sustainable activities might be put at risk.

Q 3. What are your views on (i) transferring the proceeds from leases and cutting rights to a not-for profit trust, for investment in woodland creation; (ii) transferring the landlords interest in this land to a not-for profit trust; and (iii) Ministers stipulating the constitution for such a not-for profit trust.
The Trust has concerns that transferring leases away from FCS would reduce its income, especially as these are to take place over areas where ‘the timber production element is dominant’. A not-for profit Trust, as a new and additional organisation rather than one that already exists with other income streams, would have to offset its own and additional set-up, management and public duty costs against income that might have accrued to FCS. This could mean FCS would receive less than it currently does from such leases and so have less to spend on the rest of the estate, weakening its strategic position, eroding the quality of management, losing its expertise and so reducing the delivery of public benefits, even those directed towards climate change.

It is also disappointing then that no consideration or assurances have been made about the sort of conditions for such transfers or leases. No reference is made to requirements to address planning, environmental assessment and consultation procedures, to carry out new forestry to UKWAS certification, to meet forestry ‘best practice’ standards, to provide a range of public benefits like access, amenity, educational and employment benefits, co-ordinated network creation with FCS and others, biodiversity improvements and respect for Scotland’s species. Lease conditions and arrangements may bring further loss of income due to a need for independent monitoring of performance.
The not-for profit trust is to be constituted to reflect the ‘public interest’ and ‘appropriate objectives and arrangements’ but the consultation should have been more explicit, for example, about aims for sustainable woodland activities, the sort of provision for public benefits and the involvement of local communities.

**Q 4. Are there other actions which need to be taken, or are there other changes in legislation which need to be made, in order to allow the public and private forestry sector to contribute to Scotland’s target of reducing emissions by 80% by 2050. If so please outline what these are.**

The Trust recognises that the primary focus in the Climate Change and Sustainable Development Strategies is on reducing CO2 emissions from buildings and transport through energy efficiency and the development of alternatives to carbon based energy systems. As a step to interpreting and addressing these aims the Trust supports calls for an explicit duty towards Sustainable Development for all public bodies.

The ability of the forestry sector to contribute to Scotland’s targets then needs to be viewed against such a perspective and balanced against a range of public benefits including enhancement of the natural and cultural heritage. We understand there are best practice and low impact silviculture systems that can contribute to emissions reduction and ways should be explored on how to promote these as standards across the whole industry.

The Trust has also pointed out in a previous consultation response on Woodland Expansion that there is a need for better understanding of the balance between the release of carbon from different soil types and the amount of carbon sequestration achievable by woodland growth. If cyclical cropping is encouraged then the benefits of sequestration will be consequently limited.

For the avoidance of doubt the Trust is happy that these views be made available to the public. We would be grateful to be kept informed of progress in this matter and for a copy of the proposed consultation report and of the Report to Ministers. In view of the urgency in considerations on the Climate Change Bill we are offering similar comments to the Clerk of the Rural Affairs Committee and to SPICe. I hope that this response will be helpful. Please contact me if any of my colleagues or I might be able to provide any additional information or clarification.

**The National Trust for Scotland**

**29 January 2009**
1 I agree with the proposed change in legislation to allow FCS to enter into joint ventures. Income from such ventures should be ring fenced for Forestry and flexibility given to FCS accounting to enable monies to be rolled over into subsequent years to even out the income stream.

2 I am against any proposal to lease out areas of the national forest estate or allow cutting rights. Changes in legislation to allow this are unnecessary as the objective of meeting the planting target of 10,000ha per year could be funded through an increase of the repositioning programme (see 4 below).

Leasing out large area of the forest estate is unlikely to realise the full market value of the asset while losing control of the land and so be able to respond to or take advantage of future changes in land use priorities or opportunities.

The leasing out of the 25% most productive areas will reduce FCS income by an estimated 35% leaving a funding gap for managing the remainder of the national forest estate as the minister has stated that no extra funding will be available.

Although this may not have an impact on the delivery of nonfinancial benefits in the short term these areas are bound to suffer in the medium to long-term, as investment will be greatly reduced. The ministers recent restriction on any significant further investment in mountain biking trail building by FCS can be seen as a precursor to future policy made necessary by reduced budgets.

There is no guarantee that any money raised through leasing or cutting rights would be reinvested in forestry and even if £200m was raised up front the forest industry wouldn’t be able to respond to investing that amount in one or even two years. This money would then be lost to forestry and funding to achieve the new planting objective would fall short in subsequent years.

The guarantees made to FCS staff by the minister in letters to the press are disingenuous. To say that there will be no compulsory redundancies and that any staff not wishing to transfer to a private company ignores the reality that if you reduce the size of the estate and the budget of FCS you have to reduce staffing costs. Many of the lower grade staff in the FCS are non-mobile and refusal to transfer to another area would be considered to be resignation.
The safeguards under the TUPE regulations are not as good as they are made out to be, once transferred conditions of service can be changed or redundancies made if an economic justification can be made.

The likely concentrating of the areas to be leased will also result in a significant social and economic cost to these areas.

3 As stated I am against leasing of the national forest estate and removing this from the bill would remove any argument for creating Trusts.

4 As stated above it is my view that the most practical and cost effective way of raising the extra funding from the forest estate for new planting until the income from joint ventures becomes available is an increase of the repositioning programme to £30m a year. This would allow areas throughout the country that don’t meet FCS’s core objectives to be sold, realising their full value and with out high local impact.

Chris Ross
27 January 2009
Summary
RSPB Scotland welcomes the opportunity to contribute to the debate around the management of Scotland’s forests in relation to climate change adaptation and mitigation. We support the ambitious targets for reducing green house gas emissions in the draft Climate Change (Scotland) Bill. These targets must be met in an environmentally sustainable manner, protecting Scotland’s wildlife and giving it the best chance to respond to our changing climate. We are concerned that the forestry provisions are distracting from discussion of the urgency of reducing our emissions and how we propose to meet the targets.

It concerns us also that forestry has been isolated as a form of land use and that other aspects of Scotland’s land use - which contributes 25% of Scotland's greenhouse gas emissions- have not been included in the Bill, nor are they being debated.

We strongly support the idea of Forestry Commission Scotland being able to participate in environmentally appropriate joint ventures to address climate change under Section 47 (3).

We consider that the broad nature of the provisions in Section 47 (1), (2) and (4) would alter the legal basis of Scottish forestry regulation, policy and practice and risk undermining existing government commitments on biodiversity objectives and sustainable forestry.

Reports that up to a quarter of the state forest will be put out to long-term lease cause us potential concern. We fear that it could restrict the Scottish Government’s ability to improve the biodiversity value of this land, and to meet public policy objectives of the Scottish Biodiversity Strategy, UK Biodiversity Action Plan, the EU Birds and Habitats Directives and the Ramsar Convention. The role and function of the National Forest Estate must be strategically considered and planned. Leasing options must enhance public benefits and should the lease proposals go ahead, a new environmental reference group should be established to vet lease applications and subsequent management plans.

Vital conservation and climate adaptation work funded by the Government's land management grants for farm and croft land must not be compromised by the sudden introduction of over 100,000 hectares of leased forestry land into the SRDP.
Our key recommendations

- Introduce an overarching sustainability duty in the Bill to ensure that forestry and other land uses provide multiple environmental, social and economic benefits.
- Remove the open-ended provision for changing the Forestry Commissioners' duties and functions in Section 47, subsection 1, 2 & 4.
- Retain Section 47, subsection 3 measures for FCS ‘joint ventures’ for supporting the development of renewables and other climate change benefits.
- Introduce a holistic approach to land use in the Bill through the addition of a duty to develop an integrated set of land use policies.
- Strengthen provisions for adaptation in Section 45 to ensure climate change impacts on Scotland’s forests are properly identified and that adaptation policies are subject to independent scrutiny.
- Use Forestry Commission’s current review of carbon science to shape future forestry proposals.

Response to consultation questions

1. **Do you envisage that the Forestry Commission could play a greater role than it does at present in reducing greenhouse gas emissions or in alleviating or responding to the effects of climate change? If so, what suggestions would you make?**

Yes. There is also a very important role for Forestry Commission Scotland (FCS) to implement climate change adaptation plans, for example by restoring the biodiversity, hydrology and carbon of peatlands it has in its stewardship. This would also have climate change mitigation benefits as Scotland has most of the UK’s peatlands, which are rich carbon stores when in good ecological condition.

There is real scope for forestry to help Scotland’s important biodiversity to adapt to climate change, such as black grouse, capercaillie, peat bogs, Western Atlantic oakwoods and native pinewood. As they stand, the forestry proposals consulted on miss this key opportunity to help Scotland’s wildlife adapt to climate change. Forestry’s role in helping other sectors adapt to climate change also needs to be considered. Sustainable flood management for example requires consideration of forests within both upland and lowland water catchments.

There are other climate change mitigation actions that FCS could be involved with on the National Forest Estate. E.g. encouraging the use of Scottish grown and manufactured timber/wood products to replace steel and concrete, and promoting more efficient energy use in forest management and the wood supply chain. FCS has embarked on aspects of this.

Much of this can be delivered by FCS without needing the open-ended changes to duties and functions contained in Section 47 (1, 2 & 4) in the draft Climate Change (Scotland) Bill (the ‘Bill’). Indeed the main climate change provisions in the early chapters of the Bill will help FCS deliver greater climate change benefits.

Woodland expansion in Scotland must be carried out sensitively to ensure the protection and enhancement of important biodiversity – priority species, habitats and designated sites. We urge the Scottish Government not to repeat the woodland expansion mistakes
of the past, and to reverse the damage to biodiversity and landscapes caused by inappropriate afforestation.

Despite the fact that afforestation on organic soils in temperate countries is not necessarily a carbon sequestration measure, this programme is being presented as a way of meeting carbon targets through woodland creation. Forestry carbon science is under debate and the role of soil carbon is little understood. The Forestry Commission is undertaking a review of carbon science, so it is unwise to claim substantial benefits until this is demonstrated.

2. Do you consider that either of the Government’s consultation proposals (on entering into joint ventures and on leasing cutting rights) would enhance the Forestry Commission’s role in dealing with greenhouse gas emissions and climate change?

Tree planting for climate change 'mitigation' is a distraction from reducing green house emissions reductions at source. These proposals also do not properly address adaptation. There is a danger that by singling out forestry as proposed in the Bill undervalues the wider and considerable climate change benefits of other land uses. This ignores the need for a more holistic integrated approach to land use planning in both climate mitigation and flooding.

The proposal for long term leasing of parts of Scotland's national forest estate to fund new climate work looks innovative, but the Scottish Government must ensure that the leased area delivers no less - and preferably more - for biodiversity conservation than if the land had remained in public management.

The ability of Forestry Commission Scotland to enter commercial partnerships could help deliver positive climate change work¹, so we welcome the Climate Change (Scotland) Bill proposals under sub-section 3 of Section 47, but we have concerns about the objectives, functions and operations of new trusts. Ministers must make sure that any trust is publicly accountable, delivers public policy objectives and does not raise memberships.

RSPB Scotland is concerned that the mechanism that has been proposed under Section 47 (1) for obtaining powers to lease Forestry Commission Scotland land is inappropriate because undermines the biodiversity duties and function of the Forestry Commissioners under Section 1 of the Forestry Act 1967 and Section 1 of the Nature Conservation (Scotland) Act 2004.

3. Do you envisage any implications for nature conservation, biodiversity or recreational interests from the two proposals and, if so, what are they?

Yes. The woodland expansion elements of the proposals could threaten the conservation of open ground habitats and species, either by woodland creation, or lost opportunity to restore such habitats. Woodland expansion in Scotland must be carried out sensitively to ensure the protection and enhancement of important biodiversity.

¹ We note that similar wording to Section 47 (3), was used in 2006 to introduce incidental powers for the Forestry Commissioners in England and Wales to assist the financing of the Forest Holidays business and recreational provision: Section 7 of the Forestry Act 1967 in England & Wales was amended by the Regulatory Reform (Forestry) Order 2006. Statutory Instrument 2006 No. 0780. http://www.opsi.gov.uk/si/si2006/20060780.htm See also FC info: http://www.forestry.gov.uk/pdf/explaindoc.pdf [Link no longer operates] & http://www.forestry.gov.uk/rroforestryact [Link no longer operates]
We strongly urge the Scottish Government, and its delivery bodies, not to repeat the woodland expansion mistakes of the past, and to reverse the damage to biodiversity and landscapes caused by inappropriate afforestation. This could provide real climate change mitigation as well as adaptation benefits.

Despite the fact that afforestation on organic soils in temperate countries is not necessarily a carbon sequestration measure, this programme is being presented as a way of meeting carbon targets through woodland creation. The benefits of sequestering carbon are by no means straightforward. The science behind this needs ground-truthing which should be a role for the state forestry research sector. Scottish Ministers must take account of the independent review of forest carbon science that the Forestry Commission has recently commissioned, and the recommendations of the FC Carbon Advisory Group.

If a significant proportion of the state forest is put on long-term lease to commercial interests (reportedly 25% in the first instance), it will restrict the Scottish Government’s ability to improve the biodiversity value of this land to meet public policy objectives of the Scottish Biodiversity Strategy, UK Biodiversity Action Plan, the EU Birds and Habitats Directives and the Ramsar Convention. Leasing options must favour maximising public benefits.

RSPB Scotland is concerned that this approach to splitting the state forest into ‘commercial forests’, and ‘heritage forests’ ignores current government ‘multi-purpose sustainable forestry’ policy, as well as forestry practice. High quality biodiversity outputs can, and should be generated from ‘commercial’ plantations, including those held for the Scottish people.

Changes to the management of the state forest should be done in accordance with the recommendations of Forestry Commission Scotland’s Environment Review Group. The role and function of the National Forest Estate must be strategically considered and planned. Should the lease proposals go ahead, a new environmental reference group should be established to vet lease applications and subsequent management plans. All lease proposals, forest management plans and grant applications, must go on to the FC’s Public Registers.

The management of state forest land, including that on long term-lease, should include the ambitious restoration of open ground habitats within commercial plantations, and meaningful work for priority species, such as black grouse and capercaillie. This goes beyond meeting the biodiversity requirements of the UK Woodland Assurance Standard (UKWAS).

Income generated from leasing state forests should be used to accelerate action to help Scotland’s wildlife and landscapes adapt to climate change. These funds – a reported

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2 See: http://www.forestry.gov.uk/forestry/infd-6vjhul [Link no longer operates]
3 See: http://www.forestry.gov.uk/website/pdf.b591cb1a3d9ac802570e004f557d5778638a3fhec3ee80257435003875e3,ofile,Paper4.08 CarbonInitiatives.pdf [Link no longer operates]
5 See: http://www.forestry.gov.uk/forestry/INFD-5ZADT9 [Link no longer operates]
£200 million - must finance action to restore the carbon and wildlife value of damaged peatlands and coastal dune systems, create carefully located native woods and help priority species. Vital conservation and climate adaptation work funded by the Government's land management grants for farm and croft land must not be compromised by the sudden introduction of over 100,000 hectares of newly eligible leased forestry land.

Currently the National Forest Estate is certified to the voluntary UK Woodland Assurance Standard (UKWAS) – this has to remain. The Scottish Government has commitments to maintain the state forest’s UKWAS certification, and to increase UKWAS uptake in Scotland.

4. **Do you believe there are any implications for rural employment from the two proposals and, if so, what are they?**

RSPB Scotland does not have the expertise to comment on this question.

5. **Do you have any other views on these two proposals from the Government?**

Yes. Unfortunately, consideration of the forestry provisions in Section 47 have created an unhelpful distraction from important discussions over the main parts of the Climate Change (Scotland) Bill. We are also disappointed that the forestry proposals do not sufficiently address action for climate change adaptation for biodiversity.

Climate change is the greatest single threat to Scotland’s wildlife. It is imperative that Scotland starts delivering greenhouse gas reductions and enabling swift and deep cuts. RSPB Scotland welcomes the challenging targets for reducing emissions in the Bill. In meeting these targets we must protect our precious wildlife, and give it the best chance to respond to our changing climate.

The Bill needs to address the contribution Scotland’s other land uses, as well as forestry, make to climate change, and to facilitate environmentally sustainable mitigation action. 25% of Scotland’s greenhouse gas emissions come from land use. We would welcome an indication in the Bill that the forthcoming Land Use Review would set out a strategic approach for managing Scotland’s land use in relation to climate change mitigation and wildlife adaptation.

Forestry’s role in helping other sectors adapt to climate change also needs to be considered. Sustainable flood management, for example requires consideration of forests within both lowland and upland water catchments.

The proposed adaptation measures under Part 5 Chapter 1 of the Bill are insufficient because that they rely entirely on a UK assessment of climate change risks and offer no independent scrutiny of the Scottish Government’s adaptation policies and subsequent progress on adaptation.

In relation to forestry there is the danger that a purely UK assessment of risks might not provide sufficient consideration of particularly Scottish issues such as the impacts on native Scots pinewoods. Failure in the Bill to provide for independent scrutiny or advice from other bodies in relation to the Scottish Government’s adaptation policies could mean that important issues concerning forestry be overlooked. Indeed, the fact that forestry

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6 This was made at the 2002 UN World Summit on Sustainable Development, see: http://www.forestry.gov.uk/website/pdf.nsf/pdf/ukforestpartnership.pdf/$file/Aikforestpartnership.pdf
adaptation and its role in helping other sectors adapt was not included in the climate change consultation demonstrates the need for wider engagement to avoid missing key opportunities.

We do not welcome the additional broad powers being sought by the forestry minister in Section 47 (1, 2 & 4) to over-ride the Forestry Commissioners’ duties under the Forestry Act 1967, and to delegate their functions. If enacted, these provisions could result in environmentally unsustainable forestry that would harm, not enhance biodiversity. The RSPB would expect full and proper consultation and public debate on any fundamental changes to the primary legislative framework of forestry in Scotland. This should be done separately from the Climate Change (Scotland) Bill.

Overall, the RSPB believes that the Climate Change (Scotland) Bill should take a more holistic approach to rural land use, rather than just considering forestry and muirburn. It is vital to addressing within the Bill the 25% of Scotland’s greenhouse gas emissions that come from land use. An indication in the Bill that the forthcoming Land Use Review would set out a strategic approach for managing Scotland’s land use in relation to climate change would be welcomed.

RSPB Scotland
29 January 2009
I first of all have to state that I agree with the principles of the Scottish Government on Climate Change. We all have a duty to reduce, recycle and reuse and lower our Carbon emissions.

I DO NOT agree with the proposal to lease (practically SELL OFF) forestry land and timber. I find this really strange on the concept of a 'Nationalistic Government' "selling off" the land to private and foreign companies. The Forestry Commission (FC) land holdings and operations are funded from the public purse, not just from Scotland but from all the UK. Has the question been put the people of these other countries concerning the loss of land which they fund?

The Forestry Commission has been in existence for ninety years and in that time has seen many changes and developments, this is by far the most draconian to date. The outcome could be the loss of employment for 100s of people and in a rural economy, devastating. The UK forest industry is seen by many organisation across the globe as a leader in forest management, land management, conservation, environmental protection and recreation it would be a great loss to the people of this country to lose that recognition.

Having had some time to consider the Governments proposals I strongly feel that changing the forestry act would permit the (FC) to enter into joint venture agreements with the major energy companies and businesses that would benefit the whole country and still help to reduce carbon emissions.

The FC has land and facilities that could be developed in partnership with private companies to generate income, create employment and be sustainable. Hydro power, wind power and bio power ventures are just a few that spring to mind.

In Scandinavia the use of Bio fuel is one area where joint venture investment has been successful. Local power plants, constructed by private companies or the state purchase the fuel from the forestry companies (both private and state owned) and sell the energy to the local communities. Everyone involved with the supply of the energy is being financially compensated.

We all know the potential financial returns from large scale hydro electric power schemes. However; small hydro power plants located within FC land generating energy to supply to local communities or the national grid could be just as profitable?
Kielder forest in North England is a good example of partnership working. The dam was constructed in the early 80s to supply power to the Consett Steel Works. With the steel works closing the water and potential energy was not required. Investigation and partnership working with several companies and organisations, including the FC and local council has seen the area prosper from energy being fed into the national grid and an expansion of recreation facilities around the dam. Which is creating employment, revenue to the local and national purse.

I see no reason why the Forestry Commission, Scotland (Government) cannot enter into these type of ventures with the power supply companies, instead of selling the ‘family jewels’ (cheaply I may add) to create a fast but short term answer to our current financial problems. Which has nothing to do with Climate Change of Carbon Reduction!!

Colin J Saunders
25 February 2009
Scottish Environment LINK (LINK) welcomes the opportunity to give written and oral evidence to the Committee on the forestry proposals in the Climate Change (Scotland) Bill. Established in 1987, LINK is the forum for Scotland's voluntary environment organisations - 33 member bodies representing a broad spectrum of environmental interests with the common goal of contributing to a more environmentally sustainable society. LINK provides a forum and network for its member organisations, enabling informed debate, and assisting co-operation within the voluntary environmental sector. LINK assists communication between member bodies, government and its agencies and other sectors within civic society. Acting at local, national and international levels, LINK aims to ensure that the environment is fully recognised in the development of policy and legislation affecting Scotland.

Introduction

In principle we welcome the fresh look at how the Forestry Commission Scotland (FCS) can deliver for climate change but we are particularly uncomfortable, as we have highlighted before\(^1\), with woodland creation for carbon sequestration becoming the primary driver for the government and the National Forest Estate (NFE). LINK has repeatedly expressed its view that the best way to respond to climate change is to first reduce green house gas emissions by moving away from carbon based energy production, reducing energy consumption and energy loss. We see carbon sequestration as one of the secondary responses that feature further down the list of the multiple benefits forestry provides.

The plans proposed in the recent consultation and the enabling powers in the Climate Change (Scotland) Bill are controversial and as yet, they have not been fully explained or costed. Our detailed concerns on these proposals are presented below.

It is LINK’s view that these proposals require more considered thought and discussion. As a result we are unhappy with the wide reaching enabling powers in Section 47, Sub-sections 1, 2 and 4 being included in the Bill. Rather we would like to see any specific powers that may be identified, brought forward in the future, after they have been properly explored and consulted upon.

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We do however welcome the inclusion of Sub-section 3, a), b), c) and d) (i) which allows the FCS to enter into joint ventures for renewable energy projects because these proposals are specific, directly relevant to the Bill’s aims, and help to enable objectives already set out in the Scottish Forestry Strategy (SFS).

**Question 1. Do you envisage that the Forestry Commission could play a greater role than it does at present in reducing greenhouse gas emissions or in alleviating or responding to the effects of climate change? If so, what suggestions would you make?**

It is LINK’s view that there has been a clear change in policy drivers for forestry in the last 18 months, in favour of forestry and woodland creation for climate change ‘mitigation’. LINK has always accepted that creating new woodland contributes to the process of carbon sequestration but it cannot sequester more than a small proportion of the total carbon emissions generated each year.

Government efforts to reduce CO₂ emissions are best concentrated on mitigation activities such as better insulation of the existing housing and office stock, reduction of transport emissions and restructuring our energy supply away from carbon based energy sources.

The National Forest Estate, whilst having a role to play in carbon sequestration, has a greater role to play in climate change adaptation and making space for nature. Unfortunately climate change adaptation has not been properly considered in these forestry proposals.

Therefore, LINK believes, carbon sequestration should not be a primary driver for woodland creation. Rather it should be one of a range of benefits arising from long term, multi-benefit forestry. This would mean carbon storage can be assured in perpetuity and the woodland creation can provide additional benefits to society, such as new and enhanced public access, greater biodiversity, and landscape maintenance and enhancement.

LINK believes that to properly address these issues and to look at the role of carbon across all types of land use in Scotland, we need a Sustainable Land Use Strategy to be implement a holistic approach to integrated land use and delivery of multiple public benefits.

**Question 2. Do you consider that either of the Government’s consultation proposals (on entering into joint ventures and on leasing cutting rights) would enhance the Forestry Commission’s role in dealing with greenhouse gas emissions and climate change?**

**JOINT VENTURES:**

In principle we have no objection to legislation being amended to allow FCS to undertake joint ventures with renewable energy companies, subject to appropriate safeguards, because we support the principle of injecting new resources into forestry and climate change delivery. These joint ventures would be directly contributing to the government’s renewable energy targets.
and could provide funding and expertise in developing our renewable energy sector.

Any joint ventures would require careful consideration and we would expect safeguards to be in place to prevent inappropriate developments and an adverse effect to habitats that must be retained to enable adaptation to climate change. These safeguards should include the following requirements:

- That there is protection for other public benefits such as: Plantation Ancient Woodland Sites (PAWS), woods of high nature conservation value, biodiversity, priority open ground habitats, public access and recreation provision.

- That FCS will undertake full Environmental Impact Assessments on the joint ventures.

- That all proposals will follow the full planning process and any supplementary planning guidance on preferred locations for renewable projects.

Any money raised from such ventures would need to be properly reinvested in climate change actions and a protocol may need to be developed to ensure this delivers the greatest possible environmental benefit, including emissions reductions and wildlife adaptation.

CUTTING RIGHTS
There is considerable concern that by implementing this proposal, other non-timber production public benefits would not be well served. This is largely because the income that the FCS generates from the leased production forest may impact on other multi-benefit forestry it carries out on the rest of the estate.

For these proposals to be considered further, LINK would expect that:

- The economic case is properly laid out. This has not yet happened and therefore it is not possible for us to comment on the financial aspects of the proposals with any confidence.

- A full and satisfactory Strategic Environmental Assessment is undertaken on the fully costed proposals.

- A proper assessment is undertaken of the impact on the remaining FCS activities and ability to deliver the SFS. At present the FCS carry out a complicated balance of economic, social and environmental activities (including for the landscape and the historic environment) within their forests. Transferring the more commercial parts of the national estate for a period of perhaps 75 years could potentially and severely constrain funding of the social and environmental aspects of FCS activities.
• There is a full explanation of how enhanced delivery of non-market benefits will take place. For example meeting the commitments of the Scottish Biodiversity Strategy, UK Biodiversity Action Plan, EU Birds and Habitats Directive and the biodiversity theme of the SFS.

• Evidence is provided that all the capital raised from the leases would be reinvested into forestry and associated climate change actions. So far there have only verbal ‘in principle’ assurances which are inadequate. In the absence of clearly set out protocols and structures we are not be able to further consider the proposals.

• Accessibility must be retained if the land is leased. There is a significant difference between a right to access and accessibility.

• Any company or body leasing the land would have to ensure that the land was certified against the UK Woodland Assurance Standard (UKWAS) for the entirety of the lease.

There is concern that releasing over 100,000ha of new land into the Scottish Rural Development Programme (SRDP) may lead to increased competition for woodland management funds, without increasing the SRDP budget. LINK would wish to see assurances that high quality land management for biodiversity, landscape conservation, historic environment and access would not lose out.

**Question 3.** Do you envisage any implications for nature conservation, biodiversity or recreational interests from the two proposals and, if so, what are they?

LINK is concerned that the woodland expansion elements of these proposals could threaten the conservation of open ground habitats and species, either by woodland creation, or lost opportunities to restore such habitats. For that reason, LINK urges the Scottish Government and its delivery bodies not to repeat the woodland expansion mistakes of the past, and to actively reverse the biodiversity damage created by inappropriate afforestation. Woodland expansion in Scotland must be carried out sensitively to ensure the protection and enhancement of important biodiversity and the delivery of multiple public benefits.

**Question 4.** Do you believe there are any implications for rural employment from the two proposals and, if so, what are they?

LINK does not have a specific view on the employment implication of these proposals because it is largely outside of our members’ direct remit. We would however say that we would not want to see a reduction of actively managed woodland in Scotland and it would be a disadvantage to the forestry sector if valuable skills and knowledge is not retained within the industry.

**Q.5.** Do you have any other views on these two proposals from the Government?

Within the FCS consultation document, there was a suggestion of creating a not-for profit trust (NFPT). This suggestion strongly implies a social and
environmental purpose for such a body (i.e. public rather than commercial benefit), as well as some stakeholder representation in its governance arrangements, but this is not explicit in the proposals and that gives us some cause for concern.

LINK would need to see the following guarantees in order to further consider the proposal:

- All income from the lease of land and cutting rights to be invested through the NFPT into multiple public benefits through forestry and related climate change actions. This means investment in climate change adaptation as well as ‘mitigation’.

- The NFPT is constituted to deliver forestry related public benefits and priorities as laid out in the Scottish Forestry Strategy and in particular in relation to climate change ‘mitigation’ and adaptation.

- The NFPT will enable creation of significant areas of new native woodland.

- All woodland creation funded through the new structure should be UKWAS certified.

LINK would not support the idea of the NFPT using lease and cutting rights income to solely create new production forests. All new woodland created should be multi-purpose and provide significant public benefit. If the NFPT creates new woodland in the same proportion as the current estate, it will create 87% exotic species – this would be contrary to the vision of the SFS and would not be supported by LINK. In order to achieve the current SFS vision, more than 6,000 hectares of native woodland is required per annum for the next 50 years (35% of the enlarged forest cover of 25% land area). We cannot see the logic of the NFPT creating more production forest to sell or lease off and create more in a cyclical fashion.

**LINK Woodland Task Force,** 3 February 2009.

The following member organisations have agreed this statement:

- Archaeology Scotland
- Association for the Protection of Rural Scotland
- Bumblebee Conservation Trust
- Butterfly Conservation Scotland
- Friends of the Earth Scotland
- National Trust for Scotland
- Ramblers' Association Scotland
- RSPB Scotland
- Scottish Native Woods
- Scottish Wildlife Trust
- Woodland Trust Scotland
- WWF Scotland
Call for Evidence on the Forestry Provisions in the Climate Change (Scotland) Bill Inquiry

Thank you for inviting Scottish Natural Heritage (SNH) to comment on the forestry provisions in the Scottish Climate Change Bill. These would modify the functions of Forestry Commission Scotland (FCS) in a number of ways. Most notably they would allow Scottish Ministers to lease out parts of the National Forest Estate (NFE), with associated cutting rights. The intention would be to use the funds so generated to finance measures designed to mitigate or adapt to climate change.

Current FCS Management of the NFE

Afforestation, and the management regimes applied to existing forests, was for many years - especially from the 1960s to the late 1980s - one of the most environmentally contentious issues in the Scottish countryside. Although many of the most controversial cases related to private sector forestry proposals, the Forestry Commission's own activities also attracted criticism.

It is greatly to the credit of FCS that over the past 15–20 years, this situation has been substantially transformed. FCS's enthusiastic adoption of multiple objectives, and willingness to engage local communities and other stakeholders in its decision making about the future management of its woodlands, has not only radically altered the way it is viewed in environmental and recreational circles but has also delivered very substantial benefits on the ground. These benefits have extended from biodiversity, through improved landscape quality to high valued recreational facilities, catering positively for a range of activities in a way which goes well beyond the open access requirements established by the Land Reform (Scotland) Act 2003. These enhancements have in turn helped to support an extensive range of rural businesses, as became very apparent at the time of the 2001 Foot and Mouth Disease outbreak.

Of equal importance has been the lead that FCS has thereby provided to the wider forestry industry. This is a diverse community, the more far sighted members of which have long aspired to ideals and standards of multi-purpose management at least on a par with those recently embraced by FCS. But overall, private sector forestry has, perhaps understandably given its commercial imperatives, delivered far less by way of environmental and recreational public benefit than the NFE.

SNH is anxious to ensure that any changes in the management of the NFE preserve the gains that have been secured through FCS management over the past decade or more. Indeed, it sees it as important, in terms of the
Scottish Government’s objectives in the fields of biodiversity, sustainability and increased participation in outdoor recreation, that these benefits are extended more widely across the country’s woods and forests.

In these circumstances SNH sees it as very important that any leasing out of existing NFE land is subject to safeguards carefully designed to secure the maintenance of these public benefits. The aim should be to preserve them alongside the additional benefits, in terms of climate change mitigation and adaptation, that are sought through these proposals. The latter should not replace the former.

Detailed responses to the Committee’s questions are set out in Annex 1. I hope that these answers of assistance to you.

ANNEX 1

Do you envisage that the Forestry Commission could play a greater role than it does at present in reducing greenhouse gas emissions or in alleviating or responding to the effects of climate change? If so, what suggestions would you make?

FCS, with its partners, has committed considerable research effort to help clarify the approaches that it should adopt in adapting to the effects of climate change. This includes work on tree growth, disease and stand/landscape-scale adaptation to changing environmental conditions. This consultation relates more to the actions that FCS might take to mitigate climate change, including energy production, soil carbon management and products that replace less green alternatives (e.g. timber for concrete). Wise choices need to be made, for which a key step is to develop robust ‘carbon accounting’ procedures – that is, to understand the contribution of a range of activities to greenhouse gas (GHG) emissions and the timescale over which any benefits occur. Work is already underway on this, but until we have this information it will be necessary to be cautious about advocating some more dramatic steps – for example the planting of new forests on wet, peaty upland soils may result in a medium term increase in GHG emissions, as soil carbon is oxidised.

Do you consider that either of the Government’s consultation proposals (on entering into joint ventures and on leasing cutting rights) would enhance the Forestry Commission’s role in dealing with greenhouse gas emissions and climate change?

SNH is supportive of well designed renewable energy developments and we see no problems with FCS being involved in to joint ventures to deliver these, particularly as any developments will be subject to the same assessment and decision-making procedures as any other renewable development.

The extent to which this proposal enhances FCS’s role in tackling climate change will depend on the details of any final proposal. At present we can
only set out our view of potential **benefits**, **risks** and **safeguards** against these risks.

There are clearly potential **benefits** in the raising of funds to meet Scotland’s wider climate change mitigation and adaptation aims, which are strongly supported by SNH. One suggested use of such funds is for woodland creation; we are very interested in further discussion on the type and location of any proposed new woodlands both for their natural heritage impacts and to see the assessment of impacts on GHGs in the short/medium/long term. Other related actions could be also contribute – especially promoting significant natural regeneration from existing native woodlands, and increasing the carbon capture/storage ability of peatlands (e.g. reducing erosion and drain blocking).

**Do you envisage any implications for nature conservation, biodiversity or recreational interests from the two proposals, and if so, what are they?**

The leasing proposal carries with it a number of **risks**, which collectively could jeopardise the gains secured through a substantial investment of public funds over recent years.
These include:

- reduced commitment to biodiversity, landscape and amenity care, and recreational and educational provision – restricting future provision and possibly resulting in a loss;

- an erosion of the scope for cross-subsidisation within the NFE, whereby surpluses generated on some properties support public interest provision elsewhere;

- a weakening of FCS’s credibility as an industry leader, able to demonstrate by example how the provision of public benefit can be reconciled with commercial, timber production objectives;

- pre-emption of already limited SRDP resources, as operations in the leased forest become eligible for grant support; and

- the possibility that it would become hard to raise regulatory standards in an industry which had entered into a financial contract with Government on the basis of an existing set of standards.

For any leasing arrangements to bring significant net public benefit it would in SNH’s view be important to put in place safeguards against these risks. SNH does not feel competent to advise on precisely how best to achieve this goal. We would, however, like to suggest some principles that might be followed in attempting to do so. These would involve commitments:

- to maintain for public benefit management an income stream comparable to that previously generated by commercial income from the leased forests. One possibility would be to earmark income from the proposed “joint vehicle” renewables projects for this purpose;

- to fund from lease income new public benefit provision/assets at least comparable with any lost as a result of the leasing exercise. Moreover, the benefits provided should be of broadly the same types, and in broadly the same proportion, as those lost and should thus extend across biodiversity, landscape, amenity and recreation and should not be restricted to carbon management; and

- to review the lease arrangements at regular intervals (perhaps every ten years) to make sure that the terms remained adequately protective of public (and specifically natural heritage) interests. We consider this important because the original terms could well become increasingly outdated and unreflective of current public priorities as circumstances changed.
Do you believe there are any implications for rural employment from the two proposals, and if so, what are they?

The proposals are not sufficiently detailed to answer this, nor is rural employment an area in which SNH has any particular expertise. We would, however, like to point out that, as technology in the forestry industry itself has developed, an increasing proportion of the employment generated by the sector has been indirect, relying on the use of forests for other purposes, notably recreation and tourism. This is an aspect of forest management and facilities provision where FCS has very much taken the lead. It has engaged in a large number of initiatives designed to ‘add value’ to the forest resource in this way. Many of these have involved partnerships in which SNH has also participated, along with other bodies with more specifically economic and social objectives. We would be concerned about the consequences of any net reduction in this activity for the rural economy as well as the natural heritage.

Do you have any other views on these two proposals from the Government?

SNH does not regard the leasing option as the only, or necessarily the best, means of raising money to fund climate change-related measures. One alternative particularly appropriate to woodland expansion measures would be some form of carbon offset scheme. There is at present a shortage of adequately accredited and policed schemes of this kind, in part as a result of the lack of a robust carbon accounting system. There could in our judgement be considerable potential for such a scheme dedicated to the financing of environmentally responsible, sustainable woodland expansion in Scotland.

SNH
January 2009
Scottish Renewables warmly welcomes the progress made in tabling the Climate Change (Scotland) Bill which is one of the most significant pieces of legislation ever considered by the Scottish Parliament. Scottish Renewables is Scotland’s leading green energy trade body. We represent over 230 organisations involved in renewable energy in Scotland and include many environmental NGOs in our wider associate membership. Further information on our work and membership can be found on our website – www.scottishrenewables.com

Scottish Renewables believes that the harnessing of renewable energy sources in a sustainable manner provides a unique opportunity to not only tackle climate change but to provide economic benefits to Scotland. The setting of statutory targets to reduce emissions is vital if we are to send the right signals to industry and wider society that significant changes are required to establish a low carbon economy.

Scottish Renewables is pleased to respond to the Rural Affairs and Environment Committee’s call for evidence in respect of the forestry proposals contained within the proposed Bill and has addressed the five questions which the Committee is seeking information on.

If Scottish Renewables can be of any further assistance to the Committee, we will be happy to provide further written or oral evidence in support of our statements.

1. Do you envisage that the Forestry Commission could play a greater role than it does at present in reducing greenhouse gas emissions or in alleviating or responding to the effects of climate change? If so, what suggestions would you make?

The bioenergy industry is central to the delivery of the UK’s international obligations on climate change and the Scottish Government’s intentions in the Climate Change (Scotland) Bill. The use of biomass material to displace energy production from fossil fuels will have a beneficial impact on carbon emissions and the encouragement of energy schemes using local timber will result in lower transport emissions.

As reported by the FREDS Biomass Energy Group (BEG)¹,

Biomass, particularly wood fuel, is accepted as carbon neutral. It can have a positive effect on the environment. It is also a predictable and firm source of energy supply and therefore an important contributor to a diverse energy mix, which is vital to security and continuity of supply.

¹ Year of reference 1985.
Scottish biomass is uniquely placed within the UK to contribute to both Scottish and UK renewable targets by 2010. This is because, as FREDS reports, Scotland has a substantial existing and expanding resource from managed woodlands and sawmill products which can be accessed for wood fuel almost immediately. The GB wide forestry resource is predicted to grow well in excess of demand over the next three decades, and around 60% of that resource is located in Scotland. According to FREDS, the future harvest level is likely to be around 5.5 million cubic metres above current use, and the minimum size of the biomass electricity market in Scotland could be as much as 450 MW of installed capacity. Other factors, such as the growing of energy crops may greatly increase these figures.²

Furthermore, this capacity figure would be significantly greater if the use of biomass materials for heat is increased.

From the work that FREDS has undertaken, alongside the findings from reports by the Biomass Task Force³, Sustainable Development Commission⁴ and the DTI/Future Energy Solutions⁵, it is clear that there is considerable impetus to develop biomass as a renewable fuel. Scotland is well placed to derive benefit by developing a new business arena for the forestry sector and by improving the Scottish economy through reducing dependence on external fossil fuel supplies and related uncontrolled energy prices.

Notes
2 FREDS (2005), para 15-19
3 Biomass Task Force (2005), Report to Government
4 Sustainable Development Commission (2005), Wood Fuel for Warmth
5 Future Energy Solutions (2005), Renewable heat and heat from combined heat and power plants – study and analysis, DTI & Defra.

2. Do you consider that either of the Government's consultation proposals (on entering into joint ventures and on leasing cutting rights) would enhance the Forestry Commission's role in dealing with greenhouse gas emissions and climate change?

The Commission owns and manages a very large estate which is likely to include a significant number of sites suitable for generation of electricity from hydropower and wind. Whilst the Commission has in-house project development expertise it may prove commercially sensible to work in partnership with other players in the renewables industry to realise any potential, especially where it is desirable to promote rapid deployment.

However we believe that the energy generation by any such joint venture should be limited ‘to generate power from wind, hydro and micro power’ and that there is no suggestion that the Forestry Commission would form joint ventures to develop bioenergy projects of any scale. If bioenergy Joint Ventures were proposed, these allow a situation to arise where Forestry Enterprise Services is effectively selling timber to itself. Real or perceived, serious market distortion in the wood fuel market may arise.
3. Do you envisage any implications for nature conservation, biodiversity or recreational interests from the two proposals and, if so, what are they?

As long as the cutting/felling and any re-planting activity by third party operators takes place in accordance with the same good environmental practice that the Forestry Commission would themselves follow, then it is likely that good standards can be maintained by the private sector.

To get the full potential benefit from new wind and hydro renewable energy schemes may require local changes in forestry practice. For example, low density native forests can have beneficial effects on hydrology and run off compared to closed canopy evergreen plantations and so be more compatible with new hydro schemes. Equally, dense tree cover in close proximity to wind turbines can cause air turbulence which reduces the amount of power that can be generated. If the Government want to maximise the benefits of new wind and hydro schemes then they need to ensure the Commission has the necessary duties and powers to change existing species mix and planting density accordingly.

4. Do you believe there are any implications for rural employment from the two proposals and, if so, what are they?

The opportunity to develop renewable energy schemes within the national forestry estate is likely to bring complementary economic activity in terms of construction and maintenance of schemes as seen in non-forestry estate around Scotland.

Scottish Renewables welcomed the publication of a Scottish Government study into Scotland’s future hydro power potential. The future potential lies primarily in small and medium-sized developments at a community and/or local level. The national forestry estate could considerably contribute to releasing the estimated 650MW potential in Scottish hydro power with the consequent positive jobs and economic impact that would bring.

Notes

1 FREDS (October 2008) Scottish Hydropower Resource Study

5. Do you have any other views on these two proposals from the Government?

No comment at this time.

Scottish Renewables
29 January 2009
The SRPBA welcomes the opportunity to provide comments to the Rural Affairs and Environment (RAE) Committee on the provisions relating to forestry in the Climate Change (Scotland) Bill. Under section 47 of the Bill, the Scottish Ministers would be given the power to modify the functions of Forestry Commission Scotland (FCS) if they consider it necessary or expedient to meet greenhouse gas emissions reduction targets under the Bill or for other climate change reasons.

The SRPBA responded to FCS’s Climate Change and the National Forest Estate: Consultation on Forestry Provisions in the Scottish Climate Change Bill on the 27 February. This consultation paper indicated that the Scottish Ministers are considering using the section 47 power to enable FCS to (i) enter into joint ventures with developers on FCS land with the intention of participating in renewable energy programmes, and/or (ii) offer leases and cutting rights over parts of the national forest estate. It is suggested that FCS could use the money generated by these proposals on climate change related projects, such as forest creation.

1. Do you envisage that the Forestry Commission could play a greater role than it does at present in reducing greenhouse gas emissions or in alleviating or responding to the effects of climate change? If so, what suggestions would you make?

The SRPBA believes that FCS could play a greater role in reducing greenhouse gas emissions than it does at present. We consider that the proposal to allow Forestry Commissioners to enter into joint ventures with developers with the intention of participating in renewable energy programmes on the national forest estate seems to be a sensible suggestion. FCS can currently lease non-forested land for any purpose (but not forested land) and has done so for several projects including windfarms. The SRBPA believes that FCS could get better value for Scotland by entering into joint ventures with developers and receiving a share of the profits, thus generating more funds for investment in woodland expansion. Therefore, FCS would be contributing to reducing greenhouse gas emissions by (i) entering into renewable energy projects on the national forest estate and (ii) investing the money raised in planting more trees which lock up carbon, can be used as a renewable fuel resource, are easily recycled and can substitute for more energy intensive materials, thereby reducing carbon emissions.

2. Do you consider that either of the Government’s consultation proposals (on entering into joint ventures and on leasing cutting rights) would enhance the Forestry Commission’s role in dealing with greenhouse gas emissions and climate change?
As stated in our response to question 1, we believe that granting FCS the powers to enter into joint ventures with the intention of participating in renewable energy programmes on the national forest estate will enhance their contribution to reducing Scotland’s greenhouse gas emissions. However, based on the limited amount of information available to date, the SRPBA does not think that the leasing proposal would enhance FCS’s role in dealing with greenhouse gas emissions and climate change. It is proposed that the money raised from leasing would be put back into future planting which would have benefits for climate change. However, we are apprehensive that the money raised will not necessarily be put back into the forestry sector. The proposed leases will last for 75 years, during which time governments will change and agendas will change. In practice, the government cannot guarantee that money raised will be reinvested into the forestry sector. Any lease arrangement that attempts to ensure that the public’s interest in the national forest estate is retained is likely to be very complex, possibly not 100% effective in the long run and very expensive overall. Furthermore, a 75 year lease does not relate to rotation length and this may lead to the demand for a lease roll over or sale of land.

3. Do you envisage any implications for nature conservation, biodiversity or recreational interests from the two proposals and if so, what are they?

The SRPBA envisages that the money raised from joint ventures will be reinvested back into the forestry sector for future woodland creation. With this additional income stream FCS will be able to fund biodiversity projects and ameliorate recreational opportunities on the national forest estate. However, if the leasing proposal goes ahead, FCS may stand to lose 25% of their land area but because this would include some of their most productive forests they may lose approximately 33% of their income, thus increasing their unit costs. Therefore, less money would be available for nature conservation, biodiversity and recreation. If FCS loses its income stream due to the introduction of a 75 year lease to a private company, there must be a guarantee that any shortfall in finances will be met by the Government in order to continue providing the public benefits noted above.

4. Do you believe there are any implications for rural employment from the two proposals and, if so, what are they?

The SRPBA believes that allowing FCS to enter into joint ventures could potentially create jobs in rural areas of Scotland. On the other hand, if 25% of the national forest estate is leased, including some of the most productive areas of forestry, then it is inevitable that FCS will not be able to fund as many positions as at present. The Minister has argued that there could be an increase in jobs available if the leasing proposals go ahead because the money raised from leasing could be reinvested back into the forestry sector and more positions could be created. However, there is no guarantee that the money will be put back into the forestry sector and the lessee will be under no obligation to employ existing FCS staff because they may already have their own staff.
5. Do you have any other views on these two proposals from the Government?

General comments
• The consultation period was unusually short from 4 November 2008 to 27 January 2009, including the Christmas and New Year breaks. A consultation period of three months is considered more usual and any shorter period makes it difficult for stakeholders to gather opinion and respond fully. We appreciate that the closing date is set early due to the fact that the Climate Change (Scotland) Bill has already been introduced in the Scottish Parliament. However, this suggests that there is some urgency to the government’s proposals and it appears that they are all a bit ‘last minute’. It has been rumoured that a single investor has already approached the Scottish Government to lease land and this would require the government to rush through enabling powers. The SRPBA is aware that the Minister has dismissed these claims but we would still like to raise them as concerns held by some of our members. In general, the whole consultation process seems rushed and this is evident from the consultation paper itself which lacks any detail about the joint ventures or leasing proposals. This lack of clarity makes it more difficult to formulate a definitive view.
• Before even contemplating whether the joint ventures and leasing powers are a good thing we need to address the main question in the consultation - should the government have enabling powers built into the Climate Change (Scotland) Bill to allow joint ventures and leasing? If it is granted enabling powers then sufficient checks and balances need to be contained within the primary Act to give the forestry industry some comfort that the detailed secondary legislation will be properly consulted upon and scrutinised. We would require confirmation that the secondary legislation will be passed using the affirmative procedure in parliament so that the relevant committee has the opportunity to scrutinise and ask questions of the government. This would give stakeholders an opportunity to engage with MSPs if any changes are required. We do not feel that negative resolution is appropriate in these circumstances.
• The SRPBA would like to know timing for the secondary legislation. We would like to know when we could expect to see draft regulations and need some assurance that the industry will be given sufficient time to scrutinise them. The primary Act must contain an obligation upon Scottish Ministers to consult.

Joint Ventures
• Some have questioned whether or not FCS has the appropriate skills to enter into joint ventures since their expertise is in managing state owned woodland, not renewable energy projects. However, Forestry Commissioners do have experience in management and commerce, consequently they are suitably equipped to enter into joint ventures. FCS can provide the land and management expertise while the other partner(s) can contribute their experience in overseeing renewable energy projects. Therefore, successful joint ventures are achievable.
• However, we would like to add one point of caution regarding joint ventures: FCS would have to participate in any losses if projects failed and therefore risks would be taken with taxpayers’ money.
Leases and cutting rights

- How many leases will there be – one lease of the whole 25% of the national forest estate to a single (possibly foreign) investor or a number of leases to private sector interests in Scotland? The former option would be very unpopular with the public as well as some of our members but based on discussions to date it seems more likely.
- Will lease(s) be renewed or extended after the initial period of 75 years? If so, is this not just a sell-off in another name?
- FCS is generally regarded as a good neighbour. How can this benefit to landowners be preserved with the new tenants?
- How will the future of the processing sector be guaranteed beyond honouring existing contracts?
- The SRPBA does recognise that potential lessees will need to make their woods work hard to generate a return and they will have an interest in a competitive and vibrant market for their products. However, unlike FCS they could mothball their timber at times of low prices thus creating supply problems. Private growers have not generally been willing to enter into long term contracts with sawmills since they prefer to sell at times of better prices only and cannot therefore be relied on to maintain continuity of supply.
- Instead of offering leases to new investors, the SRPBA believes that more planting would take place if the rules of the Single Farm Payment, which facilitate ‘armchair farming’, were changed. There are costs and risks involved with planting trees on bare land whereas one can let that land remain bare and receive money for doing so in the form of a Single Farm Payment. Reform of these rules would remove one barrier to increasing planting. It would seem illogical to simply increase grant rates for forestry without firstly addressing this Single Farm Payment barrier. By planting on bare land, land managers could be contributing to a mosaic of land uses in Scotland which would provide both themselves and the wider Scottish population with multiple benefits such as biodiversity benefits, diversification of sources of income and helping to tackle climate change. The SRPBA strongly encourages the development of a rural land use framework for Scotland and we welcomed initial discussions on this topic in September 2008. Scotland needs a framework in order to identify the most appropriate land uses for each area in order to ensure our limited land resource is carefully used.
- The SRPBA believes that if funding was made more readily available to the private sector, they would be willing to increase planting to meet government targets. The SRDP needs to be simplified and streamlined to encourage private foresters to plant, grant rates for new planting schemes need to be increased and restocking grants (including for Sitka spruce) need to be reintroduced because this would ensure that there is no delay between felling and replanting. Private owners and investors have not lost their appetite for planting, as demonstrated by the large oversubscription to the Ayrshire locational premia under the old SFGS. In short, if the incentive is present, the private sector will provide the forests.

SRPBA
January 2009
Scottish Climate Change Bill (incl. National Forestry Estate)

The Scottish Tourism Forum is delighted to respond to the consultation on the Scottish Climate Change Bill on behalf of its members.

The Forum is the Scottish independent industry body representing tourism and hospitality businesses across many sectors, trade associations, local marketing groups, trade suppliers and businesses that earn their living from tourism or have an active interest in tourism and its importance to Scotland. The Scottish Tourism Forum is positioned as the national strategic voice of the industry and partners need look no further.

STF has a membership base of trade associations, area business groups and individual businesses. Within our membership we have forty five trade associations representing sectors right across the industry and we reach an estimated 6,000 businesses through this network.

STF is funded through its membership with a purpose to unite tourism interests and add value to members’ businesses. We bring public and private players together, to encourage the voicing of opinion about problems, priorities and solutions.

The value of tourism to Scotland is £4.2b annually and the industry has set itself the ambition to grow the economic value to over £6.1b by 2015, by adopting the strategies in the Tourism Framework for Change reviewed strategy. We feel our comments are reflective of this ambition recognising the enablers and barriers to drive growth even during these challenging economic times. The Scottish tourism industry by definition must be here and as such any investment in to tourism is an investment in to Scotland’s future and directly to its communities.

We recognise the important role, both at present and into the future the Forestry Commission plays in its stewardship of around 10% of the countryside of Scotland. This asset is one that is enjoyed by both tourists and local communities alike, it is also seen as having a key potentially role in the further development of the tourism offer in Scotland.

The consultation looks specifically to address four main questions and our response to this is as follows:

1. What are your views on allowing the Forestry Commission to enter joint ventures, with the intention of participating in renewable energy programs on forest estates?

The STF see this area as an opportunity for effective local partnerships to be involved at an early stage of planning, to vision and deliver a range of sympathetic
initiatives that would be used to engage with visitors and local communities, assisting in the promotion of good practise and driving increased use of the forestry estate.

2. **What are your views on allowing Scottish Ministers and Forestry Commission to offer leases and cutting rights over parts of the national estate?**

Concerns have been raised over the potential conflicts between areas that have been leased out and their use for recreation. One of the strengths of the Forestry Commission’s activities is their understanding of the needs and potential opportunities within their estate leading to sympathetic development of tourism projects. The role of the Rangers is vital, a much valued resource at the local level, working in partnership to unlock untapped potential (eg Dark Sky’s) and working with communities to deliver benefit to both tourism and local communities. If long term leases are applied this could potentially stifle the further development of these opportunities.

The Commission operates in a fashion that is sympathetic in meeting the potential opposing needs of recreation against timber production and reassurance would be needed to avoid local issues arising.

The current arrangements operated by the Forestry Commission provide opportunities for local operators to be used. It is likely the beneficiaries of the leasing would be able to use national level contracts and this could have a real impact to employment in the local area. If national contracts are applied this would potentially see higher carbon emissions and lower profits from the timber operations.

We understand the criteria for the selection of properties for inclusion in surplus property list, these should be looked at carefully and the development potential should also be identified in partnership before decisions are made.

3. **What are your views on (1) transferring proceeds from leases and cutting rights to not-for-profit trust, for investment in woodland creation; (2) transferring the landlord’s interest in this land to not-for-profit trust; (3) ministers stipulating in the constitution of such a not-for–profit trust.**

The Forum does not have particular opinions on this question

4. **Are there other actions which need to be taken, or are there other changes in legislation which need to be made, in order to allow the public and private forestry sector to contribute to Scotland’s target of reducing emissions by 80% by 2015? If so, please outline what these are.**

We would full support Government in its goal to reduce carbon emissions and are not aware of any unforeseen issues relating to legislation.

The Scottish Tourism Forum would be delighted to provide further evidence or information around the points raised if required.

**Scottish Tourism Forum, January 2009**
1. *Do you envisage that the Forestry Commission could play a greater role than it does at present in reducing greenhouse gas emissions or in alleviating or responding to the effects of climate change? If so, what suggestions would you make?*

Yes. I believe that more could be done to capture carbon by restoring the thousands of hectares of lowland raised bog owned by FCS. Peat stores a lot of carbon and an active peat bog acts as a store of this carbon, locking it up for a very long time. In the 1970s FCS bought and planted a lot of lowland raised bogs as was the policy at the time. Now these lowland raised bogs are being assessed for their condition and most are found to be capable of full restoration or partial restoration to active peat bogs. This is despite 30 odd years of conifers growing on them. FCS is in a great position to achieve this work whereas bogs owned by private individuals have not seen the sort of restoration works that Scottish Natural Heritage had hoped, even with grant incentives. There are thousands of hectares of publicly-owned peat bogs that could be restored and FCS has the know-how to do this work effectively and efficiently. There are many reasons why restoring the FCS lowland raised bogs would be great for Scotland, but the carbon store argument is one of the strongest at the moment.

The other response that FCS could make would be to shift the new planting species away from commercial conifers and more towards native woodlands. Native woodlands out perform the non-native conifers when you look at carbon lock-up over the long term. However, the commercial conifers lock up more carbon in the short term. Again, there are many reasons why it would be beneficial to have more native woodlands planted but the long-term carbon lock up is a strong argument.

By having Forest Research the FCS are in a strong position to lead on forestry and climate change issues, for example researching tree species choices to allow our landscapes to adapt successfully to climate change. A strong FCS is important, I believe, to allow us to face the challenges presented by climate change.

2. *Do you consider that either of the Government's consultation proposals (on entering into joint ventures and on leasing cutting rights) would enhance the Forestry Commission's role in dealing with greenhouse gas emissions and climate change?*

I believe the proposal to enter into joint ventures will enhance FCS's role in dealing with greenhouse gas emissions and climate change. I do not believe that the proposal to lease cutting rights would do this. The main reason I do not believe this is because of the lack of a plan to demonstrate what the
released money would be used for. How can you believe in something that you don’t know the details of? This is the most frustrating part of this whole proposal - the lack of any information about what the government would do with the expected £200 million from the FCS estate. FCS staff have been informed by the Director of FCS that Michael Russell has not given any assurance that the money would come back to the forestry sector, however in the press the Minister is quoted several times stating that this money "might" and "could" be used for more tree planting. It is my understanding that there is no plan of how to use this money, that involves forestry for climate change measures or otherwise, and therefore the consultation on the leasing of the FCS estate has come before proper evaluation and planning by the government of their proposal - cart before horse.

3. Do you envisage any implications for nature conservation, biodiversity or recreational interests from the two proposals and, if so, what are they?

I consider that the more FCS are involved in energy developments on their estate the better for conservation and recreation. I would see there being a positive effect and some cracking extras coming from such developments that would not come otherwise. FCS have demonstrated such benefits when working on numerous smaller-scale projects / developments on their estate and they would make sure that the benefit to the public was maximised.

I consider that if the leasing proposal is to go ahead there will absolutely be a detrimental effect on conservation and recreation. FCS is funded partly by the income from timber sales. To lose at least 25% of the most productive forest areas is to lose a huge chunk of funding for FCS work such as working with local communities, building recreational facilities and managing land for conservation. To argue that there will be no effect is ridiculous, and anyone who knows how FCS works knows that work on delivering the social and biodiversity elements of the Scottish Forestry Strategy would suffer. In addition to these significant funding issues there would undoubtedly be impacts in the forests leased out to the private sector. Again, anyone who works in the industry knows that the public forests are managed with a different set of objectives, by people with different motivations and in a different manner than the private forests. Yes the private sector would have to manage to the UKWAS standards but if this was all FCS did too then we would not see the wide range of benefits that we do today in the public forests. FCS do extras that the private sector will not because it does not make them money. FCS does things not because it makes money but because it makes local people feel involved or it provides habitat for wildlife or it improves a community's health etc. The staff in FCS are proud of the care and attention that the forests and their visitors, the wildlife and the heritage receives. In my experience, the private sector are hardly ever in their woods and there is usually no local staff available to talk to people or turn up to community meetings. However, they do grow excellent timber - and that is because they don't put resources into anything else. If this is all we want our forests to deliver then we need to re-write the Scottish Forestry Strategy.
4. Do you believe there are any implications for rural employment from the two proposals and, if so, what are they?

I am nervous about the implications for employment but I am not in a position to have much information about this issue.

5. Do you have any other views on these two proposals from the Government?

I object to the way the consultation has been carried out. It has been very quiet, the proposals have, in my view, been hidden in the Climate Change (Scotland) Bill and the consultation period has been too short. And with no proposal of how to spend the £200 million from leasing it has been a useless exercise. I am suspicious that the leasing proposal has not been thought through properly and that the Minister has been advised by people who have been wanting to privatise FCS for years. To dress it up under Climate Change - an incredibly important issue - is insulting and offensive. I am very worried about Climate Change and am involved in the carbon-neutral movement, if I thought the leasing proposal was any use I would support it. It is not, it is a bad idea that will only release short term cash at a long term cost and this is stupid. It would be the open door to privatise the rest of FCS and this would be a bad move for Scotland.

Thank you for the opportunity to respond to this consultation.

Emma Stewart
27 January 2009
1. Do you envisage that the Forestry Commission could play a greater role than it does at present in reducing greenhouse gas emissions or in alleviating or responding to the effects of climate change? If so, what suggestions would you make?

Yes. I would suggest that the FC is in an exceptional position to play a greater role and that being such a large landowner is one of its greatest assets in being a more useful tool in the fight against climate change but the leasing out of any large forest blocks would in fact reduce this ability. The possibilities of entering into joint ventures to create renewable energy schemes would not only increase the area of land available to such schemes but would generate a source of income which the FC could then use directly in an increased tree planting scheme, especially in the creation of new native woodlands which would offer a much better carbon sequestration effect than a private, profit making conifer planting scheme. Joint ventures would also put the FC in an outstanding position in terms of taking forward wood-chip biomass power plants on a local scale, close to the sources of timber and working with the local councils and businesses to provide as near to carbon neutral energy as possible.

2. Do you consider that either of the Government’s consultation proposals (on entering into joint ventures and on leasing cutting rights) would enhance the Forestry Commission’s role in dealing with greenhouse gas emissions and climate change?

Joint Ventures: I believe that this proposal would hugely increase the role of both the FC and SG in dealing with these problems by enabling renewable energy projects to be undertaken on the NFE thereby reducing emissions and, at the same time, generating income which could be used directly by the FC to fund an increased level of tree planting to aid carbon sequestration. If such a proposal were accepted it would increase the FC’s ability to contribute to the actions on combating climate change whilst effectively reducing the burden on the SG budget by allowing the FC to partly fund itself through the income generated by such joint ventures.

Leasing Cutting Rights: I do not see any way in which this proposal could enhance the role of FC or the SG in dealing with emissions or climate change. A privately managed, leased forest would certainly offer no greater benefits to the actions on climate change than would a publicly owned, FC managed forest. On the other hand the proposal is to take the money generated from the lease and place it at the disposal of the government for such projects as tree planting and renewable energy projects, however, it has been stated that this money cannot be “ring-fenced” for such uses and, as such there is no guarantee that the money will ever make any contribution to the fight on
climate change. It has also been stated that the money would be distributed for tree planting projects via the grants system such as SRDP but there has in fact been very little take up of the grants for tree planting in the recent past so the money may well sit there unused - why generate more money for a grant system which is struggling to give out grants when a state funded organisation such as the FC already exists and has the land, infrastructure and expertise for successful woodland creation projects - an established organisation will almost invariably offer better value for money than having to create and/or expand another department to try and give away an increased level of grant funding to landowners who seem not to want it anyway.

3. Do you envisage any implications for nature conservation, biodiversity or recreational interests from the two proposals and, if so, what are they?

I do not see any implications for the above areas through the Joint Ventures proposal as any such projects would be fully vetted by the relevant bodies (planning departments, SNH, SEPA etc) as they are for any works. I do however, see major implications for all 3 areas if the leasing proposal were to be passed: Nature Conservation and BiodiversityThe FC has, as part of it's remit, an obligation to conserve, manage and improve the biodiversity and nature conservation value of the NFE which it manages on behalf of the people of Scotland. To this end it has established a well known and respected wildlife management and conservation role which routinely works with other conservation organisations on projects which go well beyond any requirement of the statutory requirements of a forest management organisation. Off the top of my head the FC has participated in: Providing release sites and key habitat for re-introductions of Sea Eagles and Red Kites, provided important man-made nest sites for Ospreys, provided a habitat for the up-coming trial re-introduction of Beavers, working to save the endangered Black Grouse by sympathetic management of open areas and forest edge, created a nationally and internationally renowned deer management team and generally successfully managed commercial conifer plantations in a manner which is sympathetic to the needs of our native wildlife. How could a private investment company leasing the NFE hope to provide such benefits whilst returning a profit on their investment even with the grant funding which would have to be offered by the government as an incentive to do any of these things and what is the point of generating an income by leasing off the NFE if this income then has to be given back to the leasee to get them to provide conservation benefits already provided by the FC?

Recreational Interests
Obviously any right of access to the forest would be unaltered thanks to Scotland's world leading laws on this matter. However, what leasing organisation would create such diverse recreational opportunities as currently offered by the FC - walking, horse-riding, nature watching, tourism and of course the very well known mountain biking facilities across the country which has led to Scotland being ranked as one of the best mountain biking destinations in the world. The vast majority of these facilities are free to use and open to all thus offering an excellent help in the current battle against
obesity and ill health. Many of these facilities would be lost under private forest management as they cost money and expertise to maintain.

4. Do you believe there are any implications for rural employment from the two proposals and, if so, what are they?

Yes.

Joint Ventures: These may help to create short term employment directly on site during the construction phases as well as maintaining existing local businesses such as shops, accommodation facilities and contracting firms in the long term and create new permanent jobs in the management and maintenance of schemes such as wind farms, hydro-electric and small scale biomass power plants.

Leasing: This would probably lead to a down-turn in rural employment as a leasing company would endeavour to do as little as possible to manage the forest successfully as the more people it employs and the more works it carries out the less profit it will make. The FC manages its forests under best practice guidelines and as such undertakes much work that a private company would deem unnecessary however these works improve the forest greatly in terms of nature conservation, biodiversity and recreation as well as providing vital rural employment at the same time. The FC also agrees to have a constant timber output throughout the year - this means that local contractors and, further afield, timber mills have a steady flow of work enabling them to maintain a full time work force, a private company would want to maximise the income from its timber sales and as such would only fell crops when the timber market was buoyant thus leading to peaks and troughs in the market and an unstable rural economy. One of the reasons for the FC being created was to bring stability to a volatile market and thus establish steady rural employment.

5. Do you have any other views on these two proposals from the Government?

Joint Ventures: As is obvious from my above comments I feel that this proposal offers excellent opportunities for the FC, the Scottish Government and on the behalf of Scotland as a whole in taking the negatives of climate change and changing them for positives in terms of lower emissions thanks to renewable energy schemes and increased carbon sequestration by increased tree planting on the NFE funded directly by the joint venture projects. There is also the opportunity to offer carbon trading by private companies paying for woodlands to be established to offset their own emissions, the FC, using the NFE, is in a prime position to become a source of long term income for this and future governments. At the same time, the FC could continue to provide its established, well known and recognised services for nature conservation, biodiversity and recreation but place a lesser burden on government funds and therefore the tax payer by the increased level of self funding.
Leasing: This seems to me to provide, at best, a source of funding to try and persuade private landowners to plant trees by handing out government grants which, in the past, they haven't taken up and to provide more incentives and research funding to renewable energy which is already big business in its own right and is increasingly being funded by the multinational energy companies as they move themselves away from fossil fuel reliance. Why should the Scottish people give up one of the country's greatest assets in return for a short term (and short sighted?) quick and easy source of cash. Finally, the Minister has made a great point of saying that none of Scotland's publicly held land will be sold off, however, it seems that at the end of a leasing deal the leasee would not simply hand the land back but would want the government of the time to remunerate them for works carried out and improvements made, potentially an uneconomically viable amount - what is the difference between this and selling off land outright?

John Taylor
26 January 2009
Response to Consultation on Forestry provisions in the Scottish Climate Change Bill (issued 4th November 2008).

Please find following my comments on the above consultation. By way of background a short summary of my cv might be helpful.

For 15 years until 2000 I managed a 6000 acre upland estate in Perthshire. This involved the integration of hill sheep, hill cattle, forestry, deer and grouse enterprises.

From 2000 I have been a self employed forestry consultant, with forestry plans being a speciality.

I have a degree in Agriculture from London University and a MSC in Forestry and its relation to Land Management from Oxford. I have a Diploma in surveying.

I am a member of the Institute of Chartered Foresters and a Chartered Environmentalist. I am a member of the Perth and Argyll Area Forestry Forum, but the opinions expressed here are my own personal views, and do not represent the views of the forum.

Qu1. Joint Ventures.

This suggestion is an essential step that must be taken in the current economic environment, and if the objective is revenue generation then this offers a clear alternative to the lease proposal. While there are a whole range of opportunities open to the FCS if this policy is adopted, power generation primarily from wind offers the most lucrative opportunity in the short to medium term. One option for raising capital in advance of actual revenue flows from FCS projects would be to launch a bond or share against the future energy/revenue creation.

Qu2. Leasing the Forestry Estate.

The scale of this proposal, which seems to be driven by what the Timberland funds want rather than from the perspective of public good, is the major problem. Small leases of lesser terms are probably much less alarming. A lease to a single entity greatly increases risk, and the fact that the leasing entity will share most of the features of a hedge fund can’t be conducive to risk reduction.
A single leaseholder of a 75-year lease on the core parts of the FE landholding is risky enough. But when you add to the equation the present economic climate, the opaque nature of timberland funds which are based in Jersey etc, and the diverse nature of a funds holdings then these are all massive risk multipliers. An effective risk assessment on any of the timberland funds is actually impossible. The state of the insurance market is also an added consideration.

Picture the situation as the holder of the lease runs into problems in their portfolio of properties across the World. Wildfires and drought in Australia rip the heart out of their investment; political instability and the economic situation leads to their Asian leases being withdrawn without compensation; massive storm flattens Scottish Forests all along the West Coast in 2012. Insurance companies, already in a dire state, can't cope with scale of impacts and don't pay. The company sinks, but the legal wrangling and untying the investment packages goes on for 10 years. Twenty five percent of the heart of Scottish Forestry in limbo for this time, and requiring a massive bail out by the tax payer. This is such a predictable scenario.

**Security of supply** and a distortion of competition are also concerns. A commercial company would have no incentive to work for the national good or look after the interests of competitors. On the security of supply issue the point was made by the Minister that existing contracts would be honoured, this is helpful, but the key point is the development of new/existing businesses to take advantage of all the positive factors at play in the forestry sector here and now. The proposal will distort and stifle new capacity, and this probably has impacts on competition laws and best practice.

The target leaseholder seems to be Timberland funds along the US model. Timberland Funds, are based in offshore tax havens, often Jersey. Any revenue generation will not feed back into the Scottish economy. They are also highly skilled at exploiting any loophole that comes there way in order to maximise returns for their investors. For example future revenues from windfarm developments (which is the real meat of the proposal) can be dissipated by a range of artifices to minimise leakage of funds from the private fund, and so minimise public benefit. The vigorous avoidance of tax liability is of course totally legal at present.

On the employment issue, I know from experience of working in the Forestry management business that investment companies employ very few people directly; you could probably run the Scottish branch of the successful leaseholder with less than ten people. All the management and contracting work is subcontracted out. This does create insecure employment, but there is nothing there for FCS staff to actually transfer into. I know from experience that TUPE offers no protection for staff in a business transfer where organisational restructuring is taking place. In addition no civil servant in their right mind would transfer from the secure civil service to the howling wasteland of the private sector at present. I believe that the Ministers triple promise on employment/redundancies arising from the proposal is rash and
unrealistic under the present world environment. Even the civil service has a limit to the deadweight that it can carry.

By ripping the heart out of the FCS and feeding it to an investment fund (who are the very people who delivered us to this point) the ability of the FCS to fund its non economic research, recreation, amenity, social and environmental functions will be destroyed. The FCS will not survive if this goes ahead. Ministers seem to have no perception of the importance of morale in running a business, and it’s impact on productivity and long term effectiveness. Civil servants are not robots, although there are exceptions to this! From a man management perspective the FCS has been handled very badly by the current administration. The SEARS fiasco has precipitated a deep malaise in both SNH and FCS, and the lease proposal is another example of insensitive and counterproductive management.

The fact that the leaseholder would be able to drain off RDC funds is a factor that should be considered in working out the full costs/benefits of this proposal.

I am not in favour of the lease proposal.

Qu3. Creation of a not for profit trust to manage funds for woodland expansion.

The primary reason for this proposal seems to be to create a mechanism for the retention of funds that would otherwise flow back to Westminster due to time limits on spending.

If this were in fact the primary reason then the most effective method of delivering the benefit (of retaining funds) would be to have a grown up conversation with Westminster. The objective of this would be to enable the funds to be retained both within Scotland, and within the forestry sector specifically for woodland expansion. This would of course provide carbon sequestration/substitution and economic benefits for the UK as a whole.

The proposed not for profit trust would use up a lot of scarce resources both during the set up and operational stages, and this would tend to duplicate the FCS functions. In addition if the Trust were set up to act as the landlord for the lease, then this would have further adverse impacts on FCS influence, morale, and employment opportunities.

One of the main problems would be that the potential for conflict between the trust and the FCS is huge, and this would inevitably lead to a lack of a cohesive forestry body. The current tensions between the SEARS partners in the ministerial forced departmental marriage are apparent to everyone working in the rural landuse sector, and this should serve as a warning.
Qu4. Other measures to reduce carbon emissions.

Planning to avoid over centralisation of both forestry management functions (amalgamation of FCS conservancies), and operational/end use functions has scope to deliver a reduction in carbon emissions. The concept of keeping it local seems to be lost on administrative planners.

The major role of forestry in reducing emissions is in product substitution (low energy intensive wood for energy intensive steel etc). This is potentially more significant than carbon sequestration within temperate forests, and this aspect has been severely neglected/underplayed in the current discussion.

The potential for woodfuel to substitute for non-renewable carbon sources as a source of heating and electricity is appreciated, but it is still a poor cousin compared with renewables such as wind power. The potential for woodfuel heating to play a major role in meeting targets is probably greater than wind energy.

Woodland creation can provide product substitution benefits (if the tree species are productive) and carbon sequestration benefits. Woodland expansion is limited by the following factors:

1. Competition with other landuses and an uneven playing field (eg SAF payments on farmland lost if land is planted with trees). Agro-forestry may have a role to ameliorate this impact if it was actively promoted instead of ignored.

2. Administrative complexities and bureaucratic overheads create huge on costs and uncertainty. The EIA process and the RDC are very discouraging to new planting.

3. Insufficient funding to overcome the two hurdles above.

There is scope to increase planting by dealing positively with any, or all of these issues. In terms of public expenditure an adjustment of forestry's relative competitive ability coupled with a reduction in the administrative deadweight would be the most cost effective way to expand the forest area.

Having said this, the funds required to reach a tipping point are not large, and an additional directed £10M to £20M per annum would have a huge positive impact on planting rates. The success of the Locational Premium Scheme and the old Native Pinewood scheme under WGS show the effect of funding in redressing forestry's competitive shortcomings cf Agriculture (that is subsidised to the hilt). This additional funding could readily be sourced by an adjustment of rates and priorities within the existing RDC. New funding is not required.

Ian Thomas
The Bill includes a number of suggestions for how forestry and in particular Forestry Commission Scotland can contribute more to the fight against climate change. I am supportive of all but one of them. The point that I am very concerned about is the proposal to lease out a very large section of the National Forest Estate to a private company.

I think this suggestion poses a serious risk to the Scottish forest industry, important conservation work, recreational opportunities and the existence of the Forestry Commission.

The Forestry Commission is a vital player in maintaining a healthy forest industry in Scotland. The dire economical situation at this very moment highlights the differences between the FC and the private sector. The forest and wood processing industry is very hard affected by the crash in house building with resulting sharp declines in the value of timber. During times like these the private sector naturally limits the amount of timber that they put to the market – why sell now when you might as well wait a couple of years and make 30% more money for the same wood. The FC, however, is committed to put certain volumes to the market regardless of the price. By doing this the FC plays a vital role in ensuring that forest contractors, timber hauliers and sawmills can keep working through very difficult times.

Many forest professions are specialist work and are not easy to recruit again if the people are forced to leave the sector during a recession. Forest workers are often people living in rural areas with limited alternative job opportunities locally. They could well be forced to move if there is no work to be found.

In short, I see the FC as a vital player in limiting the impacts of bad times on the forest industry as a whole and to hundreds of jobs in some of the most fragile communities across rural Scotland.

In addition to the above I believe that the proposals carry a real risk for damaging the good conservation and recreation work that the FC carries out all over its estate. Under a lease different condition will, no doubt, be imposed on the private sector company. But there is only so much that can be expected of a purely commercial private partner. For example, it is one thing to preserve things like access rights – which are guaranteed in Scotland anyway - but it is something completely different to actively encourage people into the forest as the FC is doing. Another example is that it is one thing to adhere to the legal minimum requirements for protection of certain plants and animals but something completely different to actively work to improve the conditions for threatened species as the FC is doing.
Another risk I see is that this could be the thin end of the wedge for a wholesale dismantling of the FC. The initial proposal suggests leasing out something around 25% of the National Forest Estate. This is obviously bad enough but the legislation will probably not carry any limit so once introduced it will be very tempting for future Scottish Governments to take another slice of the cake when they are desperate to raise more money.

I believe that the additional money that could be raised by this proposal is overestimated and absolutely insignificant when compared to the benefits of the current system.

Finally, a short comment regarding other options for how Scottish forestry could contribute more to the fight against climate change. Changing the current unworkable and unattractive grant scheme for private forest planting could give a very significant boost to the afforestation around the country. Alternatively, changes could be made to the tax breaks available for planting new forests. I am aware that taxation is a Westminster issue – but if carried through the impact across the UK would only be all the greater because of this. I think there is a significant interest in Scotland to plant more forest but the economical incentives for private landowners are currently not attractive enough.

Simon Thorfinn
24 January 2009
Response to Proposal for Forestry (Scotland) Climate Change Bill

I have been asked to give a response on behalf of the Tweed Valley Tourist Consortium with regard to the proposals for leasing forestry commission land contained in the Climate Change Bill.

The Tweed Valley Tourist Consortium represents 58 businesses within the Tweed Valley area many of who are either directly or indirectly involved with mountain biking and related activity and outdoor pursuits in the Tweed Valley Forest Parks.

The extraordinary growth of mountain biking in the Tweed Valley forest park area over the past ten years has been facilitated and encouraged by the Forestry Commission to the great benefit of the local tourism industry spawning many new businesses and developing excellent partnerships within the private sector which have had a considerable impact on the local economy.

We believe the proposals to lease parts of the forest could have a hugely detrimental effect on the Commission's ability to continue to encourage and foster the growth of its mountain bike parks and contribution to tourism in general.

Firstly, if the forestry commission land in the Tweed Valley area was leased it would be highly unlikely that any private operator would be remotely interested in developing the mountain bike activities any more than on a very limited basis as there would be little commercial gain. However, even if the Tweed Valley remained unaffected directly we would question the impact of taking a large portion of land out of direct FCS control on its overall budget how this would in turn impact on their budget for tourist related activities in general and on local jobs which are an important link for local businesses and the community to have with the Commission.

It seems ironic that this potential threat has arisen as part of the Climate Change Bill as tourism in the forest areas represents one of the most environmentally sustainable forms of tourism with enormous potential for rural Scotland to build and grow for the future.

Catherine Maxwell Stuart
Chair
Tweed Valley Tourist Consortium
19 January 2009
As the trade association which represents the technical and commercial interests of the UK wood processing sector and which has a very significant number of Member Companies based in Scotland, we welcome the opportunity to participate in this consultation.

May we first state that we have found it very difficult to provide detailed responses to each of the four questions posed, because of the lack of detail. We firmly believe that the level of new tree planting and especially commercial conifer planting in Scotland must be increased. It is a serious concern that current planting levels are not reaching Scottish Government targets and appropriate action is required to address this important issue. However, no detail is yet apparent as to how this might be done. We would welcome the opportunity of providing input to such discussions.

The consultation seeks respondents’ views on four questions; our responses are presented below;

Question 1. What are your views on allowing the Forestry Commissioners to enter into joint ventures, with the intention of participating in renewable energy programmes on the national forest estate? We are unable to give our unqualified support for the Forestry Commissioners to enter into joint ventures, with the intention of participating in renewable energy programmes on the national forest estate, as insufficient detail has been provided in respect of the type, scale, potential risk and location of such ventures. If such information can be provided then we would be pleased to offer comments. In the absence of such detail, we would say that if developments, including wind farms or hydro-electric schemes, were to be made on the national forest estate which resulted in the removal of any tree cover, especially if it is commercial conifer crops, then it is essential that there is compensatory planting of crops where tree cover is lost. It is questioned if it is necessary to pursue large scale leasing of commercial forests in order to facilitate the ability to enter into joint ventures. Also, if such joint ventures were to be developed, it is also essential that revenue from such projects must be wholly retained for use in forestry, including support for new commercial planting and restocking of commercial timber crops. Although Forestry Commission Scotland has significant expertise in forestry matters, renewable energy is clearly not their specialist area of expertise and as a consequence, there could be significant risks associated with direct involvement in this area.
Question 2. What are your views on allowing Scottish Ministers and
Forestry Commissioners to offer leases and cutting rights over parts of
the national forest estate? There has been considerable discussion
amongst UKFPA Member Companies in relation to this subject and it is
readily apparent that is the most controversial aspect of the consultation.
Industry views can be summarised by saying that again, there is insufficient
detail to comment comprehensively. However, it is felt that leasing up to one-
quarter of the national forest estate, possibly to a single entity for up to 75
years has the potential to cause irreparable damage to the well established
Scottish forest products sector. It is not known if the lessee would be an
existing forest industry businesses or group of businesses, a renewable
energy company or other investors, whose objectives are unknown. What is
certain is that if prime commercial conifer forest areas are to be leased, then
very significant volumes of high quality timber will be removed from the open
market.

It is likely that strategic supply arrangements between the lessee and selected
consumers would be developed, which would deny many businesses the
opportunity to purchase wood on the open market, as they currently do from
FC Scotland, in an open and fair manner. Such a dramatic change to the
wood supply chain is likely to adversely impact on the viability of many wood
using businesses in the sector.

There are also very serious concerns that if the lessee is a renewable energy
company, or is otherwise active in this sector, that the timber crops will solely
be used for renewable energy purposes. Whilst it is recognised that wood
and wood products have a role to play in the renewable energy mix, it must be
recognised that burning wood should not be the first option for crops which
are suitable for the manufacture of solid wood products, wood based sheet
materials or paper products.

The prime focus must be on using these crops for the manufacture of
products which will continue to store the carbon absorbed by the growing tree
and that at the end of its service life, the products should be recycled for
further use and that ultimately, at the end of the natural service life of the
product, burning for heat and/or power generation would be appropriate, but
not before. Above all, it is essential that the development of the renewable
energy sector is not supported to the detriment of the Scottish forestry and
forest products sector.

Since its establishment, the Forestry Commission has in general terms been a
force for the good; sustainable forest management and the consistent
marketing of wood on the open market has supported significant investment in
Scotland’s wood processing industry.

The Forestry Commission has consistently produced production forecasts,
has brought wood to the open market in good times and bad and has
provided businesses with regular purchasing opportunities and long term
supply contracts, all of which has underpinned the development of the sector
and ensured the continued delivery of valuable economic, social and
environmental benefits, especially in rural areas. All of which has provided businesses with confidence, which is an essential requirement for continued investment and development, which in turn ensures continued competitiveness and profitability. Without this confidence, the future for businesses in the sector would be very uncertain. There is currently no indication of what requirements would be placed on the lessee in relation to production forecasting, open market sales etc. Furthermore, restricting the supply of such large volumes of wood from the open market also raises questions about competition/monopoly issues.

There are grave concerns about the likelihood of monies raised from the proposed leasing arrangements being reserved or otherwise ‘ring-fenced’ for forestry use, to support new planting etc. It has already been stated by the Minister for Environment and senior Forestry Commission Scotland staff that there are no guarantees of this. It has been stated that monies could be used for climate change related projects; this would not guarantee expenditure on forestry, as climate change encompasses such a wide range of subjects and there is a risk that some, or possibly all of the money raised may not be invested in forestry. There is also a fear that monies may be spent on other Scottish Government initiatives which may be deemed to be politically more deserving than forestry. This is simply not acceptable. It is increasingly recognised that trees, woods, forests and wood products play a vital role in climate change mitigation and every effort must be made by the Scottish Government and Forestry Commission Scotland to maximise these benefits, by increasing new planting of commercial conifer species, which will increase carbon storage, provide unique renewable wood products for several markets and continue to provide a revenue stream for Forestry Commission Scotland.

A figure of approximately £200 million has been suggested as the sum which might be achieved via a leasing arrangement. In relation to what is being offered and the timescale involved, it is suggested that this seriously undervalues this unique national asset, perhaps by as much as 20%.

The motives for the leasing proposals are also questioned by many; although climate change mitigation is stated, some suggest that the proposals may have more to do with bolstering Government finances.

Mention is also made of cutting rights; here too, further information is required to enable detailed comment, however, lessons may be learned from overseas experience and a study could be of value in determining whether this approach, involving much smaller areas for timber production purposes than that currently being proposed for leasing, would be appropriate in Scotland.

Question 3. What are your views on (i) transferring the proceeds from leases and cutting rights to a not-for-profit trust, for investment in woodland creation; (ii) transferring the landlord’s interest in this land to a not-for-profit trust; and (iii) Ministers stipulating the constitution of such a not-for-profit trust. The lack of detail about the constitution, composition, objectives and operation of a not-for-profit trust presents further difficulties in responding. It is recognised that in theory, such a trust could
have greater financial freedom than the Forestry Commission and this could be have some advantages. Additional information is required to enable us to comment further. From an industry perspective, commercial relations with the Forestry Commission are relatively straightforward and any new arrangements with a not-for-profit trust or similar body must not in any way result in increased complexity, bureaucracy etc. At this stage, we are unable to identify any meaningful benefits of establishing a not-for-profit trust for the purposes broadly described in the consultation.

**Question 4. Are there any other actions which need to be taken, or are there other changes in legislation which need to be made, in order to allow the public and private forestry sector to contribute to Scotland’s target of reducing emissions by 80% by 2050? If so, please outline what these are.**

We believe that there is an opportunity to achieve the objective of increased rates of new planting and woodland expansion in Scotland. The current target of 10,000 hectares per year should, in our opinion, be increased to at least 15,000 hectares per year, which would provide an appropriate mix of commercial and amenity woodland and forests. It is worth noting that there was recently a period when grant aid was not available in Scotland to support new planting/restocking, which will certainly have impacted on planting levels. Furthermore, the introduction of SRDP as the grant aid mechanism has not been universally welcomed by those with an interest in commercial forestry. Further attention is required to ensure that grant aid mechanisms are fit for purpose, are suitably ‘user friendly’ and ensure that the desired objectives are achieved. It is also suggested that the subject of the tax treatment of forestry be reconsidered. It is noteworthy that planting levels and related activity in Scotland were at their highest during the period when forestry received preferential tax treatment. It is acknowledged that some of that planting attracted criticism, a proportion of which was justified, but it is important to appreciate that lessons have been learned from these times. The practice of forestry today is very different from that in the past and in view of this, it would be possible to incorporate safeguards to ensure that new planting is appropriate, in terms of location, scale, crop type, management objectives etc.

We recognise that fiscal matters are reserved to Westminster, but would suggest that the time is right for the Scottish Government to raise this issue with HM Treasury and to promote a supportive tax regime for forestry.

It has been demonstrated in the past that the private sector can play a valuable role in woodland creation/expansion, provided that appropriate incentives are provided. There is every to think that given an appropriately conducive environment, that a major contribution can be made towards achievement of Scottish Government objectives relating to forestry and also climate change mitigation.

In summary, we regret that we have not been able to comment more fully on this issue because of the lack of detail in the consultation, but nevertheless, it must be noted that there is already very serious concern about the potential implications of the proposals, especially those relating to leasing and cutting rights, which could irreparably damage the existing forest products sector in
Scotland and seriously jeopardise the role that the sector has in helping to mitigate the effects of climate change. The preference amongst the majority of businesses in the forest products sector in Scotland is for the status quo to be maintained and to reject the leasing proposals. Furthermore, there should be no expansion of the forest disposal programme.

UKFPA and its Member Companies in Scotland wish to continue their engagement with Forestry Commission Scotland and the Scottish Government and to explore how increased tree planting and forest expansion can be achieved in Scotland and how the benefits provided by our trees, woods, forests and forest products can be maximised.

**D.J. Sulman**  
**Executive Director**  
**UK Forest Products Association**  
**19 January 2009**
The Woodland Trust Scotland welcomes the opportunity to respond to this consultation. The Trust is the UK’s leading woodland conservation charity. We have four main aims: no further loss of ancient woodland, restoring and improving woodland biodiversity, increasing new native woodland and increasing people’s understanding and enjoyment of woodland. We own over 1,000 sites across the UK, covering around 20,000 hectares (50,000 acres) and we have 300,000 members and supporters. In Scotland we own and manage 80 sites across 8,500 hectares.

Key Points

- **All** income raised from Joint Ventures with energy companies must be reinvested in the delivery of multiple public benefits through forestry.
- **All** income raised through leasing of FCS land and cutting rights must be reinvested in forestry. In particular, the delivery of new woods and forests providing multiple public benefits. Carbon sequestration should not be the only driver for woodland creation.
- At least 6000 ha per annum of new woodland native is required to achieve the vision as laid out in the Scottish Forestry Strategy 2006.
- Selection criteria for land leased must ensure minimal inclusion of social and environmental benefits.
- Measures to address climate change should include delivery of both mitigation, adaptation and reduction of energy demand.
- Any loss of income from timber sales should not lead to any reduction in funding levels for remaining land managed by FCS.
- If a lease is undertaken, it must ensure that all public benefits are protected, all duties and requirements of FCS are transferred to the leasing party.
- UKWAS certification for the leasing party must be retained throughout its duration and any major corrective actions carry financial penalties.

Introduction

- In principle we welcome the fresh look the Forestry Commission Scotland (FCS) is casting over how it can deliver for climate change.
- We welcome the concept of exploring dynamic approaches to achieving some challenging woodland creation targets.
- We are glad that FCS recognises the ethos of the not-for profit (NFP) and voluntary sector and the power it has to promote positive public action.
- The proposals contained within the consultation paper represent a radical shift (potentially the most radical since 1919) and have appeared with very little warning. It is a complex area and detailed information (particularly financial) on the implications of such a shift is scarce.
The enabling powers proposed for forestry in the draft Climate Change (Scotland) Bill have been presented in draft form to Parliament before the consultation on their inclusion has been concluded. This does not engender confidence in the public consultation process.

Specific Questions

1. What are your views on allowing the Forestry Commissioners to enter into joint ventures, with the intention of participating in renewable energy programmes on the national forest estate?

Woodland Trust Scotland (WTS) in principle has no objection to the legislation being amended to allow FCS to undertake joint ventures with renewable energy companies subject to appropriate safeguards because we support the principle of injection of new resources into forestry and in particular woodland creation. Safeguards include: a requirement to undertake EIAs, protection of public benefits (e.g. PAWS, access and recreation provision, woods of high conservation value, biodiversity, semi-natural habitats), that the proposals follow full planning process, and that there will be no development leading to the loss of woods of high conservation value. All income raised must be reinvested into delivery of multiple public benefits through forestry. Without these safeguards Woodland Trust Scotland (WTS) would not support the proposal.

2. What are your views on allowing Scottish Ministers and Forestry Commissioners to offer leases and cutting rights over parts of the national forest estate?

Leasing the commercially productive parts of a National Forest Estate to private companies with linked cutting rights is not a new concept. If this concept was adopted in Scotland, WTS would require firm guarantees to enable us to support the idea, including:

- All funds raised (estimated at £200m) would be directly re-invested in forestry related activities and delivery of further public benefits, in particular in relation to climate change and woodland creation. Mitigation, adaptation, product substitution, reduction of energy demand, renewable heat, woodfuel, district heating and diversification of energy supply are important factors in delivery of climate change priorities. WTS would not find it acceptable for income raised from FCS land to be invested in other areas of combating climate change or indeed other areas of public expenditure. We would see that as ‘Robbing Peter to pay Paul.’
- Ancient and semi-natural woods and woods of high conservation value included in the leased land must be retained and managed as such.
- There is a significant difference between a right to access and accessibility; accessibility must be retained in leased land.
- Any company or body leasing FCS land must be UKWAS certified. The lease must ensure UKWAS certification is retained and any major
corrective actions carry financial penalties. Future land managers must deliver current (including in the future) public policy including the duty on biodiversity (as per the Nature Conservation (Scotland) Act 2004), as would be the requirement for FCS.

- Selection criteria for land to be leased must ensure that woods included provide the least environmental and social public benefits (more rigorous than National Forest Land Scheme disposal criteria). We see native, ancient and semi-natural woodland as having the broadest public benefit.

- FCS income streams from timber production will be adversely affected by the leasing of up to 100,000 ha of productive forest to private companies. It is important the Scottish Government ensures that funding levels for the remaining land holding are at least equivalent to the existing estate on a £/ha basis.

- The effect on SRDP funding availability may be negative if an additional 100,000 ha are eligible.

3. What are your views on (i) transferring the proceeds from leases and cutting rights to a not-for profit trust, for investment in woodland creation; (ii) transferring the landlord’s interest in this land to a not-for profit trust; and (iii) Ministers stipulating the constitution of such a not-for profit trust.

Currently it is very difficult to form a clear view on this due to the lack of detailed information. The suggestion of creating a not for profit trust strongly implies a social or environmental purpose for such a body i.e. public rather than commercial benefit, and some stakeholder representation in its governance arrangements but this is not explicit in the proposals.

Guarantees WTS would seek in order to support the proposal:

- All income from the lease of land and cutting rights to be invested through the NFP Trust into multiple public benefits through forestry, particularly climate change related. This means investment in climate change adaptation as well as mitigation.

- NFP Trust is constituted to deliver forestry related public benefits and priorities as laid out in the current Scottish Forestry Strategy and in particular in relation to climate change mitigation and adaptation.

- NFP Trust could enable creation of significant areas of new native woodland. There is a broad level of support for woodland expansion as clarified by the Woodland Expansion in Scotland Consultation 2008.

- All woodland creation funded through the new structure should be UKWAS certified.

- We would not support the idea of the NFP Trust using lease and cutting rights income to solely create new production forests. All new woodland created should be multipurpose and provide significant public benefit. In order to achieve the current Scottish Forestry Strategy vision, more than 6,000 hectares of native woodland is required per annum for the next 50 years (35% of the enlarged forest cover of 25% land area).
• We can not see the logic of the NFP Trust creating more commercial production forest to sell or lease off and then create more in a cyclical fashion.

• There has been a clear change in policy drivers for forestry in the last 18 months or so, in favour of forestry and woodland creation for climate change mitigation. WTS supports woodland carbon sequestration projects for residual emission only where carbon storage can be assured in perpetuity and where additional benefits to society such as new and enhanced public access, greater biodiversity, and landscape maintenance and enhancement are included within the project outputs from the start.

• If the carbon sequestration figures in the consultation paper are based on the Centre for Ecology and Hydrology’s C-FLOW model, it is extremely difficult to see how the proposed scale of aforestation brings about the stated level of carbon sequestration. For example, by creating 10,000 hectares of new woodland per year between now and 2020, under typical management practices it would generate a net carbon source.

• We cannot see the need for the NFP Trust to hold the landlord’s interest in the leased land to ensure public interests are safeguarded. In particular because we do not know how the Trust will be constituted or what its purposes would be. Also, if the NFP Trust was given a role as the ultimate arbiter of public interest of leased land it would be playing the same role that FCS would play for the unleased land. This appears to be duplication of resources (the Trust requiring expertise and resource to deliver this responsibility) and implies that land owned by FCS is a less safe option.

4. Are there other actions which need to be taken, or are there other changes in legislation which need to be made, in order to allow the public and private forestry sector to contribute to Scotland’s target of reducing emissions by 80% by 2050? If so, please outline what these are.

- The Scottish Climate Change Bill should contain a duty on all public bodies to deliver climate change reductions in a sustainable manner in line with the national target.
- Public body’s procurement policies to include FSC certified timber products as standard.
- Reduction in the forest industry’s emissions through best practice and Low Impact Silvicultural Systems.
- Introduce minimum standards and certification of greenhouse gas savings and environmental impacts for all forms of bio-energy.
- Open ended clauses to enable Scottish Ministers to change the role and functions of Forestry Commissioners in the Climate Change Bill cause concern. Land use accounts for approximately 25% of all climate change emissions. It would appear to be more logical to include for development of a strategy and action plan on how to tackle emissions related to
sustainable land use in the bill rather than to include enabling powers for forestry before the planning work is undertaken.

- If appropriate legislative changes are enacted, WTS would welcome the opportunity to be involved in the development of the redistribution of funds and the terms and conditions of any leases.
I am responding to this call for evidence in my capacity as Director General of the Wood Panel Industries Federation. The WPIF represents all UK manufacturers of wood-based panels, who have been consulted in the formulation of this response.

The Federation’s members employ approximately 6,000 people in the UK, directly and indirectly, and have an annual turnover in excess of £650m. The industry occupies eight UK manufacturing sites (three in Scotland) and is the second largest processor of UK-sourced wood, annually consuming some 4.5m tonnes. Approximately 65% of the UK industry’s wood requirements are sourced from Scotland.

General
The wood panel industry is deeply concerned by some of the forestry provisions included in the Scottish Climate Change Bill. We do appreciate the Scottish Government’s over-arching aim of raising capital for extending forest cover in Scotland. Whilst we support the objective to expand Scotland’s forest cover in support of climate change objectives, the lack of detail in the Government’s consultation document leads us to question, a), whether the objectives will be met and, b), whether actions taken will actually threaten the continued operation of our members, who are reliant upon resource coming from the productive forest areas being discussed.

We believe that unless serious and prompt attention is given to increasing the level of new commercial planting then the imbalance between supply and demand highlighted by the Clegg study will be realized and the consequence of this would be to threaten the continued existence of our members.

We cannot support proposals that threaten coniferous wood supply. Whilst not agreeing with all Forestry Commission policies, we recognise that over the long term they have introduced a degree of stability into the market, and by maintaining supply throughout the economic cycle have enabled processing industries to have the confidence to invest and grow.

Under the proposals, the only commitment voiced is to honour existing supply contracts, which means that there is no certainty beyond these and evidence to date would point to a private investment group being less than willing to enter into long-term supply arrangements.

Some of the proposals contained in the Scottish Government’s consultation are to be tentatively welcomed, such as the joint ventures on Forestry Commission land with renewable energy providers, through technologies such as wind and hydro electric. Using sparsely populated land, with low
recreational usage, for wind turbines seems a sensible approach. However, more detail is needed before we can fully support such measures.

The areas that the WPIF has most concerns about are the long-term leases and cutting rights. We are particularly concerned by the prospect of a single entity lessee being in control of up to 25% of FC Scotland land – and a higher proportion of its productive forests. This could have disastrous ramifications for the wood supply and market throughout the UK, bearing in mind how important FC Scotland is as a consistent and large-scale supplier. We cannot support these proposals without details on the “safeguards” alluded to in the consultation that might protect wood supply as well as recreational access and the other important services currently provided by the Forestry Commission.

We are aware that the more safeguards and conditions applied to this leasing arrangement, the less profitable it is likely to be for the Scottish Government. However, the costs that might result from market failure in rural industries must be taken into consideration, especially in the present economic climate.

In a period of great uncertainty for businesses, we question the wisdom of engaging in far-reaching proposals at this time, for if these proposals proceed, they will merely add to the growing uncertainty about the future and further undermine confidence for investors.

**Question 1: Do you envisage that the Forestry Commission could play a greater role than it does at present in reducing greenhouse gas emissions or in alleviating or responding to the effects of climate change? If so, what suggestions would you make?**

Yes, the Forestry Commission could play a greater role by: a) planting more trees; b) allowing wind farms and hydro schemes on their land; c) utilising as much of the brash as is possible as fuel without impacting on drainage and soil quality; d) improving access to less economic areas; f) promoting the development of manufactured wood products as they extend the carbon life, whereas burning is only carbon neutral.

**Question 2: Do you consider that either of the Government's consultation proposals (on entering into joint ventures and on leasing cutting rights) would enhance the Forestry Commission's role in dealing with greenhouse gas emissions and climate change?**

On balance, the WPIF supports the use of joint ventures for clean renewable energy programmes or micro-generation on the estate, subject to certain safeguards and standards being implemented; i.e. timber extraction and replanting being maintained in productive areas, revenues raised being circulated back into increasing commercial planting and maintaining access for recreational and community use.

Before we fully endorse joint ventures, we would like to see some detail on how these joint ventures would work in practice and what kind of “renewable energy programmes” would be accepted. We would also need to know
whether felling would be affected by such programmes or the terms of the joint venture.

It is impossible to support the proposals for leasing and cutting rights as they stand. In the absence of detail, they appear to jeopardise the future supply of wood to the wood processing industries. Although FC Scotland has confirmed that existing contracts would be honoured under any new leases, this does not give the necessary confidence for the long term and the Scottish Government must ensure that safeguards are put in place for maintaining a sufficient supply of wood – i.e. that contracts with existing users will be entered into in the future, based on a fair market price that is not driven by the purchasing power of a subsidised energy sector.

The consultation proposes certain safeguards for protecting the interests of “existing stakeholders”. Although it is not an exhaustive list, industry is not explicitly included. Whilst we do not deny the importance of protecting services for recreational users and community groups, as well the jobs of FC staff, the relationship between the Forestry Commission and the wood processing industries is extremely important. Not only does it provide a considerable proportion of the wood panel industry’s raw material, it has supported this industry and other wood industries through periods of depressed prices by maintaining supply when it was cut by the private sector. Stability of supply throughout the economic cycle is essential for our industry and to this end the Forestry Commission has helped our industry by giving supply confidence, which has facilitated considerable investment. In our view, a private lessee would not wish to commit to maintaining such stability.

The wood industries have estimated that the 25% of FC Scotland land proposed for leasing would equate to around 40% of its productive forests, if land is selected according to the Repositioning Programme’s scoring. This is extremely worrying for the wood processing industries, especially if the lease were to be granted to an investment company with interests in wood energy which might wish to deny purchasing opportunities to competitors. We would welcome explicit proposals for safeguards for wood supply, though we are sceptical that a commercially attractive model can be developed that maintained the public interest responsibilities currently provided by the Forestry Commission.

Qu. 4: Do you believe there are any implications for rural employment from the two proposals and, if so, what are they?
We reject the assertion that leasing would create more jobs in the forest industries sector. Biomass-fuelled electricity and non-combustion forms of generation require considerably fewer workers than traditional wood processing industries. If too much of the UK’s wood supply is diverted to the biomass sector, there will inevitably be job losses in industries such as the wood panel industry that rely on domestic wood production. These job losses are likely to be greater than the jobs created in the energy sector.
Qu. 5: Do you have any other views on these two proposals from the Government?

On the subject of a not-for-profit trust, the wood panel industry recognises that it could provide a degree of flexibility that the Forestry Commission does not currently enjoy. However, there is a risk that, for all the upheaval, it could be a case of substituting one bureaucracy for another and that as a consequence any potential benefit would be lost. There is insufficient detail to be supportive or otherwise of the proposal. The representation and constitution of the trust is all-important, particularly if wood processing interests are to be fully represented. We would also welcome some explanation of the “open membership” of the trust proposed, as well as what kind of constitution is envisaged.

We would prefer that the Forestry Commission maintained a controlling interest.

Capital raised from any of the schemes proposed here should be recycled back into forestry for planting purposes. Not only would this be a clear and efficient way to mitigate climate change but it would contribute to the Scottish Forestry Strategy’s ambitious goal of increasing Scotland’s woodland cover to 25%.

Although it is recognised that raising a large amount of capital could significantly aid new planting, it must be asked why current planting targets (10,000 ha of new planting per annum) are not being met. The Government should consider whether the existing grant system is the most effective mechanism for incentivising this process. We would urge a private sector solution to planting, which could achieve greater levels of planting with greater efficiency. In view of the long-term demands for timber from all sectors, we would support a planting rate of 15,000ha per annum, with an allocation of 9,000 ha to commercial forestry.

Conclusion

There is broad industry consensus that the proposals for cutting rights and long-term leases could be highly detrimental to the health of these industries, not to mention rural employment and the Forestry Commission’s public service remit. There is a widely held belief that the current proposals are under-selling the forest estate. Beyond the simple land value, there are highly valuable benefits, in terms of potential production, recreation and alternative use. Therefore, in response to the details provided so far, the WPIF cannot support granting powers to the Minister over leasing Forestry Commission land and granting cutting rights. The following key concerns must be addressed:

- Security of supply, including and beyond existing contracts;
- Reinvestment: monies raised must be earmarked for planting (particularly commercial planting);
- Jobs: replacement of existing wood processing industries by the renewable energy sector will cause greater unemployment;
Market competitiveness needs to be maintained across all wood-using sectors.

The WPIF hopes that the Scottish Parliament will pay serious attention to the concerns raised in this response and that the Scottish Government will conduct a meaningful dialogue with the wood panel industry and other affected industries. We look forward to discussing these issues in depth with the Minister at our scheduled meeting on 12th February.

Alastair Kerr
Director General, Wood Panel Industries Federation
28 January 2009
Some contemporary evidence leads a number of land managers to have doubts over the need to change muirburn dates in Scotland in response to climate change. A review of best scientific information is required. In addition, the recent consultation on the question “Do you agree that in order to adapt to the possible effect of climate change on moorland, it is necessary for the Scottish Ministers to be given powers to vary the permissible dates for muirburn in the future?” gave a split in responses, with 28 respondees being supportive and 24 not supportive. This paper reflects the subsequent discussions over this issue by key organisations.

It is recognised that muirburn that takes place on most managed grouse moors is generally undertaken in accordance with the Muirburn Code and with industry recognised best practice. However, there are concerns over the suitability and appropriateness of muirburn elsewhere in time and space on Scotland’s heather and grass moorlands.

After a series of meetings between the organisations listed below, and Scottish Government, agreement has been reached on the following points relating to amending the provisions of the Hill Farming Act 1946, which will apply to Scotland only. These provisions may be effected through the Scottish Climate Change Bill.

We feel that Scottish Ministers must:

- Have powers to issue specific licences to land managers for burning outside the legal muirburn dates, based upon adaptive requirements for climate change considerations

We also feel that were Scottish Ministers given powers to vary the permissible dates for muirburn any such variation:

- should be driven by climate change adaptation only
- must be evidence led, based upon good science and supported by SNH as advisors to Government
- must be preceded by consultation with those directly affected
- must include the month of September within the legal burning season
- should consider regionalisation of any change to muirburn season, based upon adaptive requirements for climate change considerations
- should be undertaken via an affirmative procedure with reference to the muirburn provisions of the Hill Farming Act 1946.

BASC Scotland    GWCT Scotland    RSPB Scotland
19th February 2009
Muirburn Dates in Relation to Climate Change Adaptation

Despite a significant split in opinion seen in the recent consultation, we understand there remain suggestions that Scottish Ministers should receive the power to vary the permissible dates for muirburn as part of the provisions of the Scottish Climate Change Bill. It has been suggested that the principle areas this may help in are:

- By protecting carbon rich peat from damage if the climate becomes drier.
- By protecting ground nesting birds in the event their breeding become earlier.

However, we are seriously concerned that there is little evidence for a positive adaptive effect for these powers, while there is good evidence that restricting the season may be positively damaging. This is because our research suggests that:

- Shortening the muirburn season could increase the risk of inappropriate burning and decrease wildfire control options, thus promoting carbon loss.
- Shortening the muirburn season could lead to many moorland birds breeding less well as risks to breeding birds are naturally limited by the industry’s self-interest.

Limiting muirburn dates could thus negatively affect climate adaptation in the future if the powers were not used wisely or without a solid evidence base. We recommend that the need for the powers to amend the season are considered as part of possible future legislation only after essential research has been conducted; such research should aim to create models which can accurately predict climatic, habitat and soil conditions which would pre-dispose towards damaging wildfire. We could then support an amendment to the Act which would allow temporary local suspension of burning rights for environmental protection.

There are also a number of other positive actions relating to muirburn that we would support that could help Scotland adapt to climate change. Ministers should be given powers to extend the muirburn season into September or powers to allow for license applications for muirburn season extensions. Consideration could be also given to a range of practical tools such as amending the Muirburn Code, supporting capital and fuel costs associated with the muirburn equipment which brings wildfire protection capability and the funding of work to establish reliable water supplies for firefighting activities on moorland and woodland areas.
We hope that these suggestions are useful to you in your deliberations.

Game & Wildlife Conservation Trust
10 February 2009
Muirburn and the Climate Change (Scotland) Bill
Evidence from RSPB Scotland to the Rural Affairs and Environment Committee

RSPB Scotland believes that introducing the flexibility to allow Scottish Ministers to make any required changes to muirburn dates in the future, based on sound and growing scientific evidence about management measures that can be taken to help climate change adaptation, as provided for by Section 46 of the draft Climate Change (Scotland) Bill is a sensible approach.

We would highlight that the proposed clause is an enabling clause giving Ministers the power to make changes should they consider it “necessary or expedient to do so in relation to climate change”.

The evidence submitted below seeks to establish that the impacts of climate change are already evident in the habitats associated with muirburn and that Scottish Ministers should have powers similar to those in England and Wales to take account of these changes and vary permitted time for making muirburn as appropriate.

We would add that we also support the idea of making provision through a licensing system for out of season burning, to allow flexibility of approach. To provide the necessary safeguards for the natural heritage from out-of-season burning, we consider that a licensing system should be put in place and it seems to us most appropriate that such a system is administered by Scottish Natural Heritage as the Scottish Government’s advisors on nature conservation.

Such a licensing system would, as mentioned, enable a flexible approach whilst a change in the unlicensed dates would reflect the needs of a changing climate and bring Scotland into line with England and Wales. We would welcome amendments to the draft Climate Change (Scotland) Bill to enable such a licensing system to be established at the same time as any changes in the permitted times for making muirburn.

Compliance with the Muirburn Code is presently a condition for the receipt of Single Farm Payment and should continue to be so.

Climate change impacts on moorland
A recent study commissioned by Scotland’s Moorland Forum from the British Trust for Ornithology (BTO Research Report No.362, March 2005), based on substantial bird nest record data, has shown that a number of key moorland breeding bird species are breeding earlier. It is suggested in the report that this may be a response to climate change. In addition, a number of these
“moorland specialist” species, including hen harrier, merlin, golden plover and dotterel are listed on Annex 1 of the EU “Birds” Directive, requiring special conservation measures to be taken to protect their populations. Most of these species nest on the ground in either heather or grass and their nests and dependent young are therefore at risk from burning events. The BTO report cites lack of evidence of the current spatial effects of muirburn on the populations of Annex 1 (and other) bird species.

In the north and west Highlands of Scotland in particular, it has become customary for serious wildfires to break out usually in April and May. There have been many such serious incidents in recent years, which have caused serious damage to moorland, forestry, and nature conservation interests, as well as tying up fire service resources. With dryer springs, brought about by climate change, and therefore an increased risk of such wildfire events, we believe that it is essential that the Scottish Government provides some greater clarity on muirburn dates at the end of the season.

In recent years, there has been an increased prevalence of heather beetle outbreak caused by climate change. Heather beetle infestation has caused heather die off and loss. This has occurred on sites such as our Abernethy Nature Reserve, which is a Natura 2000 site. The infestations of heather beetle are exacerbated by warm summers, which “stress” the heather and make it more susceptible to heather beetle attack, as well as warmer winters, which improve survival of heather beetle larvae. Both wet summers and warm winters are becoming more prevalent due to climate change. The recommended treatment for heather beetle infestation is burning of the affected areas as soon as an outbreak is detected to reduce spread of beetle attack. We can therefore see that a strong case might be made in such circumstances for a licence for out of season burning to take place in order to protect the wider heather resource, and possibly also to protect the biological interest of Natura 2000 sites.

Provisions in England and Wales
In England and Wales there is provision under the Hill Farming Act 1946 (as amended) to allow Defra and the Welsh Assembly Government to amend the permitted dates for making muirburn, and for issuing licences for out of season burning. Indeed, Defra have now amended the upland burning end of season date in England to “sun down” on 15 April. In Wales, the Welsh Assembly Government has introduced end of season date of 31 March. These measures have been taken by the authorities to prevent soil erosion and pollution of water courses, as well protection of biodiversity and adaptation to climate change. We support the idea of similar arrangements in Scotland.

RSPB Scotland
29 January 2009
SCOTLAND AND CLIMATE CHANGE - GETTING IT RIGHT

Friday 27 March 2009
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Scottish Parliament

Scotland and Climate Change - Getting it Right

Friday 27 March 2009

[THE PRESIDING OFFICER opened the meeting at 10:00]

Opening Remarks

The Presiding Officer (Alex Fergusson):
Good morning. The noise that you can hear over the sound system has never been heard before. However, today is a day of firsts in many ways.

I warmly welcome you to your Parliament and your debating chamber in Holyrood. It is a great pleasure for me, as Presiding Officer of the Parliament, to be able to welcome you this morning.

As you know, this event has been organised by the Transport, Infrastructure and Climate Change Committee of the Parliament to coincide with Parliament's scrutiny of the Climate Change (Scotland) Bill. I am very much looking forward to this morning’s contributions on a subject that, over the past decade, has leapt to the very top of the world’s agenda.

As many of you may be aware, the Scottish Parliament is this year marking its 10th anniversary. When the Parliament was established in 1999, it was founded on four key principles: openness, accountability, the sharing of power, and equal opportunities. The Scottish Parliament has taken its commitment to those key principles seriously and has sought to give effect to them through our policies and the actions that flow from those policies. That is why our committees meet in public, as, indeed, does the whole Parliament, and it is why we hold public events such as this one in our debating chamber. Events such as today’s allow people from outside the worlds of Parliament and Government to come here and speak directly to MSPs and ministers, and to affect directly the work that gets done here. To put it simply, we feel that politics is just too important to be left to the politicians. We politicians are much the richer when the widest possible participation is enabled, as it is by today’s event.

A transcript, of today’s proceedings will be produced, which it is intended will form part of the Transport, Infrastructure and Climate Change Committee’s final report on the Climate Change (Scotland) Bill. Today’s event is also being webcast live on the holyrood.tv website, and archive footage will be available on the site, which you can access from the Parliament’s website, after today’s event.

In addition to hearing from several keynote speakers during the course of today, there will be opportunities for everybody to contribute to debates on the issues that are before us. This is your Parliament, and today’s event is an excellent opportunity for each of you to have your say on an issue that affects us all. I encourage you to continue to engage with your Parliament long after today’s event and well into the future, whether it be through participating in committee events like today’s, attending one of the many events in our festival of politics in August, submitting petitions or engaging directly with your elected representatives. I hope that you have an interesting, informative and stimulating day.

I invite Patrick Harvie MSP, who is the convener of the Transport, Infrastructure and Climate Change Committee, to the floor of the chamber.

Patrick Harvie MSP (Scottish Parliament Transport, Infrastructure and Climate Change Committee): I echo the Presiding Officer’s welcome. It is a pleasure to be able to spend the day with you, discussing the Climate Change (Scotland) Bill and the global context that it sits in.

Members of the Scottish Parliament do not always have an opportunity to engage with global issues, due to the devolved workload that we focus on, but it is absolutely necessary that we engage with certain issues. The issue of climate change cannot be viewed parochially. We cannot see it as just Scotland’s issue—it is the global issue.

The last time that the G8 met in Scotland, in Gleneagles, we had a conference in the chamber, the then Presiding Officer having given us permission to do so. We invited MPs, academics, representatives of non-governmental organisations and others to debate the issues that the G8 would be debating and to send a message about population and development. It was an opportunity for MSPs to hear some of the voices from around the world not at second or third hand but at first hand, here in the chamber, and to arrive at a shared perspective. That event was hugely valuable, both for MSPs and our guests, so as part of our scrutiny of the Climate Change (Scotland) Bill, my colleagues and I thought that it would be worth while arranging a similar event to enable us to try to join the dots between what is happening in Scotland, what is happening in the United Kingdom and what is happening globally. It will be valuable to hear the voices of people who have a perspective on climate change that is different from the ones that we normally hear, as it is based on where they come from in the world and what is happening there, and is equally important. I hope that you will take the opportunity to scrutinise the
Climate Change (Scotland) Bill and what the Scottish Government is doing and put it in the context of those global issues, given that today is only a few months before the Governments will once again meet to find out whether a global deal can be agreed.

The committee has had a chance to get our teeth into the bill during our stage 1 inquiry. We have not yet submitted our stage 1 report, and we have not yet begun the more detailed scrutiny job of stage 2, when we will debate amendments. The engagement that you have with us today has a good chance of influencing the work that we do and of shaping our thinking as we approach that work.

We are in a period of minority Government. In the first eight years of devolution, ministers sat before committees to introduce amendments to bills knowing that, nine times out of 10, the votes were in the bag. That is not the case now. All MSPs in the Parliament have the opportunity to shape the bill and strengthen it if necessary. Many of you might agree that it is necessary to strengthen it, and we would like to hear the detail of your views on that.

I thank you for coming to the Parliament today and I hope that you will participate in a lively and constructive manner throughout the whole day.

The Presiding Officer: I draw the attention of all delegates to the day’s programme, a copy of which should be on your desk. I would like to take a few moments to go through the programme with you.

We have divided the day into two sessions, each of which will be preceded by a series of short presentations.

The first session will be on the impact of climate change across the world and action that is required or is being taken to adapt to or mitigate its effects. The presentations will be from the University of Edinburgh carbon management masters programme; Forhadul Islam, who is a political officer with the Bangladesh high commission in London; Paul McAlavey, from the European Environment Agency; Ahmed Moosa, from the Maldives; and Dr Ian Burton, from Canada. The morning’s debating and discussion session will be facilitated by Louise Batchelor. We will have a short break around 11.35 and lunch will be around 12.45.

The second session, which will be chaired by Alasdair Morgan, one of my deputies, is on the proposals that are contained in the Climate Change (Scotland) Bill and how they will fit with the international efforts that are discussed during the morning session. There will be presentations from Stewart Stevenson MSP; from the Scottish Government; Simon Pepper, an independent consultant on climate change; and Professor Donald Brown, from the United States of America. The session will also be facilitated by Louise Batchelor. There will be an opportunity for delegates to ask questions at the end of all the presentations when we move to the debate.
Opening Address

The Presiding Officer: Without any further ado, I invite Dr David Guggenheim to give the opening address. Dr Guggenheim is president of 1planet1ocean, as well as being a consultant in conservation policy and science. Based in Washington DC, he provides services to clients in the non-profit sector, governmental agencies and private industry.

The floor is yours, Dr Guggenheim.

David Guggenheim (1planet1ocean): It is a great honour to be here. I want to take this opportunity to commend the Scottish Parliament and the people of Scotland for their leadership, because it is precisely the sort of leadership that it is going to take to address the global issue that we face. I hope that, in a small way, my presentation can help you better understand what you are doing here and how it helps the rest of the planet, including the special part of the planet that I work for, which is that blue part of the planet—most of the planet; the 74 per cent of the planet that is covered in water, depending on which perspective you look at the earth from.

I want to tell you a few stories through that blue lens. As my colleague Dr Sylvia Earle stated so beautifully and with such a graceful economy of words, “no blue, no green”. If we do not get it right in the oceans, all of our green efforts are for nought.

I thought that I would start by telling you about one of the more bizarre jobs that I have had. You might remember something called biosphere 2 and seven individuals who volunteered, back in the early 1990s, to be locked inside a glass structure, wearing silly-looking uniforms, for two years and to try to survive in that sealed environment from what they could produce and grow. They had a 1 million gallon ocean with a coral reef and they also had a rainforest, a savannah and an area to grow crops.

I was brought in as a consultant, because things started to go wrong. All of a sudden, oxygen levels dropped to what they would be on the top of a 15,000ft mountain peak. It was difficult for people to breathe. Carbon dioxide levels increased to near-toxic levels. Food was scarce. On the screen, you can see a photograph of a younger version of me, one of the so-called biospherians. You can see that she is rather thin.

The lesson is clear: even in an environment that we supposedly controlled all aspects of, things went awry in unexpected ways, and did so extremely quickly. We need to apply that lesson to biosphere 1—the planet earth—and consider some of our actions as being part of an uncontrolled experiment that we really have to take responsibility for.

On Saturday, I was fortunate enough to be at the Explorers Club’s annual dinner in New York, at which the speaker was Edward O Wilson. He told us that half of all species could be extinct by the turn of the century, that a large number of species are disappearing even before we can discover them, and that by far the main cause of that is habitat destruction. He referred to climate change as being a form of habitat destruction.

In no place is the discovery of new species more relevant than in the oceans. Believe it or not, we have explored only around 3 to 5 per cent of our oceans. Every time that I put my head under water—whether it be when I am scuba diving or in a submarine—we find something new, like those black smokers in the Pacific that turned upside down the belief of nearly everyone of my age that photosynthesis was the only way to support life on earth and that nothing could survive without the sun. That is what we thought, but here was a colony doing just fine without the sun, thousands of feet under the water.

In 2007, we took a pair of submarines to Alaska, in an unusual partnership between Greenpeace and the National Oceanic and Atmospheric Administration, to explore the two largest underwater canyons in the Bering Sea, including one that is twice the size of the USA’s Grand Canyon. On what we considered to be just a typical day at the office, we conducted some transects along the bottom and, if we saw anything unusual, we headed off, took some close-up video and maybe collected small samples. On the screen, you can see a little patch of sponges and the manipulator arm dropping a sponge into a basket. That is no big deal, except that human eyes had never seen that sponge before. That is just the first of many more species that we expect to find from that expedition.

10:15

I have been involved in expeditions off south-west Florida to document the deepest coral reef in the continental United States. We pulled up what is shown on the screen, which is about the size of a dinner plate. It looks like a purple blob, until we see the two antennae on the right side. That is a giant and previously undescribed nudibranch. It is
kind of cute. Essentially, a nudibranch is a sea slug. I could go on and on all day with such examples. The point is that we are in a period of discovery in our oceans.

We are also discovering how the oceans work. The screen shows one of my favourite faces—that of a grouper in the Caribbean. We were off the west coast of Tampa, Florida. Each of the craters on the bottom—this is approximately 350ft deep—is about the size of a back yard swimming pool, is filled with fish and has a lot of exposed substrate. We were very curious. What in the world were we seeing and why was it there? Coming into the picture in the background is the explanation—a red grouper. Red groupers dig those holes. They are ecosystem engineers that modify the environment. All the little fish seek the shelter offered by that substrate, then the groupers eat those fish. The groupers are farmers—they are clever. There are other such examples. The screen is showing a tilefish burrow, which is further south. These are large mounds that use the same idea of attracting lots of other animals to the habitat.

The point is that fish are more than just fish—they are an essential part of the environment. I am showing a video in which we return to Alaska. What we see down in the deep parts of the ocean is not at all what we expected, at least when I was growing up, when we thought that the deep ocean was devoid of life. Up in the Bering Sea, our dives went down to about 2,000ft. That area is rich with life that we are just beginning to understand, including corals, which are the oldest living animals on the planet—some are up to 4,000 years old.

If you want to live at the bottom of the Bering Sea, you must deal with a lot of pressure, the dark and the cold, and you must have something to hang on to, because the undersea current is powerful. Even in our submarines, we found negotiating that current challenging. When I filmed the coral that is coming into the frame, my foot was floored on the gas to stay in position against the current. What does an animal do down there? One thing that a fish can do is swim against the current, but that takes a lot of energy. However, a fish that was born flat has got it made, because it can lie on the bottom and let the current wash over it, like the halibut on the video—that is a great strategy. That is what these guys do. In such a high-current environment, the bottom is full of depressions where fish such as the halibut dig themselves in, so all we see is their little eyes peeking above the sediment. That is another example of how ecosystems work. The beauty of such ecosystems is in the detail.

Each little fish-shaped depression that we can see is full of other animals—in this case, shrimp. For a shrimp, such a situation is ideal—it just gets down into the little hole, out of the current, and food particles start to fall on top of it. It just sits there and eats. That is a great survival strategy.

I wish that I had the time to show you the rest of this video. You can see one of the other things that we found—these unusual rocks. I thought that they were meteorites—they did not look as though they belonged there—but they were covered with life, as they provided something to hang on to. There were corals, sponges and octopuses. So where did those rocks come from? They came from glaciers. They were caught up in icebergs that floated down to the middle of the Bering Sea, melted and dropped the rocks.

Again, something seemingly insignificant such as where a rock falls or where a fish lies constitutes the fabric of ecosystems and shows us how they work. Sometimes, it is those little things that matter the most, and the big things that human beings are doing to affect those little things cause unexpected changes through the reactions of our ecosystems. That happens when we take too many fish from the sea or when global climate change affects where fish can live and how far south the stones that are caught in icebergs drop.

Earlier this month, I spent some time in Barrow, Alaska, which is the northernmost settlement in North America. I heard a lot of stories from locals there about the change in ice that has taken place in that community, which is another dramatic change that I am sure many of you have seen the statistics about. For that community, which survives on whaling, it has been devastating. I heard from an emergency response person who said that half the town ended up floating out to sea on a piece of the ice sheet that broke off. That turned into an interesting rescue operation. On the screen, you can see the record lows there. Ice also provides a substrate for algae to grow on, which is part of the primary production in the food chain in our oceans, so it is very important.

I spend a lot of time studying coral reefs. We hear a lot about them, but why do we care so much about them? There are not that many coral species—maybe 1,000—but it is estimated that a quarter of all marine life forms depend on coral structures for their habitat. We have already lost 20 to 25 per cent of our coral reefs and, the way that things are going, another 25 per cent will be lost in the next 20 years. One of the problems is temperature. It has been stated that corals are already living near their thermal tolerance. They have a thermal tolerance range of only about 1°C—the red line that you can see on the graph is the threshold beyond which they just cannot survive. We are close to reaching that threshold on a global average basis.
Other things are going on besides temperature change, including the fact that so many human beings live in close proximity to those coral reefs. In this video of our expedition to Veracruz, Mexico, about five years ago, everything that you see is dead. The skeletons of the corals are still there, but the corals have died. In a 15-year period, 95 per cent of those corals died. That is another example of how fast things can happen due to temperature change, overfishing and water quality issues.

Those factors are of great concern, but we can now add something new to the list—ocean acidification, which is perhaps the most underpublicised consequence of fossil fuel emissions. The dissolving of carbon dioxide in ocean water creates a more acid environment. Those beautiful cliffs of Dover are made of coccoliths or coccolithophores, which are part of the plankton food chain that secrete calcium carbonate, like so many other marine species, including corals. However, in an acid ocean, it is unlikely that many of those species can survive.

The graph shows a time series that begins in the upper left, where red is good. In the lower right, you can see that there is not much red left. The purple and dark blues are bad. Those very acid areas happen to occur in some of the most productive oceans in the world, including the Southern Ocean, which means that the foundation of the marine food chain is imperilled, and that is critical.

What a great pleasure it was to wake up in the morning and read in the Washington Post about the largest marine reserve in the world. That is one of the short-term activities, whether on land or sea, that are relatively easy to do and which buy us time for the future, because they maintain the integrity of all those little relationships that I spoke about earlier.

In January, one of the last Bush Administration acts was, ironically, to announce the largest marine protected area in the world—the size of Spain—in the United States south Pacific territories. Had we had the foresight to protect more areas, the everglades would not now be undergoing the largest environmental restoration in human history, costing about $11 billion, to put the ecosystem back together. We are all finding that preserving intact such ecosystems buys us time on climate change and is also economical in the long term, because we do not have to pay to restore them. We are finding ourselves engaged in an exercise in triage—sadly, we cannot save everything. In looking at conservation in the oceans today, many folk are trying to figure out what we can save that will endure and eventually repopulate areas downstream. Protected area networks are the latest idea in the science.

I will talk about the United States of America for a moment since that is where I am from. Tragically, in the Reagan years, the environment became a polarising issue in our politics at the highest level. I have not seen that duplicated in any other country. Unfortunately, the spin doctors, including Rush Limbaugh, whom many of you might have heard of, have done nothing but perpetuate many myths, including that climate change is not happening or is not real.

We were really hamstrung to make progress until recently. A few things changed, one of which was that four of the five warmest years since the 1890s all occurred in the early part of this century. We also had some of the most devastating hurricanes, including hurricane Katrina. We had 21 named storms in 2005 that killed thousands—hurricanes Katrina, Wilma and Charlie were among the five most costly hurricanes. We also saw the price of gas go up. Those things, and the uncanny timing of a movie by a former Vice-President of the United States, captured the American imagination and spirit, and made people understand that climate change was real and that we needed to deal with it, but we still had a little way to go.

Our President at the time was clearly impeding progress and not engaging. You can imagine my glee, therefore, when I stood in the Mall on inauguration day and heard Barack Obama say the word “science” during his inauguration speech:

“We will restore science to its rightful place”.

That was the campaign platform of the Obama Administration, which is focused on reducing oil dependence, creating new green jobs and reducing greenhouse emissions by 80 per cent by 2050. That might sound familiar to you. I am pleased to say that I do not see any signs that the Administration is wavering at all. It is only March, but it is a case of so far, so good.

10:30

The budget stimulus package includes projected revenues from cap and trade emissions. There was a stark difference between the Obama platform and the McCain platform, which refused to put any mandatory limits on greenhouse gas emissions. We still do not have a comprehensive greenhouse gas bill in the United States, as a lot of the details have still to be worked out, but the placeholders have made their way into that huge, unprecedented budget.

There has been a reversal of the Bush Administration’s policies that prevented states such as California from asserting their leadership. The state of California wanted to exceed federal standards for automobile emissions, and 12 other states have now joined in—Obama has given
clearance for that to happen by establishing a waiver from the Environmental Protection Agency.

I will wrap up by focusing on where we need to go from here. At the Explorers Club last week, I heard that the commander of the manned mission to Mars is currently in elementary school. We could say the same thing about successful climate change policy. If we do not engage the next generation successfully as we move ahead, our plan—in whatever form—will not succeed.

Some of you know that I have been travelling to all 50 US states—it was my nutty idea, when I turned 50 years old in October—to share with children stories about the oceans and exploration and to try to get them excited about science and the frontiers that await them under water. I have been to places such as Kansas, which is a community in the geographic centre of the country in which half the kids have never seen an ocean. Most recently, as I mentioned, I was up in Barrow in Alaska, where I was one of two people in the classroom—the other being the teacher—who had never eaten whale meat. I got very different perspectives from those kids.

I have noticed that we are losing our perspective on the way that the planet used to be. I do a lot of work in Cuba, and—trust me—the sea turtles that were described in Christopher Columbus’s log book as being three to four feet long and in such vast numbers that they covered the sea are not found there any more. In fact, the number of sea turtles in the world today is only 1 per cent of what it was in Christopher Columbus’s time—we have pretty much eaten the rest and destroyed their habitat.

The next photograph is of the kids of a fisherman I work with in the Virgin Islands, holding up a picture of the biggest fish that their dad caught that day. I do not know whether those look like big fish to you, but to me they look like something that I would put in an aquarium. The situation in the Virgin Islands is serious: that is what is found at the fish market, and those kids are growing up thinking that those are big fish. That is a phenomenon known as shifting baselines, and it undermines our ability to make policy, because we are losing our reference points. None of us was alive so we cannot remember what the planet used to be like.

There is another problem. The book “Last Child in the Woods” is focused on saving American children from nature deficit disorder. The average American kid—believe it or not—spends less than four minutes outside in nature in unstructured activity, which is dramatically different from when I was a kid. The kids in Juneau, Alaska, spend a lot of time outside, but a teacher in Morrow in Georgia told me that she took some students in high school to the trees at the back of the school to do a science experiment, and they thanked her—they said that it was the first time that they had ever been to the wilderness. That is the sort of perspective change that we are dealing with.

I am afraid to say that with that lack of visitation comes fear. People are deathly afraid of nature. They are especially afraid of the oceans, and in particular of sharks. I loved what a fourth-grade teacher in Florida told me fear was—she said that it was simply an acronym for “false evidence appearing real”, but it is a significant obstacle. I have noted excessive hand washing among kids. Once they come into contact with nature, they feel unsanitary and immediately wash their hands or use wipes. We are in an age in which we are losing our perspective.

I have come to realise that the picture on the screen is many kids’ view of what a scientist is. My job has been to show them that, unlike the man in the picture, being a scientist can be very cool, and to give them an idea of some of the technology that they can look forward to, for example cities under the sea. I show them pictures of the inauguration on the Mall, which I watched with 2 million of my closest friends. I was moved by the fact that kids were involved. People who were too young to vote were paying attention. The fact that young people were involved in the election is really inspirational to me. I ask young people to put notes in bottles that I will take back to the Obama Administration so that it can hear their words. The fourth grader from Alaska who is on the screen wrote, “Dear Obama, we have crabs and whales. Can we keep them?” There is something in the way that a kid writes.

I am deeply grateful and honoured to be here. Despite the difficulties ahead, there is great hope. When it comes to engaging the next generation, the good news is that even the kids who have never seen the ocean love it and really care about the environment. It is up to us to ensure that we continue that work with them. [Applause.]

The Presiding Officer: Dr Guggenheim, it is we who should thank you, because I am quite sure that if you inspire those children across America in the same way that you have inspired us, we can expect great things from the next generation. Thank you very much indeed.
The International Impact of Climate Change

The Presiding Officer: We will now move into the first debating session which, as I mentioned earlier, is on the impact of climate change and the action that is required or is being taken to mitigate its effects. Shortly, representatives of the University of Edinburgh’s carbon management masters programme will make the first presentation. The carbon management masters programme is a landmark collaboration between the school of geosciences and the school of business and economics at the University of Edinburgh. We have with us today lecturer and programme director Dr Dave Reay, who has drawn together six students from the programme: Lilian Rushaigo from Tanzania, Somanath Narayan from India, Kushal Gurung from Nepal, Rahul Barua from the United States of America, Mike Passway from the United Kingdom, and Ibnu Najib from Indonesia. Lady and gentlemen, you are most welcome to join us.

Ibnu Najib (University of Edinburgh Carbon Management Masters Programme): Good morning, representatives of the Scottish Parliament, ladies and gentlemen. I would like to take you around the world with stories from our home countries that will illustrate two main messages. The first message is that climate change is having an impact now; its impact is not decades or centuries away. The second is that global co-operation and justice are imperatives in answering the challenges of climate change.

I will begin by saying a little about myself. My name is Ibnu Najib. I come from an archipelago of more than 17,000 islands—Indonesia. We have not been able to count successfully the exact number of our islands, but our small islands are disappearing. Although our islands make up only 1 per cent of the world’s land surface, one tenth of the world’s plant species are in Indonesia and, after Brazil and Congo, our rainforest is the third largest in the world.

Unfortunately, despite the important role that our forest plays as the world’s lung, it is endangered. Natural causes and market demand—national and international—have halved our forest in less than 60 years. The rush to seemingly quick and miraculous fixes such as biofuel has further degraded our forest. I am happy that the world, including developed nations, has started a discussion to reverse the flawed logic of the market that allows trees to be worth more economically dead than alive. However, I am worried by the fact that most schemes stand firm on carbon trading and utilise most of the financial engineering that has led to the current disastrous financial crisis. As there is discussion here, too, about inviting business schemes into forest management, I would like to call more attention to the social justice aspect of the issue.

Lilian Rushaigo (University of Edinburgh Carbon Management Masters Programme): I am Lilian Rushaigo from Tanzania, east Africa, where many climate change impacts are already apparent. Local communities have noticed changes in rainfall patterns and unexpected and serious droughts, sometimes in regions that are heavily dependent on rain-fed agriculture. Diseases such as malaria that are common at lower altitudes and in warmer areas are affecting populations in regions that were previously uninhabitable by mosquitoes. Rises in sea level in coastal areas of Kenya and Tanzania such as Kunduchi and Diani Beach are eroding most of the coasts. Some family homes, fish markets and beachfront hotels have literally been swept away.

One of the most obvious impacts of climate change in the region is the receding glaciers of mountains such as Kilimanjaro in Tanzania and Rwenzori in Uganda. That development has had adverse effects on the surrounding ecosystems, with reduced run-off leaving local communities and wildlife to fight for the remaining resources.

All the impacts that I have described are affecting people who are heavily dependent on the environment for their livelihoods and are reducing people’s chances of survival. Capacity building and investment in adaptation efforts are crucial in the region and in Africa in general.

Kushal Gurung (University of Edinburgh Carbon Management Masters Programme): Namaste. I am Kushal Gurung from Nepal, the land of mighty mountains that, sadly, may not remain snow capped for ever. Our glaciers are melting rapidly because of climate change. That has led to the formation of unstable glacier lakes, 20 of which may contribute to significant flooding. So far, only one lake has been contained to a safe level, but the risk has still not been completely eliminated, due to a lack of funding—and there are 19 still to go.

The Himalayas also contain the headwaters of many rivers that run to countries such as China and India. Glacial retreat may dry up those rivers, endangering the source of drinking water for almost one fifth of the world’s total population. Furthermore, Nepal relies largely on rainwater for agriculture, and lately the monsoon has become less predictable. That has made poor farmers even more vulnerable. Our resources are not adequate to enable us to monitor and predict climate change impacts; that makes it difficult for us to gear up for adaptation efforts.

It is an irony that Nepal, whose carbon footprint is 10 times smaller than that of the UK, should
suffer in the way that I have described. For us, the Climate Change (Scotland) Bill represents action to correct that inequity. However, the bill could be strengthened by the inclusion of measures to support developing countries in adapting to climate change.

Somanath Narayan (University of Edinburgh Carbon Management Masters Programme): I am Somanath Narayan from Bengaluru, India. As an Indian citizen, I feel privileged to witness what is arguably the making of history. If strengthened, the Climate Change (Scotland) Bill could lead the world in moving towards a low-carbon economy. How the Scottish Parliament decides to pave that new road is of particular interest to India. My country and its people are acutely aware of the risks of climate change. India has a 7,500km coastline that is densely populated and vulnerable to flooding and rising sea levels. Predicted future climate change impacts include a fall in agricultural productivity and melting glaciers, affecting vital water resources.

My country understands that climate change is a global challenge that can be met only when each country takes appropriate and equitable steps in the right direction. India is a developing nation that aspires to bring electricity to 600 million people who are currently living without it, to eradicate poverty and to provide social and economic security by creating a sustainable growth trend. As such, our path to tackling climate change is bound to be different and more strenuous than yours here in Scotland. However, I am sure that Scotland, as a developed country, will lead the process by endorsing a strong, successful climate action plan from which others can learn. Thank you for listening.

10:45

Rahul Barua (University of Edinburgh Carbon Management Masters Programme): I am Rahul Barua and I am from the United States. As each of us here today works toward climate solutions, I tend to agree with my country’s new Secretary of Energy, Dr Stephen Chu, that the American public has not yet “gripped in its gut what could happen.”

A few citizens may have heard of Kivalina, Alaska, a village that has recently filed suit against ExxonMobil in the face of rising sea levels, and Californians have been warned of the potential loss of all agriculture, but the link to America’s unchecked emissions and overconsumptive lifestyle has rarely been propagated.

I am proud that we now have an Administration that understands the severity of the challenge and the urgent need for action, but we are new to this. The scope of the Climate Change (Scotland) Bill exceeds its national boundaries and is a powerful opportunity to help to determine the pace, sincerity and level of commitment on climate change from all developed nations.

Mike Passway (University of Edinburgh Carbon Management Masters Programme): Good morning. My name is Mike Passway and, as you can probably guess, I am Scottish. As Scotland is a country with warm-hearted people but a cool climate, many Scots welcome the prospect of global warming—after all, a rise of a couple of degrees centigrade is welcome, particularly on a nippy morning like today.

However, the bigger picture is far from benign and we have already seen very damaging effects of climate change in Scotland and elsewhere in the United Kingdom. For example, several severe landslides have occurred in the Highlands and it has been worked out that it would be too expensive to try to mitigate the effect of those landslides as the cost would run into billions of pounds. Coastal erosion is another major problem. For example, the rising North Sea could completely inundate the Old course at St Andrews, the home of golf, giving a whole new spin to the expression “water hazard.”

Landslides, floods and other horrific aspects of climate change have occurred regularly around the UK in recent years. My colleagues have highlighted the international significance of the Climate Change (Scotland) Bill, but it clearly has great meaning for all of us in the UK. In the pivotal year of 2050, I hope to be a sprightly 89-year-old, but I also hope that my nine lovely nieces and nephews, who will then be about the age that I am now, will be even more involved in the fight against climate change.

Ladies and gentlemen, we face a global and complex challenge but, with brave hearts, focused minds and strong international co-operation, we can overcome it.

Ibnu Najib: Members of the Scottish Parliament, ladies and gentlemen, the story that we have told describes the urgent need for strong action and commitment now because the impact of climate change is happening right now all around the world, including in Scotland, as Mike Passway told us. Our story also calls for action that can protect the silent voice of future generations. After all, how old will you be in 2050? We might not all be here, but my children and your grandchildren will be.

Our story also calls for more global co-operation. My country and Somanath Narayan’s country, for example, will benefit massively from Scotland’s expertise in renewables. As Lilian Rushaigo and Kushal Gurung illustrated previously, many developing nations such as ours need more support if we are to improve our adaptation
capability before time runs out. Our story also calls for us to revisit the current flawed logic that has allowed the market too often to commodify conscience and escape responsibility while marginalizing parts of our global community.

Strong, just, and immediate global action is our message. As Rahul Barua said previously, the Climate Change (Scotland) Bill can exceed its national boundaries because it will invite a higher level of commitment from America and other developed nations. We are grateful for the opportunity to be here and we sincerely hope that our messages will be incorporated into what can truly be the strongest climate change bill in the world.

The Presiding Officer: I thank you all very much indeed on behalf of everyone here for showing such a wonderful commitment to this subject and for a stark reminder of why we are all here today.

Our next speaker is Forhadul Islam, who is currently political counsellor at the Bangladesh High Commission in London, where he works to maintain and strengthen Bangladesh’s bilateral relations with the United Kingdom and Ireland. He is also assigned to work with the Commonwealth and with the International Maritime Organization. Mr Islam, the floor is yours.

Forhadul Islam (Bangladesh High Commission): Honourable Presiding Officer, learned speakers, distinguished ladies and gentlemen—a very good morning to you all. I am honoured to be here among people who are so expert in climate science, whereas I am no expert at all. As requested by the Scottish Parliament, I will read out a brief paper on the impacts of global climate change and the response of Bangladesh from the political point of view.

The changing cycle of nature—longer droughts, anomalous rain patterns, the melting of glaciers—tells us that all nations, rich or poor, will be affected to a greater or lesser extent in the coming years. None can escape the effects of climate change.

In Bangladesh, the climatic situation is evolving fast. Due to this, climate change is viewed as a national security issue in Bangladesh. With carbon emissions of only 145kg per capita—as against the 21 tonnes of carbon released by the average American citizen—Bangladesh is a victim of climate change. Bangladesh seeks strong political commitment and the support of the international community to assist in implementing and achieving a long-term strategy to combat the challenges of climate change. We hope to see climate justice prevail through future global legal instruments.

The longer it takes us to start building a climate-resilient society and economy, the greater our country’s vulnerability will be and the more expensive it will be to remediate the impacts. We need to act now. Unabated growth in carbon emissions and the resultant temperature rise will mean coastal inundation, recurrent floods and cyclones and millions of environmental refugees. Building up the necessary resilience is urgently required, as delayed action will increase risk and cause phenomenal damage and loss. The international community—in particular, our development partners—have obligations to support and finance our right to climate-resilient development. Urgent action to reduce global greenhouse gas emissions is the only chance to slow global warming to prevent Bangladesh and many other vulnerable coastal and littoral countries from facing a catastrophic future.

Bangladesh is ranked as one of the most vulnerable countries in the Intergovernmental Panel on Climate Change’s recently published fourth assessment report. In the section on “Observed climate trends, variability and extreme events”, the report notes that average temperature in Bangladesh has registered “An increasing trend of about 1°C in May and 0.5°C in November during the 14 year period from 1985 to 1998”.

The report says that “Annual mean rainfall exhibits increasing trends” and there have been “Decadal rain anomalies above long term averages since 1960s” and “Serious and recurrent floods … during 2002, 2003 and 2004”.

It also says that “Salt water from the Bay of Bengal is reported to have penetrated 100 km or more inland along tributary channels during the dry season” and “The precipitation decline and droughts … have resulted in the drying up of wetlands and severe degradation of ecosystems.”

In facing climate change impacts, there is political will in Bangladesh. The Government of Bangladesh recognises the vulnerability of the country, its people and overall development efforts due to the adverse affects of global warming and climate change. As one of the leaders of the less developed countries, Bangladesh has been actively engaged in the international response to climate change, with a view to ensuring that its concerns are addressed in any global framework to respond to climate change. As a demonstration of our spirit and will to commit to the collective force in combating global warming, Bangladesh
ratified the climate convention in 1994 and the Kyoto protocol in 2001.

I will now talk about some of the recent significant interventions. On 2 February 2009, the newly elected Government of Prime Minister Sheikh Hasina set up two committees—the climate change strategy and action plan committee and the climate change fund management committee—to ensure that people get the maximum benefits of the sum of around 3 billion taka that is allocated in the budget for implementing mitigation and adaptation plans in the current fiscal year.

Previously, the Government set up a secretariat on climate change under the Ministry of Environment and Forests to monitor activities to combat climate change and to deal with the climate change fund. The Government of Bangladesh has initiated a number of agricultural programmes to help to manage climate-related impacts. For example, crop diversification has helped to develop drought and salinity-resistant rice varieties. Other programmes, such as the agri-forestry programmes, the programmes on the production and use of biogas and the organic fertiliser programmes are most related to climate change mitigation.

In April 2007, at the United Nations Security Council, Bangladesh supported the United Kingdom position that climate change is an emerging concern for security. At the high-level UN event in September 2007, the former chief adviser of the caretaker Government of Bangladesh made a statement urging the global community to ensure the rights of vulnerable people. At the Bali conference in 2007, during the climate change negotiations, Bangladesh was instrumental in creating the necessary pressure to build momentum among countries that were reluctant.

At the regional level, Bangladesh devoted considerable energy to reflect its climate change concerns with regard to development. That has led to the South Asian Association for Regional Cooperation declaration on climate change. Bangladesh has legal instruments, policies, plans and programmes and is implementing strategies, approaches and principles to start its journey towards a climate-resilient Bangladesh. The overall goal is to increase the country’s resilience to climate change in order to reduce the adverse effects of climate change on various economic sectors and to minimise human suffering.

Bangladesh is a small land with a huge population, where human activities are huge. Therefore, addressing climate change involves huge resources, in terms of capacity and funding.

The Bangladeshi Government is vigilant in tracking the challenges of climate change and is taking due preparation to build the resilience of the country. Bangladesh has already considerably invested in infrastructure development to reduce risks and increase the capacity for adaptation over time. The success of Bangladesh’s relief and rehabilitation work in combating calamities such as floods and cyclones is acclaimed by the international community. The mechanism that we follow inspired the imagination of others who are in similar situations. A compliancy approach to climate risk management and adaptation has recently been taken.

However, it is not possible to address everything at one time. As such, it is necessary to adopt an overarching strategy that will address the immediate concerns. That approach involves targeting specific locations, communities, sectors and areas of special importance that can lead the way in addressing similar concerns in other parts, sectors, communities, ecosystems and so on. Bangladesh has designed a climate-resilient development framework and has accordingly prepared tools, mechanisms, partners and processes. This is the time to develop appropriate strategies, select priorities, targets, pilots and assessments for further replication in the future.

11:00

The Presiding Officer: Thank you for that interesting talk, Mr Islam. I thank all of our speakers for setting such a vivid backdrop to the debate that will now take place.

Our first discussion session will give you an opportunity to discuss any of the points that have been raised or, indeed, any points that you wish to raise. Before we begin, I will quickly cover some housekeeping rules.

I encourage everyone to participate as fully as possible. If you wish to speak please raise your hand. Once you have been invited to speak, you should stand up and wait for the red light on the microphone to go on—it will be switched on for you; you do not have to do anything to it. It would be helpful if you could give your name and that of the organisation that you represent. In order to allow as much participation as possible, I ask you to restrict your contributions to about two minutes.

I have great pleasure in handing over to Louise Batchelor, who will manage the debate for us. Louise is a journalist and well-known broadcaster who has long specialised in energy and environment issues. She has worked as a presenter and reporter on many television programmes, including “Reporting Scotland” and “Newsnight” in London, and we welcome her to the Scottish Parliament today.
Louise Batchelor (Facilitator): Thank you, Presiding Officer.

I too welcome everyone who has come together for this quite extraordinary gathering. Present today are members of Holyrood’s Transport, Infrastructure and Climate Change Committee, some of whom represent areas that are heavily dependent on the oil industry but find themselves working on potentially world-leading legislation. We also have with us people from countries with some of the heaviest carbon footprints and with some of the lightest. Also present are people from various walks of life in Scotland: people from communities and NGOs who are working hard to find ways of reversing or mitigating the effects of climate change and of being less dependent on fossil fuels.

Throughout today’s debates, I will try to keep our eyes on the bigger picture. There will be a lot of nitty-gritty to consider, but we must remind ourselves constantly that climate change is already happening and that we are already seeing the effects of it, here and—more so—abroad. We must remind ourselves of the urgency of today’s proceedings.

We have heard about the impact on the oceans, the interconnectedness of all life and the fact that something that happens in Alaska can affect something that happens on the ocean floor. We have heard about the vulnerability of Bangladesh and from the University of Edinburgh carbon management programme about the various threats and impacts of climate change.

I do not know how many people here have seen the new film on climate change, “The Age of Stupid”, which has been showing in Edinburgh this week. I saw it on Wednesday, but it does not matter whether you have seen it because the title says it all. It asks a simple question: why are we all so cheerfully participating in our own destruction? What is wrong with us? Why do we not get it, even though we keep on talking about it? I would say that I am one of the guilty parties in that regard. We still keep flying, for example, and one of the messages of the film is that we should not. However, if we did not fly, we would not have gatherings such this one, which might mean that we were unable to make the progress that we need to make.

That is all that I am going to say, because I want to hear your reactions to the speakers that we have heard from so far. Lots of themes have arisen. Why is there not more of a sense of urgency? What more could we in Scotland and the developed world do to help the developing world? What support, advice and resources can we make available? We heard a call from Nepal for more support, and we should bear it in mind that we have 10 times its carbon footprint. What is the role of carbon trading, and what will be the impact of the global recession? It is over to you. Who is going to start?

John Riley (Scottish Action on Climate Change): I am from Scottish Action on Climate Change and Carbon Neutral Biggar.

First, I would be interested to hear Mr Guggenheim’s view of Jim Hansen’s suggestion that we need a target of 350 parts per million of CO2 in the atmosphere. We are at 387ppm at present, and the figure is going off the scale. Does Mr Guggenheim believe that we should aim for a target of 350ppm if we are to avoid a 2°C increase in temperature? If so, it has been suggested than an 80 per cent reduction by 2050 is simply not enough. We would need a position of zero carbon by 2030, which is quite different from the scenario that is suggested in the Climate Change (Scotland) Bill.

Secondly, how are we going to achieve the reduction? By persuasion or economic growth? I do not think so. We have to introduce international carbon rationing in the form of contraction and convergence in order to help the developing countries to work towards equal per capita carbon entitlements. If they do not use their entitlements, they can sell them to the western world and generate an income, which will help them to develop. We will not achieve zero carbon by 2028 unless we move towards international carbon rationing—and unless we do so extremely quickly.

If people do not understand contraction and convergence, I have brought a copy of a CD for everybody at the event. It was produced by Scottish musicians who believe passionately that we have to introduce international carbon rationing and who have written a song about it. There is also a voiceover which explains what contraction and convergence is. Please take a CD away with you.

Louise Batchelor: There were a lot of detailed points there, but basically they come down to whether we are being ambitious enough. Are we going to achieve enough?

David Guggenheim: John Riley asked enough questions to keep us busy for the rest of the day, but the central question was whether our target is the right one. On that point, there is good news and bad news. Through my lens of blue, the good news with regard to marine life is that our targets are adequate to address some of the most critical issues but, when it comes to ocean acidification, the problem is not temperature but the dissolution of carbon dioxide in sea water to create a more acidic environment. I heard Dr Nancy Knowlton of the Scripps Institution of Oceanography speak last weekend, and she said that we will require additional sequestration tactics and
technologies—and perhaps some techniques that have not even been invented yet—to begin the active removal of carbon dioxide from the atmosphere, the point being that carbon dioxide has a residence time of at least a century in our atmosphere. The level might already be beyond the breaking point for some species of marine life in the oceans.

That is the short answer to what I expect will be a longer discussion.

Louise Batchelor: Yes—that is a big topic. Does anyone else want to comment?

Ibnu Najib: I would like to comment on contraction and convergence in relation to carbon rationing. Coming from a developing country, I agree with contraction and convergence, but I have some reservations in that carbon rationing should address the supply side more than the demand side. As people from developing countries, we have seen in the various international negotiations that, when it comes to limitations on countries, the stronger countries always have an excuse and find ways to navigate away from the limitations.

I agree with carbon rationing, but it should be aimed more at the supply side of corporations in the public domain. We know about them, but I am afraid that, when we target the demand side, the market mechanism and the rationing will go in the same direction as the injustice that has been happening and we, in the developing countries, will be the ones who suffer more again.

Louise Batchelor: So what can be done to cut down on the supply side? Does anyone want to speak specifically on that?

Justin Kenrick (Pedal Portobello Transition Town and Holyrood 350): The issue on the supply side is not about trying to cap people’s carbon emissions through their flying or whatever they do at ground level—that is not going to happen. It is about putting in the price at the top so that, for example, Exxon has to pay a huge amount to be allowed to put oil into the economy.

Basically, climate change is happening because carbon is being taken out of the ground, put through the economy and released into the atmosphere. The process is that simple. To stop that, we must prevent carbon from coming out of the ground, and I think that, on the supply side, we have to consider placing a huge price on putting carbon into the economy. We need Government legislation on that. The bill is absolutely fantastic, but even more fantastic has been the climate challenge fund, which has supported communities throughout Scotland as they have started to find ways of making a living and making life work without having to release so much carbon.

It has been superb to focus on what is happening in other countries, but we also need to consider how we can solve the issues on the ground here and make our lives better at the same time. The Fife diet is a great example of that. I do not know whether everyone has heard of it, but the idea is for people in Fife to eat only local produce, to avoid the carbon emissions from getting stuff from South Africa or wherever. In the beginning, it was seen as just Mike Small and a bunch of crazy mavericks doing something on the one hand, but a couple of weeks ago Roseanna Cunningham was at the launch as it was scaled up to a regional level across the whole of Fife, with everybody involved.

Such initiatives are about tackling climate change in a way that makes our lives better. Part of that is about addressing the supply side, ensuring that the financial cost of destroying the planet is too high for us here.

Louise Batchelor: Can I just throw something back at you? If we make fuel prohibitively expensive, what will we do about fuel poverty?

Justin Kenrick: That is very simple. In a cap and dividend system—you can Google the phrase—such as Peter Barnes has created in the States, Exxon and the other oil and coal companies would pay money into a trust fund, which would be divided equally between the population of the UK or of Scotland. Someone who was poor would get a wodge of £300 every month to help them to meet their fuel bills. Someone who was rich would get the same amount, but they would be paying a vast amount more because they would still be flying off to the Seychelles, running their two cars or whatever else. That would address fuel poverty immediately by redistributing the money that the companies pay, and the cap would be brought down slowly over time. If you Google it, you will find the scheme.

Louise Batchelor: Okay. Thank you very much.

Donald Brown will speak later, but he wants to say something in this part of the debate. He is from Penn State University, in the United States, and has previously been on a US delegation to United Nations climate negotiations. Donald, can you make fossil fuel prohibitively expensive? Can you tackle the supply side? How would that go down domestically in the States? As a rider to that, will America bring something meaningful to the table at the end of the year?

Donald Brown (Penn State University): There are competing theories about how we can address the supply and demand sides in relation to carbon emissions, but I am an agnostic about whether that can be done through caps alone or through taxation mechanisms.
The world is experimenting greatly with various methods of reducing carbon emissions, and I am happy to report that some US states have been extraordinary leaders in that over the past eight or nine years. Most people know about the Bush Administration, but they do not know that California and the western states have committed to significant reductions in greenhouse gas emissions or that the north-eastern states have capped carbon emissions in their electricity sector.

A great deal is being done at state and municipal level in the US, on climate change, that is not widely known about. Obama has indicated that he will bring a meaningful position to Copenhagen. The details are being worked out as we speak, so it is a little premature to say exactly what that position will consist of.

Louise Batchelor: I have heard that commentators in the States are saying that Obama will not be able to find anything that is acceptable to Americans by the time the UN talks start in December. Are you more optimistic?

11:15

Donald Brown: The real question is whether we will have domestic legislation in place before he comes to Copenhagen. It will be a fairly close call whether he can pull it off, and people are worried about whether he can come to Copenhagen with legislation in hand. Some forces are starting to organise against his doing that so we shall see.

Louise Batchelor: That is very interesting. We look forward to hearing from Donald Brown later.

To take us in a slightly different direction is Christine Wood from Tullis Russell.

Christine Wood (Tullis Russell Papermakers): I work for a paper-making company in Fife. We will announce very soon that we will build a biomass plant on our site and, although we are proud of the efforts that we are making, we can always do more. One idea that I heard about recently was to pay developing countries to keep the rainforests as they are and not fell them for palm-oil production or paper making by irresponsible companies. What do people on the panel think? It seems like an elegant solution to me, but there seem to be a lot of adverse comments about it.

Dave Reay (University of Edinburgh): Land use more generally—but including forestry—has been one of the big misses in international policy so far. Fossil fuel emissions get the headlines because they are major ones, but about 20 per cent of our greenhouse gas emissions from human activity comes from land use change, most of which is through deforestation. We need something much better than what we have to protect forests and soils from degradation. That will be one of the key tests of whether Copenhagen succeeds in mitigating climate change.

Louise Batchelor: I am not sure that you immediately addressed Christine Wood’s question, but it was interesting. I would to hear from Indonesia again.

Ibnu Najib: The mechanism referred to in Christine Wood’s question is called the reduced emission from deforestation and forest degradation programme in the United Nations. There are two important points to consider here. The first is the power of market solutions, and the second is lack of attention to the justice problem, which is actually the same point.

I was at the Poznań negotiations last year. The discussion about the effort to make trees economically worth more alive than dead is dominated by business interests. The International Emissions Trading Association is the biggest non-governmental organisation in the discussion. Indigenous people have been shouting outside the conference room and asking for more attention. Everyone has been saying ahead of Copenhagen that we are running out of time and we have to do something about the forests, but the something that is being discussed is mostly about financial engineering. If you want give people the money to maintain forests for 100 years, where will the money come from and how do we give them it continuously?

The discussion has been about how to provide money for 100 years, but there are alternatives, such as the proposal from Brazil that developed countries have a specific fund that would be located in the developing countries. The solution exists and the market is not the only answer, which is good for our country.

Attention should also be given to where the money will go. Will it go to the Government or the people? If the money is given to the Government, the countries who donate from the fund should ask the Government how it will give the money to the people. That important question needs to be addressed.

Louise Batchelor: At that point, the negotiators start to file the problem under “Too difficult” and things break down. We will hear from the European Union shortly, but there is a suggestion that some EU countries, such as Poland, are saying that it will be too expensive for them to contribute to such funds.

Duncan McLaren (Friends of the Earth Scotland): I will add to what our friend from Indonesia was saying.
There are, of course, good reasons to avoid deforestation, and developing countries almost certainly need financial aid to help them to do that, but there are two big downsides. First, as Ibn Najib set out clearly, many processes are being undertaken in ways that exclude indigenous peoples and forest dwellers from the lands that they have treated, or that should be treated, as theirs. Excluding people and turning their forest into a carbon sink is not a sustainable way of proceeding.

Secondly, far too often, avoiding deforestation is proposed as a way of allowing developing countries to choose not to cut their emissions but to pay for reductions in emissions elsewhere. I refer to the process of carbon trading and carbon indulgences that allows rich countries to buy reductions in emissions in poor countries, with social problems attached, instead of making them domestically.

The point that I am making is part of a bigger case that states that we in the rich and developed world need to make available to poor countries substantial funding, technology and new social models—different ways of doing things that do not rely on continued economic growth—so that they can build climate-resilient economies and societies. We need to do all of that in addition to making urgent and severe cuts in our domestic emissions.

Louise Batchelor: How would you make such funding available other than through carbon credits? How would you ensure that the money got to the indigenous people who are dependent on the forests?

Duncan McLaren: I am not an expert on the latter question, and probably not even on the first. However, it is possible to establish funds that are not tied to the creation of carbon credits. There is no logical reason for Indonesia to have to give us carbon credits if we pay it to protect forests.

Louise Batchelor: So we should simply tax people and hand over the money.

Duncan McLaren: The world has committed itself to increasing development aid, but so far we have failed to do so. We have committed ourselves to meeting the millennium development goals. It is clear that funding is needed in addition to what has been pledged. We must take it from other sources and not use it simply for reductions in carbon emissions. That is the red herring in the debate.

David Guggenheim: Some of points that I wanted to make were made far more eloquently than I could have made them. For a marine biologist, I have spent an uncanny amount of time on the forestry issue. Back in the early 1990s, when US electric utilities were examining ways of offsetting carbon emissions, I authored a report on behalf of the Electric Power Research Institute on the suitability of Siberian forests for that purpose.

One issue that keeps coming back in relation to forestry projects is monitoring, measurement and the threshold of proof that a project has resulted in net sequestration or a net carbon benefit—in other words, establishing that something would not have happened without the project. That is tricky when dealing with something that is as difficult to measure as a forest. I could point folks to a body of knowledge in the area, including a report by the Keystone Center in Colorado from the early 1990s, which involved broad participation but focused on measurement issues.

I agree that it is important that projects should benefit local people. We have seen some poor models of ecotourism—the promise of dollars and pounds coming into a region to support it, only for that money to go to a resort that imports its labour force and so on. We must ensure that projects are not an empty promise of support.

Louise Batchelor: The debate is starting to engender in me a feeling that there are all sorts of possible solutions to the problems, but every single one has many problems attached to it. I hoped that that would not happen quite so early in the day.

We are talking about forests, so who better to hear from than a representative of the Royal Botanic Gardens in Edinburgh?

Stephen Blackmore: The millennium for Scotland project, in which I had no hand, was truly inspired. The project was partly at community level, and similar forestry projects around the world happen at several levels. There is a big debate about carbon trading, but simple and practical projects are taking place in many countries, including Scotland. That action needs greater support and a greater urgency behind it.

It is fundamentally important that we do not forget the role of nature in reducing carbon dioxide emissions—David Guggenheim mentioned that in relation to the oceans, and forests have a role on land—but there is also a technological component. In Scotland, we have special opportunities to be way ahead on alternative energy production and, in particular, carbon sequestration or capture. We have perhaps lost some of the opportunity to exploit the North Sea oil fields for that, or some of
the energy to do so. I sincerely hope that one result of the Climate Change (Scotland) Bill will be a commitment to our being pioneers in carbon capture. We should look to nature and natural solutions, but also to engineering and technological solutions.

**Robin Harper MSP:** Mention was made earlier of Dr Nancy Knowlton of the Scripps Institution of Oceanography, who has said that we need active removal of carbon from the atmosphere. Sequestration is not active removal, although it is a step on the way. It is pumping underground stuff that otherwise would go into the atmosphere.

Many of the answers that we have heard have been to do with prevention. The only active removal that occurs to me is the use of wood in building. There are huge opportunities to replace carbon-intensive building materials, such as brick, concrete and steel, with wood. At Acharacle in the north of Scotland, a school is being built entirely of massive wood—it will become iconic when it is opened in a couple of weeks. We need to develop the technology, but the opportunity exists now to start using wood.

That is happening in Switzerland and Austria—Brettstapel is the name that has been given to the process there—and we should move to that system throughout the world. The wood in the Parliament building will still be here in 100 years, so it has locked up carbon for the next 100 years. A small school can lock in up to a million kilos of carbon dioxide equivalent permanently, or until the school has to be replaced. We must do the figures on that.

We have a huge opportunity to be much more imaginative about how we use our wood in Scotland. I am not completely against biomass, but using wood for building is a much better answer than burning it, putting the carbon back into the atmosphere and then capturing that carbon again in wood.

**Louise Batchelor:** I would love to believe that that is the solution, but I am not convinced.

**Robin Harper:** It is part of the solution.

**Louise Batchelor:** Okay—it is part of the solution. I will go back to Stephen Blackmore on that. Is it not the case that we consume far more than we can grow and that we can never grow enough to keep up in terms of building materials, biomass and carbon absorption in our forests?

**Stephen Blackmore:** The simple answer is that we could do so. To pick up from where Robin Harper left off, there are no single or simple solutions but a multiplicity of solutions. That is why I suggested that there are strong natural components involving the use of biology and nature to capture carbon in the soils. Fundamentally, the question whether we can continue to feed and improve the quality of life of people around the world comes down to the need to tackle human population levels as well as to produce more food. We can certainly do the latter if we improve our agricultural and land management techniques. We can achieve most of the biological solutions for our planet, but it will depend on willpower and investment in resources. Again, as I said earlier, much can be done at the local and community domestic scale. Changes are not always made through huge international efforts: they can be done locally, too.

**Louise Batchelor:** Thank you for that optimistic note.

**Stephen Benn (Royal Society of Chemistry):** We greatly welcome today's event and are glad to take part in it. I echo the view that a range of solutions is what will make a difference. We first need international leadership, which we hope the Copenhagen meeting will provide, but lifestyle changes will also be required. There is enormous potential in the reduction of energy demand through greater energy conservation, especially for heat loss through buildings, which is considerable.

We will clearly have to decarbonise transport in a variety of ways, such as through highly efficient biofuels, lightweight materials, hybrid and electric vehicles and battery technology. There will have to be further work on the potential use of hydrogen as a fuel, and we must make as much effort as possible to get electricity generation from a variety of renewable sources.

The CCS technology will be crucial. As was said earlier, there is tremendous potential in Scotland, and some of us in the Royal Society of Chemistry regret that it has not been exploited as quickly as it could have. We would not want it to be developed elsewhere when there is clearly good potential here.

Finally, but by no means least, the development of investment in people and skills is necessary to deliver all that progress here in Scotland as well as in the rest of the UK.

**Louise Batchelor:** May I come back to you on a couple of points? We already hear that biofuels, which are believed to be one way forward, are laying waste to the rainforests of Indonesia—that seems to be a major problem. Further, how would you produce the hydrogen? Which would be the most viable energy resource for doing that?

**Stephen Benn:** Briefly, there are good biofuels and bad ones. It is important in a debate such as this that people understand that distinction.
Louise Batchelor: And which are the good biofuels?

Stephen Benn: That is a good point. My colleague Hannah Taylor knows more detail—and she has just whispered to me that the good ones are second generation biofuels. However, the main point is that there are differences between biofuels and there is no reason why we should lay waste to rainforests to develop a more efficient biofuel.

Louise Batchelor: Okay. We will maybe hear about hydrogen later on. We probably have time for one or two more questions.

Adrian Loening (Carbon Trade Ltd): I am from Scottish Action on Climate Change and, professionally, from Carbon Trade Ltd here in Scotland. I have some complex comments to make, but I will try to keep them short.

Louise Batchelor: I will keep you short.

Adrian Loening: The first one is that, in Copenhagen in December, we must find a better way of carbon trading. I spend most of my professional life on methane capture projects with specific climate benefits that are potentially unlike biofuels and forestry projects, but it is immensely complex and difficult to organise those markets. I am a bit at odds with people here who are in favour of carbon capture and storage. I think that we should rename that enhanced oil recovery, and I agree with Justin Kenrick that carbon needs to stay in the ground.

Finally, it has been a reasonably nice, sunny day here in Scotland, but I am sat in my seat being blinded by electric lights.

Louise Batchelor: Shall we try to switch them off and see what happens? Thank you very much for being succinct. We will have another quick point of view.

Matthew Crighton (Unison Scotland): I will try to be quick, but I am sorry if we cannot discuss my point. We are looking at a couple of crises across the world, one of which is the climate, but the obvious one is the economy. The G20 meeting will shortly take place, and Governments are putting millions and trillions of dollars and pounds into banks, which fund company developments. Why cannot we put those two areas together by putting a condition on all that Government money that any investment that is touched by public money must lead to a reduction in carbon emissions from developments and that any growth must be green? We need to make that point loud and clear now because discussions are going on about the re-regulation of the world economy—rather disconnectedly, it seems to me—at the same time as the Copenhagen discussion about climate change.

Louise Batchelor: That is an extremely good point on which to end this first discussion session, and it perhaps tees us up for one of the next debates. Thank you all very much for the fantastic contributions so far. I hand back now to the Presiding Officer.

The Presiding Officer: Thank you, Louise. I am learning lessons in how to conduct debates, so thank you for providing such a good example of how to do so—it has been very interesting.

As Louise Batchelor indicated, that brings us to the end of our first session. Perhaps I can just answer the question about the lights. As I indicated at the beginning, the event is being webcast and will be available to others who want to access it through archive footage. If we do not have the lights on, we will all be sitting in complete darkness as far as that footage is concerned. That is the main reason for the lights being on.

We will now have a short comfort break, and I urge people to use it for the purpose suggested rather than to explore the building. It will be a short break of 10 minutes, and we will restart promptly.

11:37

Meeting suspended.

11:50

On resuming—

The Presiding Officer: If you would like to take your seats, we will get under way again. It was brought to my attention during the interval that one or two people at the back of the chamber are having a little difficulty hearing. I advise you all that if you lift up the lid of the black console on your desk, it acts as a loudspeaker. That might help people who could not pick up what was said through the sound system.

Welcome back. I trust that everyone is feeling more comfortable after the comfort break. I am pleased to invite Paul McAleavey, who is a European Union civil servant who has been seconded to the European Environment Agency in Copenhagen, to give us our next presentation. He is responsible for the political communications department. Like all our speakers, we are delighted to have him here. [Interruption.]

Paul McAleavey (European Environment Agency): That little pause was good—it allowed me to enjoy the moment even more. As a Scot who campaigned for this Parliament many years ago, it is with huge pride that I stand here. I am grateful that the sound problem gave me a little extra time to absorb the moment.

As the Presiding Officer said, I speak as a civil servant of the European Union. I have been asked
to provide this morning’s session with a European policy perspective. The organisation that I work for, the European Environment Agency, is based in Copenhagen. It is an information agency rather than a regulatory agency, which was set up by the European Community in 1994 to ensure that the EU and its citizens have the information and the analysis that are required to make the changes that our environment needs or, in the words of this event, to provide the information that will help the EU and its member states to “get it right”.

Our geographical scope is broad. We have 32 member countries—the 27 members of the EU, plus Iceland, Norway, Switzerland, Turkey and Liechtenstein. Our remit is similarly broad. We are required to support sustainable development and help achieve significant and measurable improvement in Europe’s environment through the provision of—these are four important adjectives—timely, targeted, relevant and reliable information. If people have a chance to look at some of the publications that I have left on the agency’s stand outside the chamber, they will see that we do not just write documents for decision makers; we have a mission to popularise information for the broader public. I will use some metaphors to explain the scale of what we are talking about.

In the short time that is available, I will highlight just some of the work that the agency does in Copenhagen and how it might be relevant to the work that is being done in Scotland.

On climate change, the agency plays a specific role as part of the European effort. Basically, our experts co-ordinate a massive accountancy job by collecting, verifying and analysing data on greenhouse gas emissions from all over Europe. The data are then used to produce two key annual reports that feed into the Kyoto process. This year, the numbers and the analysis are particularly significant in the context of the 15th conference of the parties—COP15—negotiations that will take place in Copenhagen in December. With the first commitment period under the Kyoto protocol in effect running out in 2012, COP15 will be expected to produce an ambitious successor. Some 15,000 or so delegates will descend on the city in December so, as someone who spends his working days in Copenhagen, I warn anyone who plans to come over to do their Christmas shopping this year that hotel space is very limited.

The first report that we produce each year is the inventory of greenhouse gas emissions, which is published in early summer. Basically, that report counts gases to give an overall picture of emissions across Europe. We send the report to our European Commission colleagues, who officially submit it to the United Nations Framework Convention on Climate Change. Because the data are first verified at national level, the data in the report are always subject to a delay of one and a half years. Our latest report, which was released in June 2008 but is based on data from 2006, shows that emissions from the EU 15—meaning the 15 member states that were members of the European Union before the 2004 enlargement—were basically 3 per cent below the base year. In 2006, EU 15 emissions were 3 per cent below the base year, whereas the target is for them to be 8 per cent below.

What does that mean for people—like me—who are not climate scientists? Given that the concept of counting gas is quite abstract, we have made efforts to simplify and popularise the report by explaining the cuts in terms of the number of days of the year. Basically, the EU 15 Kyoto target of achieving an 8 per cent reduction in emissions from their 1990 levels means that we need to cut 29 days-worth of emissions every year for each of the five years between 2008 and 2012. The latest data from the agency show that we have cut 10 days-worth of emissions between 1990 and 2006. In simple terms, we still need to cut a further 19 days of emissions just to reach the Kyoto target of an 8 per cent cut. By analogy, the Climate Change (Scotland) Bill’s target of achieving an 80 per cent reduction in emissions by 2050 means, as I understand it, that Scotland will need to cut 290 days-worth of emissions by 2050.

The other main report on mitigation that we produce each year is the greenhouse gas trends and projections report, which is published in the autumn. Whereas our spring report looks back at what has happened, our autumn report looks at the likelihood that member states and the community will achieve the Kyoto commitments. Basically, our greenhouse gas trends and projections report allowed the European Commission to produce this month the graph—labelled “1. Climate change - Greenhouse gas emissions”—that can be seen on the screen. The graph shows that the EU 15’s performance remains mixed, but the EU 15 as a whole should meet the Kyoto commitments if the member states speed up implementation of planned measures.

If we consider the issue at national level, we see that France, Greece, Sweden and the United Kingdom reached their Kyoto target in 2006. We then have a middle batch of countries—Austria, Belgium, Finland, Germany, Ireland, Luxembourg, the Netherlands and Portugal—that project that they will achieve their Kyoto targets. However, our projections for Italy, Spain and Denmark—yes, including Denmark—indicate that those states will not reach their Kyoto emission reduction goals. As one can imagine, that takes us into some interesting discussions every autumn with our host Government in Denmark.
The graph looks ahead beyond Kyoto to 2020 because, in December last year in advance of COP15, the European Union agreed a climate and energy package called 20/20/20 by 2020. That package commits the EU to reduce greenhouse gas emissions by 20 per cent by 2020; to increase the share of energy from renewable sources by 20 per cent by 2020; and to improve energy efficiency by 20 per cent by 2020. The slide shows graphically—I refer to the red dot labelled “EU-27 target”—what a 20 per cent reduction would look like by 2020.

However, what do such targets mean to non-experts? How do we communicate the 2020 target to people who are not climate scientists? We have explained that reaching the 2020 target is the equivalent to removing the emissions from all transport in Europe. Imagine the emissions from every truck, bus, car, train, boat and aeroplane disappearing—that is the equivalent of a 20 per cent cut by 2020. The target is ambitious but, as we have heard this morning, it needs to be—the challenge is serious.

12:00

I was aware that you would not be able to pick up the detail of the next slide—that is not a problem, because copies of the report from which it is drawn are available outside. Even if all emissions stopped today, climate change would continue for a long time, due to the historical build-up of greenhouse gases in the atmosphere. The third report that I want to highlight is our climate impacts report, which is based on 40 indicators and shows climate impacts that are already evident in Europe. My intention in showing you the slide was to highlight the diversity of climate impacts in Europe. This morning we heard people speak eloquently about the impacts that are evident outside Europe, but there are already impacts in Europe.

The Mediterranean region—the yellow area on the map—will experience less precipitation, lower river flow, more forest fires, increased water demand, a high risk of desertification and a risk of more biodiversity loss. In the central and eastern European region—marked in green on the slide—there will be more temperature extremes, less summer precipitation, more floods and more forest fires. Here, in the north-western part of Europe, with our maritime climate, we can expect more winter precipitation, higher river flows, a higher risk of coastal flooding and the northern movement of freshwater species. We do a lot of work on Natura 2000 designated areas. Now that we have an almost complete designation of Natura 2000 sites in Europe, the climate has changed the ballpark. It has taken 20 years to achieve the designation of most sites, but we will need to revise the map because of the impact of climate change.

I wanted to use my time to give you a glimpse of some of the European perspectives that provide part of the context for your deliberations on the Climate Change (Scotland) Bill. You can find the reports that I have mentioned on our website, and I have left some copies outside the chamber to be picked up today.

To finish, I would like to draw your attention to work that the agency is doing in relation to energy and on the subject of co-benefits. We are about to launch a new report that maps out the potential of wind energy in Europe. Early indications suggest that the potential of wind energy corresponds to about 2.5 times the gross electricity generation of the EU 27 by 2020, even taking into account social, environmental and economic constraints such as Natura 2000. A key message for the agency is that renewable energy comes in small, even micro, packages. Because energy from the sun, winds, waves and tides is diffuse in nature, it is far better suited to a decentralised generating system.

Tackling climate change has huge co-benefits. I will explain what we mean by that. The effort that is required for us to meet the 2020 targets will also cut air pollution in Europe. For example, improving energy efficiency and increasing renewable energy will reduce fossil fuel consumption, which is a key source of air pollution. Such positive side effects are referred to as co-benefits. We have estimated that achieving the 20/20/20 by 2020 package would cut by £8.5 billion every year the cost of meeting the EU legal air pollution requirements. The savings to European health services could be as much as six times that figure—in other words, a €50 billion benefit to our health services, as a co-benefit from climate change action. There is a lot at stake. Thank you for your attention. [Applause.]

The Presiding Officer: Thank you very much for that very stark presentation.

I welcome Ahmed Moosa, who is a Maldives special envoy for science and technology and is currently looking into President Mohamed Nasheed’s recently announced initiative for the islands to go carbon neutral in the next 10 years.

Mr Moosa, the floor is yours.

Ahmed Moosa (Maldives Government): Thank you very much, Presiding Officer.

Honourable members, ladies and gentlemen, it is a great honour for me to be able to participate in this very big event and in an important and timely debate. I thank the organisers and the Scottish Parliament for giving us this tremendous opportunity to contribute.
Climate change is the biggest challenge facing mankind today. The Maldives is a group of small—or, as you say in Scotland, wee—coral islands in the middle of the Indian Ocean. Journalists often use terms such as blue skies, crystal clear warm water, white coral sand, paradise and a sparkling image of perfection to describe the islands, which are one of the world’s most exotic holiday destinations. However, according to other reports, the Maldives is a paradise that is soon to be lost. Climate change is threatening to wipe away this natural wonder.

Global warming has never been a myth. We can witness its effects across the globe. For example, in the early 1990s, when I studied at the University of Glasgow, we had snow throughout the winter months. Now, as most people know, it hardly ever snows in Glasgow. The summers are warmer than ever here in Scotland and throughout Europe.

In the Maldives, several islands have been severely affected. Coastal and beach erosion, frequent flooding and fresh water shortages have all been attributed to climate change; the El Niño of 1997 caused severe coral bleaching not only in our reefs but in several other similar habitats around the world; and there have been a number of extreme weather events, including the recent floods in the United Kingdom and an increased incidence of severe hurricanes.

Honourable members, ladies and gentlemen, the Maldives might be a very small country but we have our own language, culture and traditions. We have been living in a relatively pristine environment for well over 3,000 years. If sea levels rise as predicted, then we lose everything. Climate change is a real threat to our existence.

The world must come together to save not only the Maldives but our whole planet from peril. There is absolutely no doubt that the leaders of the industrial nations have the biggest role to play in this greatest of human endeavours. In that respect, we in the Maldives are most encouraged by the Scottish Parliament’s initiatives to pass new measures to challenge this important issue. This is a historic opportunity for Scotland to lead the world and lay down strong measures to combat climate change. Scotland is my second home and I am very proud of what it is doing.

The new democratic government of the Maldives is committed to tackling the threats of climate change. Earlier this month, President Mohamed Nasheed announced the aim for the Maldives to be the first carbon neutral country through investing in renewable energy and decarbonising our economy. In addition, we are inviting researchers and scientists to come to the Maldives and set up research hubs and outposts. Indeed, we have already started to sign agreements with European universities.

A UN study published in January offered evidence that global warming undermines a number of basic rights such as food, water, shelter, health, life and self-determination. The Maldives has since successfully lobbied the UN Human Rights Council to adopt a resolution to hold a panel discussion on the relationship between human rights and climate change. The Maldives-led resolution secured the support of 88 co-sponsors, including 15 members of the Alliance of Small Island States and key allies such as India, Sri Lanka and, this week, the UK, for a panel debate to be held in Geneva this July and before December’s conference in Copenhagen.

We call on the world to come together in a spirit of solidarity to tackle climate change in Copenhagen later this year.

I will present some facts and figures about the impact of climate change in the Maldives. According to estimates, the country has a population of fewer than 400,000 people. We have around 1,200 islands, of which roughly 200 are inhabited. The Maldives cover 298km², and more than 99 per cent of the country is sea.

The main industries are tourism and fisheries, and our gross domestic product per capita is approximately $3,000. The capital island, Malé, is the smallest capital in the world: it is about 2km² and has a population of around 120,000—the majority of the Maldivian islands have fewer than 2,000 inhabitants. Malé is the industrial and financial hub of the country; it is protected by a sea wall that was donated by the people of Japan and which was one of the key reasons why Malé was spared in the recent Tsunami.

The critical issue for the Maldives is that it is a very flat country. The average elevation is less than 1.5m above sea level—floodling is now reported in many of the islands, coastal and beach erosion is commonplace and shortage of fresh water is a major issue. The Maldives contributes less than 0.001 per cent to greenhouse gas emissions worldwide, but the country will be the biggest victim of global warming if IPCC projections prove to be correct.

The next slide shows coral bleaching as a result of rising temperatures following the events of El Niño in 1997—we saw bleaching in many areas throughout the country. In the next photograph you can see houses on the islands that have been destroyed by flooding. The next picture shows the erosion of the beach—normally the beach flows nicely into the sea, but in this case all the sand is gone.

Our strategy is to lobby for a debate to take place before Copenhagen. We need help from the international community to develop the capacity of our people and transfer the technology to the
Maldives. As a relatively poor country, we need funding and financial assistance from the developed world.

The President of the Maldives announced this week that we will try to go carbon neutral within the next 10 years, and some of our resorts are already attempting that. There is an on-going focus on driving forward the international commitments. We have a national adaptation programme of action to try to protect the islands as much as we can, and we will introduce renewable energy to the Maldives, which will be one of my biggest tasks. We are seeking to cooperate with international research organisations and, as I mentioned earlier, we want the Maldives to be a research hub for scientists.

Climate change is a real threat to the very existence of our country. The Maldives needs international support to combat it, and we will continue to campaign to get a strong commitment from the international community in Copenhagen. We want to lead by example as much as we can by going carbon neutral within the next 10 years.

Thank you very much—we believe that, together, we can save this world.

The Presiding Officer: Thank you, Mr Moosa. I have spent many a long hour—as I am sure many others have—looking at pictures of those beautiful islands in holiday brochures, and I imagine that researchers will be queuing up to accept Mr Moosa’s invitation to create a research hub there.

Our final speaker, Dr Ian Burton, has unfortunately been delayed by a travel hitch. We will not lose his expertise, because we will hear from him this afternoon. We will go straight to the debate that would have followed his presentation—it will take the same form as the earlier debate, and will be expertly convened by Louise Batchelor.

12:15

Louise Batchelor: Thank you, Presiding Officer. We have two fantastic presentations to kick off our next debate, which will last approximately half an hour. I have loads of questions to ask, but I should not indulge myself; it is really back to you.

I am conscious that there are quite a few young people here this afternoon. We are joined by people from the Scottish Youth Parliament, the Children’s Parliament and Inverkeithing High School. I hope that you feel that you can participate—we would very much like to hear from you, especially as there was so much focus earlier on getting the message across to the younger generation. I suspect that, in many cases, it is the younger generation that needs to get the message across to us, but that is another matter.

I will throw out a few themes to explore. The first is the urgency with which action must be taken. We have just seen from the situation in the Maldives that climate change is already happening and that the situation is critical already. Are things happening fast enough to address it? The second issue is the new democracy in the Maldives. Is democracy the right model for tackling climate change? In this morning’s edition of The Scotsman, Dr Richard Dixon asks whether democracy is too weak a mechanism. It is difficult to persuade people in democracies to vote against their short-term gains—those are my words, not Dr Dixon’s. The third issue is carbon trading, which we talked about earlier. There is a whole issue about how the developed world can help the developing world.

Right—enough of me. We will hear first from Dr Dixon, as I have name-checked him.

Richard Dixon (WWF Scotland): Thanks for the mention.

Urgency is a key issue. That is brought home to us when we think about the first achievement of the Climate Change (Scotland) Bill, which is the setting of a target to reduce carbon emissions by at least 80 per cent by 2050. We can argue about whether the figure should be higher, but the target that is set in the bill is for a reduction of at least 80 per cent, so it could be more than that. Nevertheless, 2050 is so far away that we need a much clearer indication—which I hope that we will get from the minister this afternoon—that the Government is serious and that something is going to happen soon.

We have heard from all the international speakers so far that the Climate Change (Scotland) Bill is important in the process leading up to Copenhagen. What we need is early action. If we were back in the 1960s thinking of what would happen 42 years ahead, we might think that England would often win the world cup and—yes—that big cities would have trams. We would also think that computers would be huge things that took up whole floors of buildings but had nothing to do with us in our daily lives. Similarly, 2050 is so far away that, whatever we think about, we will get it absolutely wrong. The next 10 to 20 years is the timeframe in which we can put the right measures in place.

Alternatively, we can do the wrong things. If we build new coal-fired power stations that are around for 50 years, we will set ourselves on the road to disaster. If we make the decisions about investment in research now, and if we set the right early targets, we will set an example that the world needs. We are not just saying that we aspire to
meet a target in 2050; we are saying that we are serious about the task and that we will set ourselves on the right course not just from 2020—
which is what the bill does, sort of—but from next year, when the bill comes into force, with tough action being taken in each year. Most of us in the NGOs are calling for a reduction target of 3 per cent a year, which is also what the SNP manifesto called for. Such a target would send the message that, straight away—right from the first year—we are going to do something pretty tough to move things along.

Louise Batchelor: Thank you very much. As we have hinted, there will be more forensic examination of the bill this afternoon.

On the issue of urgent action, I ask Paul McAleavey whether there is a sense of urgency in Europe. You have come up with some fantastic ways of describing what must be done, such as the number of days’ worth of emissions that we have to cut per year. Are you getting a sense of urgency in Copenhagen?

Paul McAleavey: There is, indeed, a sense of urgency in the European Union—is my microphone switched on?

Louise Batchelor: It is switched on, but it is that one over there. Sorry—they are conspiring against you today.

Paul McAleavey: I am not used to sitting in the First Minister’s chair.

There is a sense of urgency in the European Union. The discussions are on-going—we all follow them in the newspapers. Difficulties have been experienced over the past couple of weeks in getting some countries—Poland has been mentioned in particular—to sign up to financing for adaptation measures. However, those problems have been the exception rather than the rule.

The European Union has had a high level of engagement. I spoke about the 20, 20, 20 by 2020 target. The European Union has said that, if other developed countries sign up, we will move the target to 30 per cent by 2020. There is a sense of urgency, although the precise final negotiating position for Copenhagen has been put back a little bit, until June. As delegates will probably know, the Prime Ministers will meet again in June to consider issues such as financing. I am sure that there will be lots of opinions in the chamber on whether the level of urgency is high enough.

Rob Gibson MSP (Scottish Parliament Transport, Infrastructure and Climate Change Committee): I am a Scottish National Party MSP for the Highlands and Islands and a member of the committee that is considering the Climate Change (Scotland) Bill. Louise Batchelor asked whether democracy can deliver. In Scotland, we are grappling with the idea that if we can engage people through the development of renewable energy systems—particularly in marine energy—that can take the lead in Europe, we can create jobs and people will understand the imperative of being involved in the climate change revolution. The paradox is that, although we want to do those things locally, we have so much that we can export. Therefore, we would buy into the European model of a supergrid.

I have a question for the panel. We are talking about building targets on the basis of statistics that take 18 months to appear. Can we find any way in which to achieve speedier analysis of the data and, if so, will that be shared around the world? Do people agree that accountants will have to learn to have a carbon balance sheet, as well as a monetary one?

Louise Batchelor: That is one for Paul McAleavey. Can the EU do the analysis and science any faster?

Paul McAleavey: The reason why it takes 18 months in the European Union is simply because some of the emissions data are based on formulas. For example, some of the data need to be calculated using estimates from agriculture. The member states have to verify those estimates before they pass them to the European level, otherwise they might not believe what we said back to them. A faster mechanism is available through the market. The emission trading scheme that has been established sends much quicker signals on emissions and the carbon price. We report on official data 18 months behind, but the market and some of the market institutions that deal with carbon trading make estimates that are, I would say, slightly less reliable but based on more recent market data. There might be scope for considering the way in which those two processes operate together.

Louise Batchelor: We keep being told that there are 100 months to save the world or before the tipping point happens. It would be good if we could all see on our computers or wherever a big screen showing us our emissions increasing, for example. I do not know whether that will ever happen, but it is not beyond the wit of humankind to come up with such a system. That is a rhetorical point.

Ahmed Moosa: I want to say something about how democracy can play a part. After I was appointed to my job on 11 March, I quickly asked the ministries to give me some of the reports that had been done on renewable energy and the adaptation that we need for the Maldives. I have a big pile of those reports, which, combined, cost a couple of million dollars. They were funded by the United Nations Development Programme, NGOs and even Governments and were produced over
the past 15 or 20 years, but no action had been taken on them. Maldivians have just removed a dictatorship after 30 years, during which there was no education on recycling or renewable energy. We are having to introduce that in the Maldives. The regime that was in place was not concerned about that. It was making noises—the Maldives hosted the first small island conference on sea level rises back in 1987, for example—but it was not doing enough.

Louise Batchelor: So a green benign dictatorship is not necessarily the answer.

Ahmed Moosa: Indeed.

Sagan Turner (Inverkeithing High School Energy Group): I would like to go back to the point about our being the next generation. My school, which is an eco-school, is doing particularly well. At the same time, however, many people in our school do not understand climate change. I have a friend who tells me that climate change does not exist. That makes me think that the children of parents who do not believe in climate change will not find out about it.

Admittedly, I watch a bit too much TV. I see the adverts about 2020, and the one with the recycled paper bag, which is pretty cool. However, not enough information is going out to the next generation to make them aware of the situation. Even in my school, which does very well and which has a large eco-school committee, there are still not enough people who are aware of what is happening. Thinking about the rest of the country, how are we going to get the next generation more aware of the situation and how they can contribute?

Louise Batchelor: Thank you—that was a superb contribution. At the same time that people hear about the campaigns and see the information about climate change, they also see adverts for cars and every electrical good under the sun. It is a real problem.

Liam Beattie (Scottish Youth Parliament): I would like to touch on the point that has just been made. Consulting young people is hugely important. By 2050, young people who are in primary schools today will be in this chamber, and I hope that they will be debating the positives that came out of the Climate Change (Scotland) Bill, if it gets passed. I dread to think that, in 2050, they will be picking up the pieces left by the previous generation, if we do not take action now and if the bill does not get passed.

I consulted my eco-schools group yesterday. For those who do not know, such groups are environmental committees. The eco-schools initiative is a Scottish initiative—I am not sure whether it is UK-wide. Of the very few people who were on the group, none knew about the Climate Change (Scotland) Bill. This world-leading bill is not well known among young people—or older people.

We need to raise awareness of global warming, whether through education or adverts, and we need to change people’s perceptions about climate change, including the idea that it is not happening or that it is not our responsibility but the Government’s responsibility. Everything possible that can be done needs to be done now.

Louise Batchelor: How many of your friends or contemporaries believe that climate change is happening and believe in the need for urgent action?

Liam Beattie: Young people especially are a bit more sceptical about climate change. They see it as something that is not our responsibility. Changing attitudes will take a while, but once they have changed, we will reap the benefits because of what can get done.

Alex Hill (Met Office): I will pick up on the points that have just been made. Those two kids are absolutely spot on. I talk to lots of groups and individuals, and our difficulty is not necessarily that the Climate Change (Scotland) Bill might not be successful—I think that it will be; it is an incredible piece of legislation. The biggest problem is persuading people, and the vast majority of people do not do enough and do not care enough. Our biggest problem is educating young people and adults—everyone who is involved in either generating or using energy. The problem includes our general lifestyle.

We need to start with a huge education programme and, frankly, we have failed to do that. As scientists, we have failed to do that—instead, we bicker about whether the level of CO₂ is going to be 550ppm or 525ppm, for example. We do not get across the fundamental science and the fundamental differences that climate change will make to the way in which we live our lives on this planet over the next century. We must start with that point.

As scientists, we must stop bickering about numbers and about whether doing this or that will help. We need to get across the basic message to as many people as is humanly possible. We need to become organised. To be frank, people of my generation need to apologise to people of later generations, because we started the mess. It is unfortunate that future generations will feel the impact, which they will have to do something about.

12:30

Louise Batchelor: I could not agree more—except for the point about education in schools. In
the schools that I have visited, the subject is on the curriculum and is being taught. However, people of our generation still drive our kids to school and back—my kids are a bit older than that now. Children are being told about climate change, but they see no adaptation as a result of it.

Stephen Blackmore: I agree with everything that has been said, especially by the school representatives, about the need for education. I will add an emphasis to that. Some people are in denial about climate change, but those who are aware of it include many people who think that we can do nothing. It is fundamentally important to convey the fact that our intelligent species knows many of the answers. We know what to do and what steps to take about climate change—it can be tackled—but I am afraid that I do not hear that being said often enough.

The danger is that the communications that we put out tend simply to frighten and alienate people. We need to make them aware of the problems and, alongside that, we need to provide the many solutions, some of which we have heard about today. The message of problem plus solution can motivate action.

Debbie Walker (Scottish Transport Studies Group): I am an atmospheric chemist—I am in the scientists’ camp. We talk a lot about the barriers to taking action and perhaps about democracy being one of those barriers. As a scientist, I am filled with horror that we are still debating the numbers and how readily and quickly we will be able to quantify the carbon saving of an action and see its impact on the inventory. To be frank, as a scientist, I do not really care. We know that introducing technologies that reduce our dependence on intensive and finite fossil fuel use is good not just from a carbon perspective, but for the economy and sustainability. Why are we focusing on the numbers game and debating whether the target should be 350ppm or 450ppm? We heard Paul McAleavey talk about cross-benefits. Such actions have multiple benefits—they are not just about carbon. Surely they make sense, so what are the barriers to taking action? We have talked about urgency. Yes—the need to set policy and targets is urgent, but the need to take action is far more urgent.

Louise Batchelor: I said at the beginning that I wanted to keep the debate on the big picture; Debbie Walker has done that beautifully for me.

John Riley: The big problem is that we see economic growth as more important than longer-term survival. That is crazy.

Alex Hill talked about education. We rely on TV for a substantial part of what we learn. I will put Louise Batchelor on the spot: how can we liaise with the media and particularly with TV companies on how they can assist us? Can we bring the media to forums such as today’s conference and ask how they can help us?

Louise Batchelor: The answer is that you must shout more loudly. People are shouting very loudly about the current financial recession, about what is or is not in their bank accounts and about what capitalism has done to them. Many people in the chamber believe in everything that we are saying but, believe it or not, the messages are not getting out loudly beyond this room. As I said, people are far more concerned about short-term interests. They are far more worried about what is happening to their money. I blame no one for that; I, too, am concerned. However, that is the message that is being heard loudly in newsrooms.

The only way that you will change that is by constantly logging on to the stories on the websites, not just of the BBC, which I have now left, but of all the other media organisations. Every time stories appear, put in your comments, write to those organisations and phone them, otherwise they ain’t going to get it because they hear a much louder noise coming from all sorts of other self-interest groups.

John Riley indicated disagreement.

Louise Batchelor: You are shaking your head—okay.

Daniel Leary (Natural Environment Research Council): I appreciate that I am running slightly counter to the more optimistic turn that the debate has taken. We have heard a lot about the challenges that are faced in meeting carbon budgets. We have also heard that tackling the situation that we are in will involve multiple methods and multiple approaches. On the back of that, I thought that it might be appropriate to mention geoengineering, which is probably best defined as environmental interventions that are designed to treat the symptoms of climate change rather than its causes, which is what carbon budgeting is all about. An example of geoengineering is iron fertilisation of the oceans to sequester carbon. Some geoengineering ideas are somewhat whacky, such as the one that involves sending mirrors into outer space to reflect the sun’s rays away from earth. If at all possible, I would be interested to get the panel’s views on whether we are at the stage at which use of such methods is necessary. Even if we are not, might it be a good idea at least to research such approaches?

Louise Batchelor: Are those not quite dangerous red herrings? I throw that point back to the panel. David Guggenheim takes a highly global view. What do you think about iron fertilisation of the oceans?
David Guggenheim: I am a few steps behind—I just wanted to talk to the students.

Louise Batchelor: Perhaps you could do that as well as responding to Daniel Leary's question.

David Guggenheim: Last Saturday, I was on a panel at the Explorers Club when a fourth grader—I think that he was the only kid in an audience of stuffy older explorers and famous people—stood up and asked me what he could do to help people in his school understand the problems of the oceans. I looked at him and I said, “You’re doing it.” People have a greater fear of public speaking than they do of death, but he had the courage to stand up and ask a question. To the students here I say, “You, too, are doing it.” That is extremely inspiring. You should never underestimate what your voice is capable of accomplishing. In many, if not all, cases, your peers and your schools will follow. A fifth grader whom I met in Georgia started a petition against the finning of sharks—the practice of cutting off their fins for shark fin soup—which made it all the way to Washington DC. We should never underestimate the power of a young voice in a democracy.

What was the other question?

Louise Batchelor: You have travelled so much that you are meeting yourself coming back the way—you cannot remember the question because of jetlag. The question was about what technical fixes we can use in the oceans. We have already discussed carbon sequestration and whether that is burial for good or a bit of a temporary fix.

David Guggenheim: I have read a lot about the storage of clathrates—those interesting structures that are able to hold their mass under high pressure—at the bottom of the ocean. I am convinced that, technologically, such a step is possible. On one level, it is disturbing that we always think of the oceans as the place where we dispose of stuff when we cannot figure out where else to dispose of it.

The big challenge with some of those technologies is the sheer amount of energy that would be involved in making them happen. Some of the Pacific canyons off the west coast of the United States would be ideal storage sites, but thousands of miles of pipelines would have to be built to transport the carbon dioxide there. Although such techniques can work in a laboratory, I have yet to see evidence that they can be scaled up to work in reality.

I have a problem with some of the other proposals. The fertilisation of the oceans through, for example, the use of iron in the nutrient-limited environments in the southern ocean would interfere with the natural cycle of primary production in the oceans. Although, again, the process might make a lot of sense in a test tube in a laboratory, it is another uncontrolled experiment on top of multiple uncontrolled experiments.

Louise Batchelor: I cannot believe that I said that those ideas might be red herrings. Forgive me.

To what extent is the European Union or the European Environment Agency looking at technical fixes to get us out of this mess?

Paul McAlavey: The EEA is not looking at technical fixes, for sure. On whether the EU is, I simply repeat the excellent point that was made earlier about the coincidence of the financial crisis happening with the climate crisis. We have an opportunity to ensure that a proportion of the stimulus packages is spent on some of the new technology that is being developed, and we have done some work to find out how much of those packages is being directed towards such investment.

Eddie Phillips (Go Greener): I represent Go Greener—we were called that before the Scottish Government came up with its go greener campaign, so I thank it for adopting our slogan. I want to talk about people’s attitudes, because I think that we are missing something.

I am holding a WWF document called, “Simple & painless? The limitations of spillover in environmental campaigning”. It contains a quote from the Cambridge physicist David McKay:

“Don’t be distracted by the myth that ‘every little helps’. If everyone does a little, we’ll achieve only a little.”

I will give a graphic example of that. When talking about the recent economic downturn, a relative of mine said, “Well, we’re just going to have to put our climate change stuff on hold until we get over this economic situation.” How wrong can you be? I believe that the Chinese character for “crisis” is two lines, one that means “danger” and another that means “opportunity”. That is what we are facing.

We know that the recycling market is jittery. However, I believe that that situation also contains opportunities. I would be interested to know people’s views on that. I do not believe that we should postpone our campaign; I believe that we should instead use the present economic situation to move the campaign up a gear.

Louise Batchelor: I agree. I heard an interviewer on “Newsnight”, of all programmes, asking, “Now that we have the financial crisis, aren’t environmental concerns a bit of a luxury?”

Mike Passway: On the point about iron fertilisation, you mentioned red herrings. According to the news this week, the problem is to do with red crustaceans. Iron salts were fed into
the ocean and the algae bloomed, as predicted, but it was then eaten by crustaceans. That is another geoengineering plan up the spout.

Louise Batchelor: Unintended consequences.

Somanath Narayan: On the urgency factor, I come from India and, when I get back home, I certainly want to speak to Government officials to persuade them to stop burning new coal and doing other things that contribute to emissions and to communicate to them the urgency of the situation. However, I need examples if I am to do that. The Climate Change (Scotland) Bill sets targets for 2020, which means that I will probably not get an appointment to sit down and talk to the ministers until 2025. Scotland needs to cut emissions now, so that I can persuade my ministers to start their efforts by 2015 or 2020 at the latest.

12:45

Louise Batchelor: Thank you for reminding us of that.

I want to throw the question back to someone from an NGO, so I am glad to see Richard Dixon’s hand up. I want to know why NGOs are failing to get the message across. Why are there still so many people who choose not to believe that climate change is happening or who believe that there is no point trying to do anything about it? I am sure that you will mention that you have quite a big action planned.

Richard Dixon: Indeed. I will start where we started off this session, with the question of democracy and whether it is too weak a tool to achieve anything. We all know that politicians will only go as far as they think that they public want them to go. If a small but vocal minority makes a fuss about something, politicians may well think that a majority of people hold that view. It is difficult for politicians to judge the mood of the public and work out how much they can do on any given issue and still get voted in at the next election—to use the simplest representation of a politician’s considerations.

Tomorrow night, we are holding our earth hour event. From 8.30 to 9.30 tomorrow night, people around the world will be switching off their lights. The lights of this building will go out, as will those of the Forth bridge and other buildings around Scotland. More than 100 million people will take part around the world, in 80 countries. The chief aim of the event is to show politicians that lots of people are concerned. They are only doing something simple—just switching off their lights—but they are sending a message to politicians, and politicians should understand that that gives them a mandate to go to Copenhagen, as leaders, and do something tough.

Louise Batchelor: You neatly ducked the hardest part of my three-part question. Why are NGOs such as WWF failing to get the message across to—I think—the majority of people?

Richard Dixon: Climate change is a challenge for people because, in their hearts, they know that it is a challenge to the way that they live. If you talk to people about recycling, it is easy to convince them to do a little bit of extra work, sort their refuse and put various things out on the right day—they can do that and feel that they have done their bit. Most people, however, know that if you talk to them about climate change, you are partly talking to them about not driving so much, driving a different sort of vehicle, insulating their home and doing stuff that they kind of know is right but do not really want to do themselves. If it is someone else’s car that is going to go away, that is fine—more space for their car. However, the self-denial aspect is a challenge to many people.

Why do we not get the message across in a big way? The car industry spends hundreds of millions of pounds advertising cars and we spend a tiny pittance sending out press releases that sometimes get in the papers and on television. We are quite up against it.

Louise Batchelor: As you say, doing something about it is a pain, basically.

I thank everyone for their contributions; I am looking forward to more debate this afternoon.

The Presiding Officer: I thank Louise Batchelor for so ably managing this lively and important debate. I am delighted to say that Dr Ian Burton has arrived. We welcome him to the chamber and look forward to hearing from him this afternoon.

I am genuinely sorry to be leaving the conference at this point, but I have to get back to my constituency. As I intimated earlier, one of my deputies will take over this afternoon.

I do not know whether “enjoyed” is the right word, but I have found today to be incredibly stimulating and—yes, it is the right word—enjoyable. I applaud everyone who has contributed so well to the morning sessions, and I am sure that the rest of the day will be a great success.

12:49

Meeting suspended.
Climate Change and Scotland

The Deputy Presiding Officer (Alasdair Morgan): Good afternoon, ladies and gentlemen. Welcome back. I hope that you enjoyed your lunch. I thank those who provided displays in the reception area—WWF, the Met Office, the European Environment Agency and the Tyndall centre for climate change research. I am Alasdair Morgan, the Deputy Presiding Officer and your chair for this afternoon. I hope that you are looking forward enthusiastically to the afternoon’s session.

We will move on to presentations with a different focus—the Climate Change (Scotland) Bill and how it will fit in with the international efforts that you discussed this morning. I invite Stewart Stevenson MSP to come to the well of the chamber. He has represented the Banff and Buchan constituency in the Parliament since he won a by-election in 2001. He was re-elected in 2003 and again in 2007, when he was appointed as the Minister for Transport, Infrastructure and Climate Change.

The Minister for Transport, Infrastructure and Climate Change (Stewart Stevenson): I thank Patrick Harvie and the other members of the Transport, Infrastructure and Climate Change Committee for inviting me to speak at this event. In my role as the Minister for Transport, Infrastructure and Climate Change, I have regular contact with the committee on a wide range of issues. The challenge of climate change remains a key priority in our discussions, particularly as the Climate Change (Scotland) Bill is passing through Parliament. I hope that this morning was useful and informative. We have an impressive range of participants, especially those who have travelled far to be with us from Canada, Bangladesh, Tanzania, India, Nepal, Indonesia and the United States.

As you know, the global impact of climate change is an enormously wide subject with many uncertainties and unknowns. In recent years, the science behind the subject has made it fairly clear that periods of dramatic change are likely. At a climate change summit that was held in Copenhagen earlier this month, scientists suggested that sea levels could increase by more than 1m by the end of the century. The latest projections are much more dramatic than previous estimates and mean that around 10 per cent of the world’s population—some 600 million people—would be in danger of being flooded. As well as sea level rises, many areas of the world face more extreme storms, floods and droughts. They also face worse shortages of food, water and energy, with the associated health risks.

Climate change impacts are not just events to worry about in the future; they are with us now. Already, some of the poorest people in the world, who are least responsible for the changes, are paying the price. The key message from the Copenhagen summit was that there is no excuse for inaction. One of the Government’s key aims is to ensure that that mantra is adopted throughout Scotland by all of us who can make a difference—and that means every single one of us. It is an issue not just for the Government, for public bodies or for business; all of us, as individuals, have an important contribution to make.

In Scotland, as in the rest of the world, a twin-track approach is needed. We need to limit, by whatever means possible, the emissions that we produce. Our climate is already changing, and emissions have a delayed impact. Even if we stopped all our emissions immediately, global warming would continue for decades to come. This is not about preventing climate change—it is already too late for that; it is about trying to limit its worst effects. As well as reducing emissions, we must adapt to the changes that we experience. Summers in Scotland will be warmer and drier; winters will probably be wetter and stormier. Sea levels will rise and we will probably have more flooding and more landslides.

As organisations make their plans for the future, they need to plan for life in this different world. Some existing infrastructure—roads, harbours, water treatment plants, housing—might not be right in a changed climate. Of course, adaptation plans have to work in a low-carbon economy too. Good planning now can save pain later.

This year is a crucial one in global climate change. The global economic downturn should not and must not deflect us or the rest of the world from the pressing need to reduce emissions. We need to take stock of the situation and demonstrate that green economic revival is possible. Achieving sustainable economic growth remains our key purpose in the Scottish Government. The move towards a low-carbon economy is a significant economic opportunity for Scotland and one that we have to embed firmly in our policy processes.

At the end of this year, a crucial UN climate change conference will take place in Copenhagen. It marks the end point of a two-year negotiating process under the Bali road map and will, the world hopes, produce a successor to the Kyoto protocol. I was pleased to attend the Poznań UN conference in December, which was a key milestone in the process. Speaking to other states and regions from around the world, I took the opportunity to showcase developments in
Scotland as a model of international excellence and, of course, to learn from others.

Many of you here today might have seen already the latest climate change film, “The Age of Stupid”, which is set in 2055. The film challenges many aspects of our consumer lifestyles, but the overriding message is: why did we not stop climate change when we could? This year is a critical turning point in the bid to avoid that question being asked in years to come.

Although Scotland is a small country with just 5 million people, we currently emit around one seven hundredth—0.15 per cent—of the world’s global CO2. If everyone in the world lived like the Scots, we would need three planets to support us. In other words, it can take just a few days for the average Scot to produce as much CO2 as someone living in a developing country would produce in an entire year.

Scottish ministers are committed to a Scotland at the forefront of global efforts to reduce greenhouse gas emissions. From the outset, the Scottish Government has taken its responsibilities on climate change very seriously indeed. We realise the long-term significance of decisions that are made now and the moral obligation that we have to take action. We are working with the UK Government to help it to influence the European Union and the United Nations to make firm and ambitious commitments to protect the world’s climate and safeguard future generations, particularly those in developing countries, who will be most impacted. We are also working in partnership with the UK Government and other devolved Administrations to deliver the targets in the UK Climate Change Act 2008, which became law at the end of last year. We welcomed the first report of the Committee on Climate Change in December 2008 and have submitted our views on the appropriate level of carbon budgets and associated issues to the Secretary of State for Energy and Climate Change in advance of his announcement alongside the Chancellor of the Exchequer’s budget on 22 April. It is a seminal report that emphasises the challenge ahead but, importantly, makes it clear that it is a challenge that can and must be met.

One of the Government’s goals is to address together the health of the economy and the environment. “The Government Economic Strategy” sets out our core purpose of sustainable economic growth. Central to that purpose are the sustainability targets to reduce emissions by 2011, based on 2005 levels, and by 80 per cent by 2050.

Scottish people are already quite well informed about climate change. A survey of more than 3,000 people living in Scotland was carried out on our behalf last year. I am pleased to say that only 1 per cent of respondents had never heard of climate change, while 43 per cent said that they knew a fair amount about it. The majority of respondents—57 per cent—said that climate change is an immediate and urgent problem, although about a fifth—22 per cent—seemed to think that it is more of a problem for the future. Respondents were also asked whether they agreed with this statement:

“It’s not worth Scotland trying to combat climate change because other countries will just cancel out what we do”.

I am pleased to say that two thirds of those who were surveyed disagreed with that statement. Although we have to improve our environmental behaviours in Scotland, I am confident that the people of Scotland are primed for action to tackle climate change.

The passage of the Climate Change (Scotland) Bill will result in Scotland having a world-leading statutory framework to underpin action on climate change. The measures in the bill will put Scotland at the forefront of international action to tackle climate change. In our target of an 80 per cent reduction in emissions by 2050, we will include all the Kyoto greenhouse gases as well as emissions from international aviation and shipping. We will be the first country to do so. To ensure that there is progress and accountability, we have built into the bill a credible framework of annual targets and strong reporting requirements.

I am pleased to say that the first stage of evidence taking on the bill was completed earlier this month. My ministerial colleagues and I are grateful to all those who have taken time to present their views on our bill. All being well, we aim to achieve royal assent later in 2009. For my part, I recently gave evidence to the Transport, Infrastructure and Climate Change Committee on a number of issues that were raised during stage 1 of the bill. In response to strong opinion that was voiced at that stage, and in light of the developing scientific understanding, we have decided to have an interim target for 2020 rather than, as the bill proposes, for 2030. The level of the target will be informed by a number of considerations including the first report of the UK Committee on Climate Change, which I mentioned earlier, and the carbon emissions budgets that the UK Government adopts under the UK act. I hope that that demonstrates both our commitment to the need for early action and our recognition of the desire for greater certainty about the early years of Scotland’s emissions reduction trajectory.

We are only too aware that setting the targets is the easy bit. Achieving them will require enormous effort, co-operation and perseverance. Every sector will have to play a part, and each individual will find individual challenges. An initial overview of measures that could contribute to an 80 per cent reduction was carried out on our behalf and was
published in November. We are now working to produce a discussion document for publication later this year, which will set out the key areas for carbon savings and the work that needs to be done to deliver those in the short, medium and long term to meet our interim and 2050 targets.

The ministerial team fully accepts the Stern report’s conclusion that the cost of inaction on climate change far outweighs the cost of action. I may be the only minister with “climate change” in my job title, but every minister has to be a climate change minister. Projects to tackle climate change are underway in many sectors, including energy, transport, business, the public sector and housing. We are not waiting for the legislation to be in place before we take action to reduce emissions. We have already announced the £10 million saltire prize to encourage innovation in marine renewables in Scotland and around the world. We are pleased to have the National Geographic Society as our worldwide partner in that prize. Since the Government came into power, we have approved 20 large-scale renewable energy schemes, including the largest consented wind farm in Europe and one of the world’s largest wave energy developments. We have surpassed the landmark of 3GW of renewables capacity. That is enough to power 1.5 million homes with clean, green energy.

We have also made significant investment in public transport infrastructure to tackle congestion and reduce emissions. We have launched a new sustainable travel programme called smarter choices, smarter places, and £15 million has been made available for seven demonstrator projects in communities throughout Scotland, from Dumfries to Kirkwall.

14:15

We have encouraged a number of key Scottish businesses to share knowledge and good practice by supporting the May day network. We have planned for the introduction of the carbon reduction commitment for commercial and public sector organisations, to extend trading of carbon emissions, and have announced proposals for the first stage of an ambitious area-based home insulation scheme, supported by £15 million of new Government funding, plus £15 million of match funding from other sources. The scheme is currently being developed, and we hope to launch it in the autumn.

To inform future decision making, we have made a commitment to assess the carbon impact of Government expenditure. We believe that there are few parallels to our approach. Although it presents considerable challenges, we will continue to work towards the development of methods that will help us to achieve our goal of reducing emissions that are associated with the Government’s expenditure each year of more than £30 billion.

In addition, we recognise the enormous value of community involvement in seeking solutions to climate change. To support activity on a community level, we have allocated £27.4 million to the climate challenge fund. I am extremely encouraged by the scope and innovation of the applications that we have received. Work is underway in the area.

In conclusion, Scottish ministers are committed to Scotland being at the forefront of efforts to reduce emissions. We can take a measure of reassurance from our knowledge that collective international action works. We must be clear that the task that we have set ourselves is achievable. We can and, no doubt, will continue to debate the difficulties that we face in seeking to achieve our goal. However, despite the scale of the challenge, our underpinning mindset must be that international co-operation can deliver the global action that is required to limit the effects of climate change for the sake of future generations, be they in the developing world or here at home in Scotland.

The Deputy Presiding Officer: The next presentation is by Simon Pepper. In 2000, Mr Pepper was awarded the OBE for services to sustainable development. He was the director of WWF Scotland for 20 years—until 2005—and served as an external appointee on the Cabinet sub-committee on sustainable Scotland. He is now freelance, but he has a special interest in promoting change in climate behaviour. He is chair of the Scottish Government’s climate challenge fund panel.

Simon Pepper (Independent Climate Change Consultant): I start by thanking the Transport, Infrastructure and Climate Change Committee for its efforts in organising today’s debate. I also thank this morning’s contributors, especially those from other countries, who have given us a colourful insight into the dilemma that developing countries face.

As we all know by now, there is no question but that climate change threatens us here in Scotland, directly and indirectly, through its economic and other impacts. I hope that the case has been made that we should act in our own interests. However, I want to take a wider perspective, as the moral case globally should underpin our attitude to the issue. Poorer countries, especially in southern climes, are hit by a double injustice. They are least responsible for climate change—as we have heard—and they are hardest hit by its effects.
The facts are well known and well rehearsed. Let us not beat about the bush. It is confidently predicted that a temperature rise of more than 2°C would cause death and destruction on a massive scale, especially in poorer countries, not to mention indirect impacts on the whole world from the resulting disruption of economies and huge populations moving about. That would be a human catastrophe. In fact, “atrocity” might be a better word to use, given what we know about the scale of climate change and its human cause. We are in danger of witnessing a largely avoidable crisis, catastrophe or atrocity that has been caused by the greed and negligence of a large—but not very large—sector of the world’s population.

We know that the tipping point of a 2°C temperature rise, which will probably trigger that sequence of events, is expected to be reached in the next few decades, unless the whole world acts quickly and sufficiently to turn round emissions by about 2015. We know that we in the rich world are the most responsible for that state of affairs. In the past, we could claim to be the unwitting cause of the problem, but not now. In relatively recent years and months, the situation has changed critically. Climate change and its causes are now acknowledged facts that are beyond sensible dispute. It is interesting that one could not have said that even a year or two ago.

In 2009, we are poised at a significant moment in the world’s history. From now on, we all know where we stand and how the future will judge us. We have our responsibilities to fulfil. We know that if we kid ourselves that that would be too difficult, fail to take appropriate remedial action and continue to make matters worse, we must accept that we are taking an informed and active part in this outrage against the great mass of humanity, whose lives will be disrupted and destroyed.

Sure, other countries are implicated too, but we in Scotland have a triple duty to act, apart from our well-rehearsed economic interest in doing so and the various benefits for our health and wellbeing that were mentioned this morning. First, our part of this global problem is our responsibility. China’s part is China’s responsibility—let us not be distracted by that. The example that we heard this morning from the Maldives, whose population is one 10th that of Scotland, was dramatic. The Maldives is not waiting for others to commit to a zero-carbon future—it is getting on with that and committing itself to that target now. Secondly, ours is a disproportionately large part of the problem, because our per capita emissions are among the highest in the world. Thirdly, we aspire—rightly—to global leadership.

We have a clear choice that we can take. Do we take the necessary action to remove ourselves unambiguously from any complicity in the catastrophe, or do we dither, delay, devise excuses and do less than is necessary? I stress that I see a compelling and overriding moral imperative that we must acknowledge and cannot dodge.

I congratulate the Minister for Transport, Infrastructure and Climate Change and the Scottish Government on the Climate Change (Scotland) Bill’s content, which has been recognised as potentially world leading, as the minister said. The setting of a target for 2050 and an interim target is the most important feature of the bill’s approach, because it allows Parliament to elevate decisions about the target above the inevitable policy debate that will continue for ever about how we reach the target from year to year. It is also commendable—I endorse what the minister said—that the bill covers all the greenhouse gases and international aviation and shipping. The bill is the first legislative proposal so to do.

I also congratulate the minister on his emphasis on the scientific basis of targets. He has been correct repeatedly to stress in submissions to the Transport, Infrastructure and Climate Change Committee that targets will be determined objectively in response to scientific advice and not to short-term political considerations. We should all round on any political party that seeks to secure reduced targets for electoral advantage.

That said, I hope that the debate will explore some key points about the bill, to put a bit more flesh on those broad commitments. I will touch on five topics that others might want to pick up on. The first is whether the bill commits us to enough. The world needs leadership, so to aspire to be the best in the world is a good start, but if being the best in the world does not guarantee that the job gets done, it is not enough. The test is whether, if everyone followed us—which is what people do to leaders—the climate crisis would be resolved. Currently, the answer, sadly, is no. Recently, Lord Stern summed up the serious concerns that the climate is changing much more quickly than expected and that the world is responding much more slowly than expected, so the need for remedial action is multiplying. The commitments in the bill, especially in the period up to 2020, for which we have no targets as yet, are not sufficient. My first question is whether the bill is ambitious enough.

My second point is on whether the targets will really be driven by the science, as we understand the commitment is. Despite the minister’s assurances that that is the case, the argument tends to creep in from Government that certain challenging targets would not be achievable. We must be very careful about that, because it is a sign that expediency, not science, is starting to influence our choice of targets. Does that
argument mean that we cannot meet the targets without discomfort or economic disadvantage? If so, it is difficult to see how we square that with the known implications of failure to tackle climate change for hundreds of millions of people in the world. Is that what we mean by leadership? I do not think so. We cannot ignore the plight of two thirds of the world’s population because of relatively minor discomfort that we might have to suffer. Any pain that we feel would be very small compared with the misery that climate change is sure to inflict on hundreds of millions or perhaps billions of others. Therefore, my second question is whether we have a cast-iron guarantee that the targets will be set on a scientific basis, leaving aside political considerations.

My third question is whether the bill requires change soon enough, which is another dimension of the story. Will the bill deliver our share of the necessary net emissions cuts to avoid a 2°C rise and the tipping point? At present, the bill commits the current Administration to little if anything beyond what it is doing already—the current score is a mere 1.3 per cent reduction per annum. An interim target in 2020 is welcome news; a world-leading number on that target would be even better news, if it were science driven. That target should drive demanding annual targets up to 2020, starting now.

The Tyndall centre for climate change research recommends 6 to 9 per cent per annum cuts from now, which makes the current figure of 1.3 per cent look, frankly, pathetic, although it complies with the bill as it stands. I wonder why the minister is waiting to request advice on which to base the 2020 target and annual reductions up to that date. The Government does not need legislation to set its targets now, which we understood from its manifesto it planned to do. Time is of the essence. Clear signals are needed sooner rather than later and delays in setting the targets or getting on with achieving them merely add to the burden for future Administrations and generations. My third question is whether the bill demands, and commits us to, action soon enough.

My fourth point is on whether we are measuring the right thing. We could cut the emissions that we produce here in Scotland and still make no difference at all to climate change if we simply import our needs from other countries. Whatever half-measures the international community is signed up to, surely, if we aspire to leadership in Scotland, we must measure and report at least the level of emissions for which our consumption is responsible, wherever in the world the emissions take place. We must also limit access to carbon credits as a way of avoiding more direct responsibility for our emissions. Thirdly, we need to set and measure cumulative budgets for our emissions so that we can see the whole picture of what our contribution will be between now and 2050. That is the fourth question, about measuring the right thing.

14:30

Lastly, I want to ask what is to fear. My feeling is that the Government is seriously underestimating the galvanising effect of leadership in setting targets early, even if those targets turn out to have been too ambitious. Once those targets are set, we will know where we are heading. The current situation—which a lot of people in the chamber would describe as a sort of paralysis, in which there is a great sense of urgency and a clamour for change but that change is not happening—arises from the fact that we have not yet set the targets. Once we have set them, we will be off and will know where we are going. That will get people moving.

The Scottish Government’s projections for the possibilities of early change are very timid. Okay, macro projects—the big investments—often take up to a decade to mobilise. However, the people can be mobilised surprisingly quickly with the right leadership and all the people together—all 5 million of us—can make a big difference both as individuals and as communities. For much of the population, a 10 per cent reduction is not difficult at all. Those of us who have tried it can testify to that.

The climate challenge fund applications that I see give a very encouraging insight into the remarkably ambitious, creative and enthusiastic willingness of communities throughout the country to respond with effective action. However, they need leadership and key milestone targets to sustain their belief in the possibilities of a better world—a happier, healthier, safer, greener world in which enlightened Scotland is a beacon to the international community.

The part that NGOs have to play in that was mentioned this morning. NGOs are straining themselves to mobilise the public mandate, but because of the sense of paralysis without targets, it is difficult for them to do so. No imperative is appearing from the top to drive people on. Tomorrow’s earth hour, which has been organised by WWF, will be one more sign of the growing public clamour for a strong lead and a strong bill.

Those are the five questions that I want to ask. Are we talking about doing enough? Is it science driven? Are we doing it soon enough? Are we measuring the right thing? What is to fear about ambitious, early, strong targets? I am sure that those and other points will be raised by others during the debate. My main point is that we should not distract ourselves with the failings of other countries; we should do what is morally necessary
to fulfil our responsibilities to the future. Our claim of leadership demands no less than that.

First, we should set ourselves targets that are based not on what is easy or on what is influenced by what is easy, nor on what others are doing although we hope that they will follow, but only on what the science says is necessary to prevent the worst effects of climate change. That is the overriding moral imperative, and leadership of that kind would resonate powerfully around the world. How we will meet those targets and how we will minimise the effect of the targets on our own people are important but secondary considerations. We can move much more decisively into a discussion about the how as soon as we know more clearly what we are aiming to do.

We must grasp the nettle soon and set appropriate targets that are as challenging as necessary. Let it never be said that we failed to act in a timely and sufficient way when we knew what was needed; let us not be guilty of negligent inaction in the face of such a dire crisis for the world.

Scotland’s international reputation has a lot to gain and a lot to lose. The genie is out of the bottle; we claim leadership. I hesitate to refer to our track record as a footballing nation, especially in advance of tomorrow’s game but, as far as such claims are concerned, there is an ominous precedent in the world cup of 1978. Those who can remember the disastrous vainglory of Ally McLeod and his ill-fated approach to leadership in that challenge will understand what I mean when I say that Scotland does not need claims of world leadership full of sound and fury but, in the end, signifying nothing. At this time and in this field of play, the stakes are much too high.

The Deputy Presiding Officer: Thank you, Mr Pepper.

As you know, Dr Ian Burton was not able to deliver his presentation this morning. I am glad to say that he has joined us and I invite him into the well of the chamber.

Dr Burton is a scientist emeritus with the adaptation and impacts research division of the Meteorological Service of Canada; professor emeritus at the University of Toronto; co-chair of the Ontario expert advisory panel on climate change adaptation; co-chair of the World Bank expert group on the pilot programme for climate resilience; and a visiting fellow at the International Institute for Environment and Development in London. I am not sure whether there is something about the environment that generates jobs with very long titles, but Dr Burton is nevertheless very much welcome.

Ian Burton (Meteorological Service of Canada): Thank you very much. It is a great pleasure to be here and I apologise for not being present for this morning’s presentations and discussions. I was on my way from an IPCC meeting in Oslo, but got diverted by airline problems. The IPCC—the Intergovernmental Panel on Climate Change, that is, not the independent police complaints commission—is preparing a new report for the international community on the effect of climate extremes in the creation of natural disasters.

I have been asked to give a view from Canada on climate change impacts and adaptation. I should point out that a view from Canada is exactly that: it is not the view from Canada and I am not speaking on behalf of anyone else. The question that I want to examine is whether we are doing enough about adaptation and whether what we are doing is being done in the right way. I apologise that, because of my late arrival, my presentation is something of a throwback to this morning’s discussion.

Most of my remarks are based on a study completed in Canada in 2007 called “From Impacts to Adaptation: Canada in a Changing Climate 2007”, which makes a thorough national assessment of the kinds of impacts that are now being experienced; contains some detail on the impacts that we might experience in the future; and takes a gentle tiptoe into the area of adaptation, movement towards which, although happening, is not as aggressive as it might be.

The report proposes a balanced response to climate change. There should be an appropriate amount of mitigation; in other words, we should try to reduce emissions to halt or prevent climate change. Such an approach ranges from using more energy efficient light bulbs to the long-awaited cap and trade programme, which is on its way. Adaptation, on the other hand, relates to the impact on climate change of small activities such as water conservation and whole-sector approaches such as integrated water strategies.

The goals of what was the first large-scale national assessment since the completion in 1997 of the “Canada Country Study: Climate Impacts and Adaptation” were to highlight advances made in our understanding of vulnerability and to provide a knowledge platform for what we hope will be the next stages in the process.

With regard to the nature and distribution of climate change in Canada, the globe on the slide that is being displayed illustrates changes in annual mean temperature in degrees centigrade between 1995 and 2005. As you can see, northern Canada is experiencing a dramatic amount of change, particularly in the McKenzie basin in the north west, where the change in temperature is
already having a significant impact on the environment and Inuit native people’s lifestyles.

The next slide shows a number of little illustrations of the kinds of impacts that are being observed and measured. These represent only a small sample; there are many more. One might wonder, for example, why the pine beetle infestation in the boreal forest of northern British Columbia does not appear on this pictomap. The explosion of the pine beetle population and its subsequent killing off of the boreal forest, which is likely to affect the whole boreal belt from western to eastern Canada, is at least partly attributable to climate change, because the milder winters that the boreal forests have been experiencing—which are part of the general warming trend—have contributed in large part to the over-season survival of the beetles and the growth in their population.

In addition to these various observed trends and impacts, there has been a series of extreme disasters and catastrophic events. The next slide outlines four in particular: an ice storm; a set of wildfires; the tail-end of a Caribbean hurricane in the maritime provinces; and floods in the Saguenay region of Québec.

I have summed up why we must take a more serious approach to adaptation nationally and globally than we have done thus far in what I call the adaptation imperative. The lines plotted on the graph on the left-hand side of the slide set out the resident IPCC emission scenarios. They are a little bit out of date, and it is widely recognised that they are conservative—or, if you like, optimistic—in the amount of emissions that they expect to be produced. According to the most optimistic scenario, which is represented by the green line, global emissions will peak between 2040 and 2050. As the graph on the other side shows, if the peak were to be delayed for so long, global surface warming would continue well beyond the end of this century. As I say, those scenarios are now widely considered to be too optimistic.

As well as the adaptation imperative, there is what I like to call the adaptation deficit. I do not have the latest figures but in the period from 1950 to 2006 there has been a rapid rise of global total figures for insured and uninsured disaster losses. A lot of those losses have occurred in the developed world, with perhaps proportionally higher losses in the developing world. That shows that, despite the fact that, to date, we have not experienced as much climate change as we are about to, we have not been doing a very good job of managing our control and adaptation of and our response to weather disasters. Losses are already going up and, given where we ought to be, we are already facing a deficit in adaptation.

Adaptation has so far been relatively neglected during the climate change negotiations—although that is changing—due to three myths. First, it has been said that it is a local and regional, and environmental, problem, and that we do not need to be concerned with it as a matter for international co-operation and development. That is not correct—adaptation is global and strategic and multisectoral. The types of disturbances that will occur in many parts of the world as a result of climate change will create problems and raise issues that go well beyond national boundaries.

Secondly, there is an idea that adaptation is antithetical to mitigation: that if one talks about adaptation, one is not serious about reducing greenhouse gas emissions. That is a myth, as the better we understand adaptation requirements, the stronger the case will be for mitigation. The third myth is that adaptation is defeatist. It is not, and if we do it properly, we will help to build social resilience.

I will comment briefly on Ontario. Canada is a federal state and a lot of the provinces are taking their own initiatives in adaptation. In Ontario, for example, a climate change secretariat that is mostly concerned with mitigation has been established in the premier’s office. We have also established an Ontario expert panel on climate change, which is discussing the issues with ministries and leading them to take climate change adaptation into account in their practices and policies in areas across the board, including water, natural resources and ecosystems, infrastructure, energy, agriculture, health, emergency management, education and others.

The panel is helping Ontario to develop a long-term strategy for adaptation; enhancing the capacity of ministries to take adaptation into account in their programmes and policies; working with communities and stakeholders to bring them into the adaptation movement; and developing tools, incentives and regulations.

It has recently produced a guidebook on adaptation to climate change for Canadian communities, which is intended primarily for use at a municipal level. It is interesting because it does not simply address adaptation—although that is its main burden—but says that communities ought to be thinking, planning and developing their future to contribute to the mitigation effort and to contribute to adaptation in the context of a sustainable future.

The final slide shows the websites that give further information on the subject. I thank you for your attention—it is a pleasure to be here.

The Deputy Presiding Officer: Thank you, Dr Burton.
I welcome our final speaker: Professor Don Brown, from the United States. He is associate professor in environmental ethics, science and law at Penn State University, where he is currently teaching an interdisciplinary course on climate change and sustainable development and acting as programme director of the collaborative programme on the ethical dimensions of climate change.

**Donald Brown (Penn State University):** I am delighted to be here, and I thank the Scottish Parliament. I have been working on climate change for about 25 years, and I learn something new at every meeting I go to, which I find valuable—I have met many colleagues here today.

I congratulate the Scottish Parliament on its work. Listening to Stewart Stevenson, I know that I do not have to tell him some of the things that are in my presentation. Listening to Mr Pepper, too, I know that he is not the identified office for my comments, as he already gets what I am about to say.

I will reflect on the ethical and moral dimensions of climate change, on which I want to encourage us all to turn up the volume. Some people get the significance of Al Gore’s claim—which he made three times in his movie—that climate change is a moral issue, but many do not. I will argue that climate change is not only a moral issue, but that it raises multiple civilisation-challenging moral and ethical issues.

There are things about the global scale of these problems that call out for an understanding that climate change is a moral and ethical issue. First, what people do in one part of the world can dramatically hurt people in other parts of the world—the slide shows the first human example of that in a very dramatic way. Secondly, the harm that people can cause to others in that way is potentially catastrophic. Thirdly, climate change is already happening. The chart that you can see on the slide was produced as part of work at the centre for health and the global environment at Harvard Medical School—it identifies the deaths that are already being caused by climate change. We heard a number of examples of such deaths earlier today. Fourthly, although Governments understand their mission as to protect national interests and those in one part of the world have no jurisdiction in or responsibility for other parts of the world, climate change affects other people. No national strategy—not even the Scottish national strategy—makes sense unless it is part of a global solution to a global problem. Countries cannot consider only their national interests.

We have to turn up the volume on climate change as a moral issue, at least in my country. As the economy slows down, people are saying, “It’s not in our national interest to take on climate change at this particular moment.” If climate change is an ethical issue, we have obligations, duties and responsibilities, and excuses for not taking action are not justifiable. The idea that it is not in a country’s national interest to do something does not wash if climate change is viewed as a moral obligation. The notion that climate change is a moral and ethical issue connotes that we do things not because of self-interest, but because of responsibility.

Framing the issue as moral does not necessarily mean that we will get consensus on what morality requires. As you know, some people look to religion for their truth in terms of their moral responsibilities, whereas in secular societies we look to a variety of ethical systems, utilitarianism and rights theories. Environmental ethics is about a misplaced focus—in my view—on differences between meta-ethical theories, because when it comes to policy, nothing turns on those distinctions. I will have to explain that claim to you at another time.

The point about climate change is that, even though we may have different ethical starting points, our analysis indicates that on many of the major policy issues on which climate change requires us to focus there is an overlapping consensus. In other words, it makes no difference that, in relation to some of the major moral and ethical issues that climate change raises, we may have individually different moral and ethical positions that dictate our responsibilities to us on a day-to-day basis. No ethical system would condone the status quo behaviour on climate change.

I wrote a book on the United States’ behaviour on climate change. The US used three excuses for 20 years: scientific uncertainty; the cost to the United States alone, interestingly enough; and the idea that we did not have to do anything because the rest of the world was not doing anything. Mr Pepper hit eloquently on the reason why that final excuse does not wash as a moral or ethical excuse.

The fact that we have different ethical starting points does not mean that we may not agree on what ethics and morality require. More important, ethics knocks all the outliers out, even if there is a difference of opinion on the allocation question, to which I will refer in a moment. Some of the positions that have been taken on international allocation would, in our view, satisfy no ethical or moral theory.

Framing something as an ethical issue works in the real world for many public policy issues. That is critically important because most of the debate in the United States is framed by scientific and economic discourses that pretend to be ethically
and value neutral, but which obscure ethical and moral questions.

The next slide has a list of religious institutions in the United States that now take the position that climate change raises ethical and moral issues. I run a programme at Penn State University in which we work with applied ethics institutes around the world. We are always looking for collaborators because our mission is to turn up the volume on the ethical and moral dimensions of climate change. We have been in existence for about three or four years and have been trying to identify the major ethical issues that climate change raises. I will end by talking about two of them in a bit of detail.

The more we look at climate change, the more we see issues crying out to be understood as moral and ethical. In our "White paper on the Ethical Dimensions of Climate Change", we identified civilisation-challenging moral and ethical issues. The first refers to what is called the stabilisation question: at what level do we try to stabilise carbon dioxide in the atmosphere? No national strategy, including the Scottish national strategy, makes sense unless it takes a position on the stabilisation question. As you will undoubtedly know, carbon dioxide in the atmosphere is already at 380 parts per million and it looks like it may be too late to stabilise it at 450ppm. The IPCC has talked about having 900 to 1,000ppm under the most pessimistic climate change scenarios.

It would be a civilisation-challenging problem by itself to try to figure out how to meet energy demands, given different possible stabilisation levels. The next slide has a graph that shows different curves. The bottom curve is for 350ppm, the next is for 450ppm and the next for 550ppm. People do not get the scale of the problem, because it would take a civilisation u-turn to stabilise at 450ppm. To make matters worse, the atmosphere is like a bathtub into which different people put different amounts. However, slowing down the tap water will not solve the problem. We must cut emissions way back. Every country would probably have to cut carbon emissions to under 2 gigatonnes per year to stabilise carbon dioxide levels.

We talked about the 2°C rise in temperature, but we did not talk about how incredibly difficult it will be to prevent that. Because of what is called climate sensitivity there is significant uncertainty about how much warming we will get with different levels of greenhouse gases in the atmosphere—we hear of figures from 2°C to 4.5°C. Time does not allow me to explain all the information on the next graph, but the middle curve shows the probability of exceeding a 2°C rise in temperature if we try to stabilise carbon dioxide in the atmosphere at 450ppm. Even at that level, there is a 45 to 66 per cent chance that we will overshoot the 2°C rise. At 550ppm, and assuming that the IPCC’s distribution for climate sensitivity is correct, it is virtually certain that we will exceed 2°C. The point is that all this is a moral issue. Scotland, Pennsylvania and the United States, for example, must take a position on not only targets but how they relate to the concentration levels of carbon dioxide in the atmosphere. Mr Pepper said that there is no need to be conservative about initial targets. I would argue that any target must be considered in the context of the position that is taken on the stabilisation question. We know that many parts of the world, such as Africa, are particularly vulnerable to a 2°C rise in temperature. For example, a 2°C rise will mean that Uganda can no longer grow coffee. We are probably at the tipping point of melting the Greenland and west Antarctic ice sheets, and Africa is particularly vulnerable to rises in sea levels.

15:00

The models disagree about the effects in different parts of the world, but they all agree that some parts of the world will get a lot drier. Many of those places are already getting drier. There is great human suffering—it would tear your heart out—in parts of Africa that are already getting drier where the models predict that they will.

So the first issue is: what is our position on the stabilisation question? That is a deeply moral question. The significance of its being a moral question is that we cannot simply look to our own interests to solve it. We need to understand that we have duties and responsibilities.

The last issue that I want to talk about is the allocation question. Now that we know that the world can accept only 2 to 3 billion tons of carbon per year if we want to stabilise greenhouse gas levels, how do we divide up those 2 to 3 billion tons? That is a huge, civilisation-challenging, moral issue. The next slide, which shows what parts of the world are emitting greenhouse gases and what parts are vulnerable, reveals an amazing disaggregation between harms and benefits.

There could be no more obvious moral and ethical question than what each country’s fair share of the global target should be. The map in the following slide, which is labelled "United States of Climate Change", shows that, unfortunately, the entire emissions from India are equivalent to those of only two states—Texas and Louisiana—in the southern part of the United States. The US is way beyond its fair share of safe global emissions. I can say that without any fear of contradiction. No matter how the allocation question is posed or
what formula for distributing carbon emissions is used, there is no credible argument that, without radically reducing emission levels, the US is emitting its fair share.

The next slide deals with carbon dioxide contraction, which is the issue of how we allocate those 2 to 3 billion tons. That is a civilisation-challenging moral issue because, if we give each person an equal right to the atmosphere, the consequences for the rich countries are quite dire. Instead of having to reduce emissions by 80 per cent, the United States will probably need to reduce emissions by 96 or 97 per cent.

I will end by mentioning other civilisation-challenging issues that need to be understood as moral questions. Who will pay for the damages? The representative from Canada sort of started to touch on that. The question is also a moral issue concerning retributive justice. The world—certainly my country—has not even begun to wake up to the Stern report’s conclusion that it will cost more to do nothing. The logical implication of that is that damages are already being experienced and someone will need to pay for them.

I could mention many other ethical and moral questions, such as who the duty holders are, but that would take a further 10 minutes. The answer is that we are all duty holders—individually, locally, regionally, nationally and internationally.

Thank you for your attention.

The Deputy Presiding Officer: I thank the speakers for their excellent presentations. It is Friday afternoon, we have had a good lunch and thoughts are turning to the weekend, but the big theme or message that has emerged from today’s event is the urgent need to take action, the lack of time that we have left, and how quickly we need to find things that we can do. Those are themes to explore.

I am very glad that the Minister for Transport, Infrastructure and Climate Change, Stewart Stevenson, will be here for about 15 to 20 minutes. I am not going to waste his time by talking a lot, but I want to bring the discussion back to the pragmatic level and ask: how much difference will the Climate Change (Scotland) Bill proposals make to our everyday lives? As Simon Pepper asked, do they go far enough? Will they make us drive less, consume less and insulate our houses better? Will they speed up the rate at which wind farms are given permission or at which marine energy is developed? Will we end up having to rely on carbon credits to meet the targets? You know what the questions are, so who is going to start?

Richard Dixon: I am the director of WWF Scotland. We have had two interesting presentations about the moral issue that is climate change, but one dimension that was missing was Scotland’s moral role. We have had James Watt commercialising the steam engine, Mr Dunlop and his tyre, and Mr Macadam and his lovely road surface; Patrick Macmillan and his bicycle do not really outweigh the fact that Scotland created climate change and it is all our fault. There is a moral duty on Scotland to help lead us out of the problem, and we heard from international speakers this morning the interest in the Climate Change (Scotland) Bill as a measure that could help to lead discussion towards a good result in Copenhagen.

Three aspects seem to me to be the most important: two are to do with content and one with process. On content, the most important thing that the Scottish bill will do is include aviation. We are nearly there on agreeing how to do that correctly, and it is terribly important because no one else is doing it and it sends a clear message to Copenhagen.

On process, we talked this morning about timescale. We talked about urgency, but another aspect is not just all of us acting urgently to put urgent targets in place but how long it takes the bill to get through Parliament. If the bill heads towards becoming an act before the summer, it will be a very important piece of paper to wave about in the run-up to Copenhagen. If, however, it finishes off some time in November, no one will take any notice of it internationally. Part of the urgency is about turning the bill into an act and getting it out there to make a difference in time.

The other key content issue is one that Simon Pepper raised—early action. The minister talked about early action, and it is welcome that the 2030 target in the bill will become a 2020 target, but the key issue is what level it is set at and what combination of percentages will operate in that first decade. At the moment, we do not know any of that; we know only that there will be a 2020 target, but we do not know how hard politicians will be driven. As I said this morning, our prescription
is to set a 3 per cent target every year right from the start so that we know where we are going.

The UK Committee on Climate Change has come up with two sets of numbers: 34 per cent and 42 per cent, the difference between which being how hard we try and, partly, whether a global deal is put in place. If there is such a global deal, that committee says that we should go for 42 per cent.

Louise Batchelor: That is for 2020.

Richard Dixon: That is for 2020. The UK committee is clear that the 42 per cent target is what the UK should go for and that it is only in limited circumstances that we should be unambitious and go for the 34 per cent target. The 42 per cent target is the benchmark, but Scotland has some natural advantages, such as our great renewable energy assets, so we could go for even more. I wonder whether the minister will comment on his thinking so far, particularly on the relevance of that 42 per cent target that the UK committee says that the UK can achieve. Why can Scotland not say straightaway, “Yes, of course, we can do that”?

Louise Batchelor: Minister, that is a pretty clear question on the 42 per cent target. Ministers might include aviation in the bill, but will it turn into a must?

Stewart Stevenson: Aviation is a must; the issue is simply a legal drafting one and, if people are uncomfortable with it, we will look at the drafting.

We are a Government of 47 members facing an Opposition of 81 so we are not totally in control of the timetable, but we are hoping to have the final stage of the bill in the last week before the summer recess—in other words, at the end of June. However, if material issues arise, I have made the commitment to the Transport, Infrastructure and Climate Change Committee, which organised today’s event, that it will have the time to deal with them. In a sense, we should not be unduly precious about timescale if we need to give parliamentary time to material issues. Patrick Harvie, the committee convener, and I will work together on that because he shares the ambition to get moving as quickly as possible.

The 42 per cent stretch target is precisely that. We want to get scientific advice on the matter, so that we know what direction to take. Simon Pepper said that it would be better for us to set ambitious targets and not meet them than to set targets that we can definitely achieve. We will probably take a different view on that, because the credibility of targets will be damaged if we set targets that we consistently fail to meet. We must engage with the scientists to get the balance right. A number of assumptions in UK terms are associated with the 42 per cent target. I refer to the half of our carbon that can be traded under European rules.

Simon Pepper asked why we are not asking the UK Committee on Climate Change for advice right now, instead of waiting until the bill has been passed. First, if the bill goes through Parliament on schedule, we will have time to get advice on the schedule that is included in the bill. Secondly, we do not know what the legislation will look like until the parliamentary process has been completed, so we do not have the necessary context. However, we are working closely with the UK committee on the matter and are discussing the provisions that we want to include. We will not ask the committee for advice formally until the bill has been passed and we know what the legislation looks like, but we are interacting on the provisions that it is our ambition to include. I hope that my comments give some reassurance not only to Simon Pepper and Richard Dixon but to others who are listening. Our ambition is to make the kind of progress that is needed.

Louise Batchelor: Thank you, minister—we are certainly not done with you. I suspect that we are also not done with targets.

Duncan McLaren: The minister is well aware of all of the things that we ask for, so I will not go through a long list of them—I will make just two points now.

First, given what we have just heard about ethics and urgency, the issues of a stabilisation level and an allocation between countries come together in the setting of a cumulative budget for the total emissions that a given country may emit over the period from now until about the middle of the century—let us take 2050, which is the date in the bill. The biggest provision missing from the bill is a commitment to ask the UK Committee on Climate Change to provide scientific advice on the total budget for which Scotland would aim. That would allow ministers a bit of flexibility in determining how far above 3 per cent per year they must go, and when, to deliver a safe outcome. Will the minister ask the committee for advice on what would be a fair and safe cumulative budget?

Louise Batchelor: That is a pretty big question.

Duncan McLaren: I have a second, smaller question—although it is not really so small. We have talked a great deal about the urgency of action. I want to stress the urgency of some non-action—not doing things that would lock in massive emissions in the future. The minister is responsible for deciding whether, as part of the national planning framework, Scotland will go ahead with large coal-fired power stations, which, without carbon capture and storage technology from day 1, would risk large emissions that would
blow apart any safe budget. I urge that, when necessary, we urgently take decisions not to do things, as well as decisions to do things. [Applause.]

Louise Batchelor: Duncan McLaren raised two issues: cumulative totals and the need for major reversals or changes of heart on some planning issues.

15:15

Stewart Stevenson: Setting a cumulative budget is an interesting issue. In effect, if we set annual targets, we need only add up the numbers to arrive at a cumulative budget. I have already told the Transport, Infrastructure and Climate Change Committee that we are happy to do the arithmetic that will translate the annual budgets into a cumulative budget.

The closer together the targets that any country chooses to set—be they five-year, three-month or one-day targets—the closer we get to understanding what the cumulative budget is. We must remember that the targets are, in any event, only the surrogate for what we are trying to achieve, which is to keep the temperature down. That has been covered in a number of the presentations today.

We need to keep our eye on 2050. As I have said to many people, 2050 is a great challenge, not least because I will be 104 years old. It is some distance ahead, and we might have to do later other things that we cannot conceive of today. I am entirely relaxed about cumulative budgets. In essence, we are doing the arithmetic on that.

Duncan McLaren spoke about the provision in the national planning framework, which is our horizon to 2030 for spatial planning, and he referred to the provision for carbon-capture-ready coal-fired power stations. The technology is not ready today, so we cannot make that commitment.

On the other side of the balance sheet, the other very important thing in the national planning framework is the commitment to develop marine renewable energy. We have one quarter of Europe’s potential off our shores—60GW of potential renewable energy. What does that big number mean? It is more than 10 times what we produce as electricity as a nation now, and we are already a nation that exports electricity. The potential for marine energy exists, and the £10 million saltire prize is designed to promote the technical, scientific and engineering work that will improve marine tidal energy generation. We have two types of marine energy that will take us in that direction: wave energy and, down at the bottom, tidal energy.

We would like there to be action on carbon sequestration, which will help us to re-engineer existing plants of a variety of kinds, not just in the power sector. As yet, however, the technology is not there; it is at a relatively early stage, particularly as regards turbines.

Louise Batchelor: Let me bring you back to the subject of Hunterston, minister. This morning, we were talking about capturing hearts and minds, and some people were saying how difficult that is. Some people get it about climate change; others do not. Is part of the problem not that our Government is sending out mixed messages? You are speaking about marine energy and other good things, but you then say that you will have a coal-fired power plant as well. Is there not a real presentational problem in even mentioning that?

Stewart Stevenson: We have to be able to replace the capacity that will come out of our system when our two nuclear power stations close down in the middle of the next decade and the decade after that. Coal is one part of what might be the answer on that timescale, but the longer-term answer will undoubtedly be tidal energy. We are already getting a significant amount of energy from wind power, but wind power is not as reliable as tidal power. Geothermal power is also part of the issue.

Louise Batchelor: So you are saying that you do not have a choice.

Stewart Stevenson: We do not have a choice in the short term, but that is why carbon capture is so important.

Judith Robertson (Oxfam Scotland): I am head of Oxfam Scotland. I would like to bring this morning’s international discussion into this afternoon. I am here with my colleagues from many of the countries where Oxfam works—we work in more than 100 countries around the world, for which the immediate issue of climate change is devastating. Hundreds of millions of people’s lives are being affected now: for example, subsistence farmers all over the world cannot rely on basic grain supply to get their crops to grow. The situation is not just being caused by poverty; it is causing poverty.

We have an opportunity, through the Climate Change (Scotland) Bill, to show the way. It is still just an opportunity, however—that is the point that I wish to make. I am glad to hear that the questions around annual targets and the 2020 target are still open, but the question needs to close—and do so quickly in such a way as to deliver what the science says. We need to deliver by 2020 in order to deliver what we need by 2050.

We have heard repeatedly that there is no option. We have heard moral arguments, arguments about practicality and efficiency, and
economic arguments. I do not know how many more arguments our politicians need to hear to be convinced that the issue is a live one.

Louise Batchelor: Can we make that into a narrow question about targets?

Judith Robertson: No. It is not a narrow question.

Louise Batchelor: Could you make it into one?

Judith Robertson: No. I want to come back to Simon Pepper’s point about confidence and the Scottish football team. The Scottish football team believed that it could win that world cup, but it could not score the goals. Scotland believes that it can lead on climate change legislation—and it can do that—but it has to put the ball in the back of the net. That is basically what I am trying to say, and I would like the minister to say how we will do that.

Louise Batchelor: Thank you for that point. I will turn that into a narrow question for the minister. Are we off with Ally’s army? What is the problem with setting annual targets immediately? Everyone tells us that, unless we act within a decade, it will be too late.

Stewart Stevenson: The simple answer is that we do not yet have the science to set the annual targets in the Scottish context.

Louise Batchelor: But have we not seen the science? We know what is happening.

Stewart Stevenson: No. We need a consistent source of scientific advice. At present, we are committed to using the UK Committee on Climate Change, which is currently the best available source. It is important that we use that committee, which has only just been established formally under the UK Climate Change Act 2008, although it existed in shadow form for several months before that.

Scotland’s situation is different from that of other countries, so we need specific advice. As I said, we are responsible for one seventh of the world’s emissions. Nonetheless, we have to do at least one seventh, if not rather more, in our response, because of our unique opportunities. If we start by making political decisions rather than being driven by the science, we will continue to make political decisions. Future decisions will be adverse rather than beneficial if we allow them to be made at the minister’s desk—even with a minister as enlightened as I am.

Louise Batchelor: I thought that we had the science, so I am confused now. Do we have any points on the science?

Justin Kenrick: The science is absolutely crucial. Lord Turner admitted that the UKCCC’s findings are based on the IPCC 2007 modelling, which was based on pre-2006 data. We are getting data now about the Arctic and the permafrost, and we have Kevin Anderson’s work at the Tyndall centre and Jim Hansen’s work at NASA. All that work shows that the situation is much more drastic than that modelled in the UKCCC’s findings. So to follow the science, we should not follow those processes; we should follow what the scientists say now and what they said in Copenhagen last month. The Government is right to follow the science. I am looking at the man sitting next to me, as he is from the Tyndall centre. If I understand it correctly, the Tyndall centre says that we need annual cuts of 6 to 9 per cent now.

At the end of the morning session, Louise Batchelor said that dealing with climate change is a real pain, but I want to say that it is not. I am from the Portobello transition town organisation. I have found that dealing with climate change is a fantastic opportunity to change the way in which communities live and to make them sustainable and vibrant places. Debbie Walker said this morning that, when we take the required steps in response to climate change, we immediately make an economic benefit and improve people’s lives. A 6 to 9 per cent reduction in the next year and the year after will enable us to make the changes that we need in our lives. It is a pain not dealing with climate change. That is not a moral pain as a result of the effects on others but a pain because it leads to extinction for us.

Louise Batchelor: Good point.

Rachel Nunn (Going Carbon Neutral Stirling): I will make a pun that is worse than Louise Batchelor’s one this morning about a red herring. My team of eight people are at the coalface in dealing with the disinterested public—unlike those in transition towns—and trying to get them to take action on their carbon footprint. Tonight, I am going to a tae kwon do group that has kids and, later on, adults. The guy told me, “You can’t talk to the kids, because you can’t brainwash them about climate change—I’m not having that.” It is an interesting observation that the majority of people in Scotland still seem to think that talking about climate change is slightly taboo, slightly greeny and possibly slightly religious. It worries me that that attitude is still out there. I am allowed to talk to the adults in the group, although I am not sure who is more scared. I wonder whether I am more scared of the rejection, if they do not want to start reducing carbon, or they are more scared that I will ask them to do something. Communication and leadership are essential, and Simon Pepper is right that we need targets and that we need them to be communicated.

I think that there are three businesses on the list of delegates for today’s event. Two of them were due to sit between me and Doug McLaren, so they
are either really titchy people or they are not here. If today's event is an informed debate about how we can get a collective and collaborative solution, why are businesses not at the table?

Louise Batchelor: I must admit that I asked where the businesses are and whether they are comfortable with what is proposed in the Climate Change (Scotland) Bill. The encouraging answer was that, by and large, they are comfortable with what is proposed, so we should not be too depressed about the lack of business representation.

Kat Jones (Scottish Natural Heritage): Professor Brown said that climate change is a moral issue and that Governments and states therefore have no excuse for failing to act. The same is true of individuals. My point is about the personal action that each of us needs to take.

There is lots of discussion about reducing our greenhouse emissions through decarbonisation of the economy, and we need to find alternative, low-carbon technologies to take the place of polluting technologies. However, although low or zero-carbon alternatives exist in some cases, we must wake up to the fact that there are by no means zero-carbon alternatives for all our goods and services. Almost everything that we do emits carbon to a greater or lesser extent, and as such it will be a huge challenge to make the cuts that we need to make. Measures to increase efficiency and reduce waste therefore play a huge part in the reduction of emissions, including the use of waste heat, the insulation of homes and more efficient transport.

We need to use our resources as efficiently as possible and we need alternative technologies but, if we want to avoid dangerous climate change, we need to reduce our consumption. We need to use our cars less or not at all, to fly less or not at all, to buy less stuff, to heat less, to mend things and to use less electricity.

Louise Batchelor: I think that most people here would agree with you, but do you have a question?

Kat Jones: The question, I suppose, if the minister is still here—

Louise Batchelor: He is still here—just.

Kat Jones: The positive message is that avoiding climate change means that we need more active transport. We need to walk or cycle and become fitter people. We need to live closer to where we work and to spend more time in our communities. I would like to see an emphasis on that side of the action that we can take on climate change.

Louise Batchelor: Minister, at the last count, only 1 per cent of the transport budget was spent on walking and cycling. Why is that?

Stewart Stevenson: Well, of course, walking is very cheap. I walked here today, and I can tell you that, in the 680 days for which I have been in office, I have made 351 walking journeys of 10 minutes or more. That equates to some 300 miles that I have walked on ministerial business, and that includes only the journeys of 10 minutes or more. Not only that, but let me share with you—I think you are adult enough for this—that I have lost so much weight that I can no longer keep my trousers up without braces. I say that not in a vainglorious way but to illustrate the fact that climate change is about individual action. I think that that is what Kat Jones was saying.

In the past two years, I have almost halved the number of car miles that I travel. It was 40,000 miles. It is still quite high and is substantially above the average, so there is clearly more that I can do, but 59 per cent of my personal journeys are accounted for by rail, walking, bus, ferry, cycle and subway.

Louise Batchelor: I am going to be rude and interject. That is impressive, but your Government still has a massive road-building programme.

Stewart Stevenson: Actually, the Government has a massive railway programme, which has seen a 30 per cent increase in patronage of our railways. We are also putting more money into buses and changing the way in which we support the fuel subsidy of our buses to make it more ecologically focused. Under that work, there will be more rewards when behaviours are more ecologically focused.

We heard earlier about the Tyndall centre. I am not familiar with the figures of 7 to 9 per cent. I will go back and look at that, but I think that the numbers are rather different.

We also heard about Lord Turner, who is one of the great communicators in politics. He is not of my political persuasion, so you should believe it when I say that. He told a Westminster committee that, if the economy grows by 3 per cent per annum—when he said that a year ago, that was reasonable—and the cost of 2 per cent of GDP that Sir Nicholas Stern identified applies, the growth that would have been delivered in January 2050 will be delivered later in the same year. That provides a context for the fact that the pain—the cost—of heading in the right direction is entirely affordable.

15:30

Rachel Nunn talked about not being allowed to brainwash kids. I think—and I suspect that others
think so, too—that the kids are doing the brainwashing, because they have got it much more than we wrinklies have. The kids are proselytising, educating and intervening in their parents’ activities, so do keep up your work.

Businesses in Scotland—and elsewhere, I think—are heavily engaged. One hundred and forty businesses have signed up to the May day network, and the climate change business delivery group, which is independent of Government, is working with the Government. Back when I was appointed as a minister nearly two years ago, my second engagement was to talk to the Confederation of British Industry Scotland in Edinburgh. I was surprised to find myself in a room of people who were engaged and enthusiastic. Of course, they were enthusiastic not because of the ethics or the morality, to which I sign up, but because they could see a profit in reducing their energy use. If that is what will take business on the road, let us work with it and have the morals and ethics a wee bit later. If businesses at least do the right thing now, that will be a modest help.

I say none of that to underrate the challenge, which is undoubtedly substantial. Please forgive me for leaving now, as I must undertake other duties.

Louise Batchelor: Thank you very much, minister. As you leave, questions will still be ringing in your ears.

I will try to bring in people who have not had a chance to speak. Two people are trying to speak; I call Adrian Shaw first, but I promise to take you both.

Adrian Shaw (Church of Scotland): I was delighted to hear about the ethical issues that Donald Brown raised, because for the Church of Scotland climate change is primarily an ethical issue, as it will cause much damage to many people around the world. For that reason, we strongly support the Climate Change (Scotland) Bill.

However, we are concerned that the Government will get nowhere near an 80 per cent target by 2050 or any other interim target—no matter how stringent—unless people in Scotland believe in and are committed to action. For the necessary changes to be effective, people must be aware of their scale. We have heard some of the changes being discussed. People will have to believe that those changes must be made in their lives and those of their communities and they will have to know how to make those changes. We are quite a long way from that in Scotland, despite the many exciting projects that we have heard about.

I will draw a parallel with the hugely successful act that the Scottish Parliament passed to implement the smoking ban. Literally overnight, that changed behaviour in Scotland for the better. Was that legislation so successful because of its fine detail, or because it was argued about, debated and well known and because people said, “I will do it,” when it had to be implemented? We must be in such a position with climate change, but I do not think that the bill will deliver that.

Louise Batchelor: Is the Church of Scotland leading by example?

Adrian Shaw: Scotland has 200 eco-congregations of different denominations. They are people who want to make the change and who want to help cut emissions. That is part of the process and of the solution.

Louise Batchelor: I apologise to Mike Robinson, who stood up at the same time as Adrian Shaw. It is his turn now.

Mike Robinson (Stop Climate Chaos Scotland): I must wear a different coloured shirt next time.

I will start with a semantic point. The annualised targets about which people are nervous are not targets, but minimum targets. It is critical that we use the right terminology. Nobody will applaud us for getting near those levels; we are meant to try to exceed them. I reiterate what my colleague Justin Kenrick said: most of the science refers to cuts of 8 to 9 per cent. The longer we leave it, the higher the targets will probably become. That might be an incentive to rush the bill through before the summer.

I will pick up on carbon capture and storage and on coal-fired power. Of course that remains an issue. It is counterintuitive to proceed with CCS when we are pushing through legislation on climate change. The Massachusetts Institute of Technology said that it did not think that CCS would be practical until 2030, so that technology can hardly address the urgency of the situation.

Louise Batchelor: Thank you very much for making that point.

Bill Slee (Macaulay Land Use Research Institute): I return to the role of the rural land use sector in addressing climate change. It is a pity that the minister has gone—

Louise Batchelor: There are plenty of other people listening and the event is still being webcast, so do not worry.

Bill Slee: We need to get our ducks in a row. There are areas of rural policy in which the targets are not being achieved. We are way below the target of achieving 25 per cent forest cover by 2050. Forestry is invaluable because of the scope that exists for it to be used as a renewable fuel and, as we heard earlier, as a renewable building material.
Another area of rural policy is the Scottish rural development programme, under which grants for renewables are potentially available, but enormous bureaucratic obstacles are put in the way. In parts of Government that could be driving forward the climate change agenda and pushing renewables, there are many obstacles that are not being removed. If we are to reach the targets, it is incumbent on us to get all the ducks in a row—we must ensure that all the directorates of Government are working together effectively. I do not believe that they are at the moment.

Louise Batchelor: We saw what happened when the former Minister for Environment tried to push through an idea to lease off parts of the forests—he failed utterly. What is your opinion of that proposition?

Bill Slee: It was exactly the wrong type of activity. If we want to get communities involved, surely the way to do that and to make possible the provision of relocalized renewable energy would be through the community forest land scheme, which allows communities to lease or purchase forest land, rather than by leasing it to a multinational company.

Louise Batchelor: Everyone who has their hand up has spoken before. I think that Eddie Phillips has had his hand up the longest.

Eddie Phillips: Although I am here representing Go Greener, I am convener for environment on East Renfrewshire Council as well—I sometimes forget which organisation I am representing.

I am really sorry that the minister has gone because I wanted to put him on the spot. The bill is largely okay, but it is long on what and short on how. Its problem is that it says that tackling climate change is partly down to individuals and partly down to the Government and councils, but there is a missing link, which is core-funded community-leading organisations—in other words, organisations such as Carbon Neutral Stirling, Carbon Neutral Biggar and Go Greener. Such organisations are extremely important. We need them to be supported by the Government and councils if we are to take the message on to the doorstep. There needs to be a step change, and for that we need leadership. Go Greener, the organisation that I represent in East Renfrewshire, is showing such a lead, but we need core financial support for community organisations. We need a commitment on that, and I had hoped that the minister would be asked to respond to that, but that will obviously not happen today.

I finish by saying to the Government, “Well done for what you have achieved, but it is not enough.” We need support for local groups such as Go Greener. We know what we need to do; what we want are the resources to do it. Please can we get them?

Louise Batchelor: You have highlighted another of today’s running themes, which is about how we get any Government to take good, pioneering, radical action. Does the impetus come from the grass roots up or from the top down? What are the mechanisms? Do we all have to take to the streets? It is clear that communities are starting to take action. I guess that we just need more communities to do that.

We will have another point from the Youth Parliament.

Liam Beattie: Good afternoon. I represent the Scottish Youth Parliament, which debated the bill a few weeks ago at our general meeting in Dunfermline. Although it received overall support, I have two concerns about it. It is a shame that the minister has gone. The first point is about public transport and the second is about aviation.

The brilliant idea of simply not using the car is impossible for people who live in rural areas. This morning I had to spend two and a half hours travelling the 50 miles from Hawick in the Borders to Edinburgh. The car is a much better alternative. Unless better public transport infrastructure is put in place in Scotland, people will not use public transport. They will say, “Why should I have to go on public transport when it is a lot simpler to use my car?”

On aviation, why should a low-income family be prevented from flying to Spain once a year, for example, when a person who works in Canary Wharf can easily fly down to London every day without thinking about the rise in the tax?

Louise Batchelor: There is a huge issue around who should fly and who should not, but I am not sure that today is the day for that discussion. Does it depend on how much money you have, how important your job is or your reasons for flying? It is a massive debate.

No one should worry about the fact that the minister is not here, because members of the committee are still here, and so are the civil servants. You can decide for yourselves whether you think that they are less important than the minister, but his eyes and ears are still here.

Adrian Loening: I am rather concerned that all of the discussion has been rather long on encouraging people to address climate change issues. I am grateful to our friend from the Church of Scotland, who mentioned the smoking ban, because I believe that we need to force measures on the population. For example, I would not be allowed to build a house that had doors that were 2in too low or which did not have a bathroom. However, we are allowed to build houses with
poor insulation and no solar panels and to create streets around them with infinite street lighting and parking places. We need to build into the system a way of ensuring that those matters are dealt with.

I will steal a sentence from a friend of mine who said, “If the world was a bank, we would have saved it since Christmas.” Well, the world is a bank, actually.

Louise Batchelor: And a much more important one. Are you saying that, given the nature and urgency of the challenge, we should be almost on a war footing now, and that things should be happening tomorrow?

Adrian Loening: There is technology in existence and straightforward things that we can do. As soon as the bill is passed by Parliament, we can legislate to ensure that no house will be built in Scotland without a solar water heater. The technology is simple; last year, I bought one on eBay for £500, and it works beautifully.

Juliet Swann (RSPB Scotland): I want to pick up on the point that the gentleman from the Macaulay Land Use Research Institute made about land use, especially given that many of the presentations today have been about the impacts that we are already seeing on the land around us and how we are adapting to that. As Dr Burton said, we should not apologise about talking about adaptation as it is part and parcel of the fight to tackle climate change. As the gentleman from the Macaulay Land Use Research Institute said, there are already mechanisms that we can use—we could leave this chamber today and go out and start improving how we adapt to climate change. We can do things now around natural flood management and restoring our peat bogs, for example, that will benefit communities, people’s health and the economy as well as fighting climate change.

Dr Burton talked about how the Canadian Government is moving forward on adaptation. I would like to know how it is driving that and what it is doing to achieve the adaptation changes that are necessary.

Louise Batchelor: That is a good question. Dr Burton?

Dr Burton: Very briefly, it is not doing as much as it ought to be doing. It is getting started.

Louise Batchelor: Give us a glimpse of what it is doing.

Dr Burton: We are proposing that the five-yearly land use plan updates that are done at a municipality level should now take climate change into consideration, in relation to adaptation and mitigation. That would involve precisely the kinds of things that the questioner referred to.

Louise Batchelor: That is good.

Fran Loots (Comrie Development Trust): I am from the Comrie Development Trust, and I also work part-time for the John Muir Trust.

We have heard quite a lot about renewable energy, and there is a need to consider that. However, there is an important step before that, which involves the amount of energy that we use in the first place. If the Scottish Government is saying that it does not necessarily need legislation in order to act in this area, the biggest thing that it could do at this time is to make a massive commitment to energy efficiency measures. That would hit two targets at once: it would reduce the amount of emissions, because we would need less energy; and it would have a significant impact on the economy. Those are fairly simple and straightforward measures that are within the Government’s gift.

15:45

The other issue is about how we look at how energy is delivered in the long term. One of the communities with which I have had contact with my John Muir Trust hat on is on the island of Eigg. It is interesting to look at what has happened there, where people have gone from a system of relying very much on diesel for their generators, for example, to a system of 95 per cent electrification that relies on renewable energy. The technology is there, and the situation is interesting, but what is really significant is the steps that the community have taken to have responsibility for their lives. They have put a cap on how much electricity they can use. If they trip the system by using too much in their homes, it gets cut off and they have to pay to get it restored. That seems a simple and neat way to deal with the matter—behaviour has consequences and actions issue from them. I would love a system like that in my house; I have teenagers who know all about the world and the changes in it, but they feel that they cannot do much.

Louise Batchelor: They still want to use the tumble dryer.

Fran Loots: Exactly. They do not connect their actions with what happens.

Louise Batchelor: Those are two very good points on which to end the session, particularly the point about energy efficiency, which most people know is a subject very close to Patrick Harvie’s heart. I have been asked to hand back to Patrick Harvie, who is convener of the Transport, Infrastructure and Climate Change Committee. Thank you all very much.
Concluding Remarks

Patrick Harvie: I thank Louise Batchelor for her contributions and facilitation throughout the day. I also thank the committee clerks, the events team, the broadcasting unit, the official report and the security staff, who have all helped to make today possible. I thank our speakers, the MSPs and all participants, the Presiding Officer and the Deputy Presiding Officer.

I also extend my thanks to the minister in his absence. I was particularly interested in his comment that all we had to do was to add up those short-term targets to know what the total budget will be. That seems a clear indication that those minimum, anything-above-zero, targets are going to be replaced with some specific targets—numbers that we can add up. I very much look forward to amendments along those lines from the Government—if the Government forgets to lodge them, perhaps somebody else will.

In the morning session, I was really struck by some of the generational issues that were expressed. I grew up with a bit of an environmental activist mother, as Louise Batchelor knows. I used to hear phrases such as, “If we don’t get this right, future generations will never forgive us.” That kind of statement is outdated now and we should stop saying it. It is not about future generations any more; it is about this generation. It is about people living on this ball of rock who are suffering right now; it is about our generation not only having to take responsibility for its actions but living with the harm that has already been caused all around the world. Still we hear of people, particularly in the rich world, seeking indulgences, as Duncan McLaren called them in our morning session—the things that we can do that make us feel a little better, but which do not deal with the fundamental problem.

I lay that charge not just at individuals, because there is a tension between individual and Government effort. Governments more than anyone else are guilty of seeking indulgences at the moment: they seek a policy on this or that, but they do not stop doing the harm at the same time. Our approach will work only if we stop causing harm by building unnecessary roads, expanding airports that we do not need to expand and building new coal-fired generating capacity. If we stop doing those things and do the good stuff, we will get somewhere, but if we take a more-of-everything approach, we will fail.

There is a really crucial moment for all of us. Everyone in the room is aware of how important this year is—not just for Scotland, with its domestic bill, but for the world, with the negotiations that will take place at Copenhagen. There is a fear that we could move from denial and inaction to defeatism and inaction. Rather than moving from one irrational state to another, we should occupy the rational space between the two, which is to take action.

I was delighted to hear about some of the inspirational action that is planned and is already being taken in the Maldives, to which I pay tribute. We saw a photograph of the country’s capital city, surrounded by a little defensive sea wall. If any country could be forgiven for thinking, “This is not our problem—we must just deal with survival,” or for making a flippant comment about the proportion of the world’s greenhouse gas emissions that it produces, it is the Maldives. However, the Government of the Maldives has not done that but has sought to give genuine leadership. It may have set long-term targets, but it is not waiting to meet those targets or for the rest of the world to act. Instead, it has decided to take action now, within an understandable timescale of 10 years, to show the world that that can be done.

I thank Ahmed Moosa very much for his contribution.

Can Scotland show such leadership? Simon Pepper provided us with some useful suggestions. He and others in the chamber talked about having science-driven targets and about starting policy initiatives now, rather than waiting for targets to get through Parliament. The Government of the Maldives has just come to power; the Scottish Government set its 3 per cent policy target nearly two years ago, but the Parliament is still working through the legislation. There is no reason for us to wait for the bill to be passed—we should crack on with the policy target of reducing emissions by a minimum of 3 per cent per year.

We should amend the legislation by, for example, setting limits on the use of international credits. If we accept that we must achieve transformational change in our levels of greenhouse gas emissions and in our contribution to the harm that is being done around the world, it is bizarre to imagine that we can use unlimited international credits as another form of indulgence to meet our targets. We need to make clear that the huge bulk of the effort must be domestic.

I want to say something about the wider issues—the underlying philosophical issues that sometimes get lost when we talk about targets. The concept of a green new deal was behind some of the comments that were made and some of the questions that were asked. When previous generations spoke about a new deal, they were facing a recession and the prospect of war. Behind that threat was a philosophy—the ideology of fascism. People had to deal with the problems caused by the recession in a way that was consistent with combating that ideology. In creating a green new deal—the phrase has been
picked up by Governments around the world—we must take an approach that allows us to deal with the recession and climate change and to move away from using fossil fuels, which are running out, but we must also address the underlying ideology that drives a lot of the harm that has been caused.

I call that ideology consumerism. In the rich western world, we adopted a consumerist economic model. That did not happen through a law of nature—consumerism is not innate to humanity. Instead, there was a deliberate, conscious decision to adopt a political and economic model in the rich world that has allowed the rich to get richer and the poor to get poorer, half the world to be too fat and half the world to be too thin, and precious resources to be plundered and squandered. The consumerist model has allowed the rich world to squander its wealth and to overconsume, while elsewhere some of the most basic human needs are left unmet.

If the climate change challenge requires from us what was described today as a civilisational U-turn, is that not about time? Should we not welcome the opportunity to create such a U-turn? If we see a green new deal only as a stimulus and as a way of reviving life in the economic model that caused the harm in the first place, we are certainly being unambitious.

Overturning a consumer economy—to create what we might call a conserver economy—would mean living within our ecological and financial limits. Yes, that means living with limits on our emissions of greenhouse gases such as CO₂, but that is just one expression of the required change. The limits within which we must live include those for land, water and marine harvest. We have been living beyond those limits.

The green new deal must also have something to say about—this is a dangerous word—population. I do not know what that is yet, because anyone who ever even raises the question is told to get back to China. However, the population question will need to be resolved in some way—I do not know exactly how.

The green new deal will also need to redefine what progress means. We will need to come to an accommodation with the idea that economy shares its roots with ecology. The economy is not just about money—I do not know where such an idea came from—but about all of life. If “sustainable economic growth” is to mean anything—if I am ever to stop laughing at the phrase as an inherent contradiction—both Governments and individuals will need a change of mindset as well as a set of targets.

Over the next few weeks and months as the Climate Change (Scotland) Bill moves through the committee process, let us focus on getting the targets and framework right but let us not imagine that setting the targets will mean that the job is done. Once the bill has been passed, we will have only the beginning of a transformational change in our economy, society and politics. I hope that everyone here will continue to contribute to that transformational change.

I thank everyone for their contributions today.

The Deputy Presiding Officer: I thank Patrick Harvie in his capacity as convener of the Transport, Infrastructure and Climate Change Committee—another one of those long titles—for bringing together such a diverse range of delegates from all over the world, and from across the climate change world.

I also thank Louise Batchelor, who facilitated our discussions. It is always helpful to have a professional doing the job instead of us amateurs.

Finally, my greatest thanks go to the delegates who have taken part. I apologise to those whose contributions could not be taken this afternoon or, indeed, this morning. I thank all the speakers and delegates for their enthusiasm and for the content of their contributions. In particular, I thank those participants who have travelled here from afar and who have given us valuable insight into what climate change means for their countries. They have helped us to understand the impact that our actions have not just in our own small country but globally.

As delegates leave the chamber, they will be guided to the exit via the garden lobby, where there is a global change exhibition that demonstrates how communities in four continents have responded to climate change. The exhibition brings together the work of various leading nature photographers from Africa Geographic, Australian Geographic, Canadian Geographic, New Zealand Geographic and the UK magazine Geographical. I hope that everyone enjoys the exhibition.

Thank you all for coming to the Scottish Parliament, and safe home.

Meeting closed at 15:59.
ALPHABETICAL LIST OF PARTICIPANTS

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Richard Aspinall (Macaulay Land Use Research Institute)
Simon Aumonier (Scottish Transport Studies Group)

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Sagan Turner (Inverkeithing High School Energy Group)

U Wali Uddin (Bangladesh in Scotland)

W Debbie Walker (Scottish Transport Studies Group)
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Melissa Waugh (Scottish Government)
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Alan Werritty (Royal Society of Edinburgh)
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Gail Wilson (Stop Climate Chaos Scotland)
Ruth Wolstenholme (Scotland and Northern Ireland Forum for Environmental Research)
Christine Wood (Tullis Russell Papermakers)
Philip Wright (Scottish Government)
Connor Wyse (Inverkeithing High School Energy Group)
ADDITIONAL INFORMATION FROM STOP CLIMATE CHAOS SCOTLAND


Including comment and analysis on supplementary evidence submitted by the Minister for Transport, Infrastructure and Climate Change.

Introduction
Stop Climate Chaos Scotland (SCCS) provides this supplementary evidence to help inform members of the Transport Infrastructure and Climate Change Committee in their consideration of the Stage 1 Report. The following submission sets out the clear scientific evidence for immediate and significant emissions reduction and provides a description of some of the policy options available to support delivery of the necessary reduction of at least 3% per annum.

If the Scottish Climate Change Bill is to provide global leadership in its attempts to tackle climate change it must reflect the scientific imperative for early and significant reductions. While the ambition of the 2050 target is right and to be welcomed, the lack of clarity in the cuts proposed in the next ten years means the Bill provides a poor template for others just when the world is looking for leadership on climate action.

Summary
1. The scientific evidence clearly shows that developed nations must reduce their emissions by at least 3% immediately.
2. The EU Emissions Trading Scheme does not constrain our ability to achieve at least 3% a year reductions.
3. Reductions of 3% per annum are achievable: the additional effort required in the non-traded sector is less than the Government estimates, and the potential for reduction is greater.
4. The economic downturn is likely to have the effect of reducing Scotland's emissions by over 3%. We have to take action now to ensure this rate of reduction is maintained by targeted policies that put us on a path to a green, low carbon economy.
5. Significant additional emissions savings to those identified in the Minister's supplementary evidence are available to support meeting the shortfall identified by the Scottish Government.

2020 reduction baseline
The Scottish Government figures for the reduction needed in the non-traded sector by 2020 to meet national 3% per annum figures are over estimated in several respects. These include the use of inconsistent forecasts and baselines and overly conservative assumptions on the likely reductions within the traded sector. We calculate that the reduction likely to be required by 2020 is between 9 – 11 MtCO2 (see Appendix 1).

The scientific case for early action
"...we expect the targets in our bill to be driven by the science"¹ Stewart Stevenson, Minister for Transport, Infrastructure and Climate Change.

The recent scientific literature on climate change places significant emphasis on the importance of immediate and significant cuts in emissions from the developed world to ensure an early peak in global emissions. For example, the conclusion that we need ‘stringent emissions cuts’² is reached by Parry et al (2008), Schellnhuber (2008)³, Anderson et al. (2008)⁴ and most urgently by Hansen et al (2008)⁵. The credibility of any emissions reduction target is therefore dependent on them being set on the basis of the latest science. Attempts to ‘balance’ the scientific imperative for action with political decisions regarding ‘achievability’ will only serve to undermine the Bill. Recent history has shown that for any moment in time a target set on terms of achievability is likely to fall short of ambition and may be exceeded. The original renewable electricity target of 18% by 2010 is such an example as this was met as early 2006/07 and current targets for 2013 have also been exceeded. But in the case of climate change targets, we cannot afford to set a low benchmark and exceed it later, when other countries are looking for our leadership now. Political will and leadership can redefine the measure of achievability and yet as the Bill currently stands it appears to give space for the ‘potentially short-term political considerations’ the Minister has said must be avoided.

¹See http://www.scottish.parliament.uk/s3/committees/ticc/or-09/tr09-0902.htm#Col1648
³http://www.pnas.org/content/105/38/14239.full
⁴http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6V2W-4T5JPH4-1&_user=108&_rdoc=1&_fmt=&_orig=search&_sort=d&view=c&acct=C000050221&version=1&_urlVersion=0&_userid=10&md5=a6e66ddd5c782cc086277ac399fd57f
Recent climate modelling work carried out by the UK Met Office provides further evidence of the need for immediate reductions in emissions. The work concluded that “overall, a delayed and slow decline in emissions would probably lead to nearly 2°C more warming than an early and rapid decline in global emissions - a total temperature rise of 4°C above pre-industrial levels”. The Met Office’s analysis of different emissions reductions scenarios shows that even a minimum [global] annual reduction of 3% would result in significant global warming, stating that “even if [global] emissions start to decrease in the next two years and reach a rapid and sustained a rate of decline of 3% per year, temperatures are likely to rise to 1.7°C above pre-industrial levels by 2050 and to around 2°C by 210067”. This means that the science tells us Scotland’s contribution must be at least 3% per year if this scenario is to be achieved and must start immediately.

Alongside the urgent conclusions of the emissions modelling work the empirical evidence of climate change continues to provide a stark reminder of the need to act now. Scientific research shows us that:

- The Arctic Ocean is losing sea ice 30 or more years ahead of the projections presented in the Fourth Assessment Report (Stroeve et al, 2007).
- Floating tide-water glaciers in the Antarctic Peninsula are losing ice faster and are making a greater contribution to global sea level rise than reported in the Fourth Assessment Report (Pritchard and Vaughan 2007).
- The actual emissions growth rate since 2000 has been greater than any of the scenarios used by the IPCC in either the Third or Fourth Assessment Reports8.

### Policy options for emissions reductions from the non-traded sector.

The table below provides examples of further emission reduction options and potential that could be achieved by 2020 that were not detailed in the supplementary evidence provided recently by the Minister. The table clearly demonstrates that even focusing on a couple of policy areas there are significant emissions reductions options available to contribute towards delivering a target of a 14MtCO₂e reduction (identified in the Government’s supplementary evidence as being required to deliver a cut equivalent to 3% each year to 2020, although as noted elsewhere SCCS believes this target to be lower). We have cross referenced the identified additional policy options with those in the Minister’s evidence and UK Climate Change Committee report to remove any double counting of emissions saved. Further details and references for the emission reduction options are set out in Appendix 2.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Savings identified by Scottish Government evidence (MtCO₂e)</th>
<th>Total savings by 2020 including additional options identified by SCCS (MtCO₂e) and above those resulting from measures in the UK CCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Housing</td>
<td>1.15</td>
<td>1.66 (excluding new build improvements which would offer further reductions)</td>
</tr>
<tr>
<td>Renewable Heat</td>
<td>0.65</td>
<td>1.85</td>
</tr>
<tr>
<td>Transport</td>
<td>2.8</td>
<td>4.8</td>
</tr>
<tr>
<td>Forestry Land Use and Land use Change</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>5.7</td>
<td>9.4</td>
</tr>
<tr>
<td>Additional unallocated reduction potential identified by Government</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Total Scottish Government identified reduction potential</td>
<td>6.4</td>
<td></td>
</tr>
<tr>
<td>Scottish Government and SCCS identified reduction potential</td>
<td></td>
<td>10.1</td>
</tr>
</tbody>
</table>

6 See [http://www.guardian.co.uk/environment/2008/oct/01/climatechange.carbonemissions](http://www.guardian.co.uk/environment/2008/oct/01/climatechange.carbonemissions) for the full article.

7 Recent work by the Tyndall Centre shows that global emissions are very unlikely to peak before 2020 and therefore even greater emissions reductions are required to so ensure the global emissions budget does not trigger dangerous climate change – i.e. even the projections from the Met Office could be interpreted as conservative.

It is clear from the above table that even without fully accounting for the likely additional reductions that will actually occur in the traded sector there are significant emissions reduction potential from the non-traded sector to suggest that a target of at least a 3% per year cut to 2020 is achievable.

This simple analysis of policy options and their emissions reductions potential does not include:

- The substantial emissions savings that we believe could be delivered by amending the Strategic Transport Projects Review (STPR). The Minister’s supplementary evidence states that emissions are expected to rise in the non-traded sector by some 2 MtCO_2e. The STPR would suggest that some 0.9 Mt of any rise will arise in the road transport sector. Given that nearly all other sources of emissions in the non-traded sector are making reductions it is clear that far from being in line with its ambitions on climate change the Scottish Government’s transport policy places a disproportionate burden on other sectors.
- Greater potential for emissions savings from forestry land use and land use change.
- Greater scope for emissions savings from non-domestic buildings.

In this document we have focused on savings from domestic effort and not accounted for any potential for international credits.

**Emissions from the traded sector**

The supplementary written evidence submitted by the Minister for Transport, Infrastructure, and Climate Change argues against immediate emissions reductions of at least 3% on the basis that the predefined reductions from the European Emissions Trading Scheme (ETS) place too great a burden on non-traded sector. SCCS acknowledges that integration with the ETS is a complicated area but does not recognise the ETS as placing a constraint on the emissions reduction ambition of Scotland. The Scottish Government is committed to a 50% renewable electricity target by 2020 and aiming for a 20% renewable energy target by 2020. Both these targets and many other policy commitments reflect the renewable energy potential of Scotland and place us on a path to a decarbonised power sector at a far faster rate than the predetermined path described by the ETS. For instance, the combined impact of delivering the renewable electricity target and installing CCS to cover some of Longannet's output would produce a reduction of nearly 6MtCO_2 between 2010 and 2020. However, under the Scottish Government’s proposal the emissions savings are effectively not credited to the Scottish account except where permits are auctioned. This accounting system effectively acts to dis-incentivise energy efficiency and renewable energy policy as the savings are not counted.

Even if this accounting approach is to be followed, the traded sector will make a vastly more significant contribution to emission reductions following a global deal, whether in Copenhagen at the end of 2009 or later. The predetermined emissions trajectory will increase from over 1.5% to over 4% per annum, meaning the burden on the non-traded sector is significantly reduced. The Government does not quantify for the fact that the traded sector will be subject to increased ambition as a result of a global agreement and consequently improved EU targets any time before 2020. The CCC analysis of enhanced ambition in the energy sector suggests the emissions cut in this sector would rise to 56%, reducing the contribution required from the non-traded sector from 9MtCO_2e to just 3.4MtCO_2 (or roughly 1.25% per year).

After 2012, the ETS will enter its third period and will move to substantial auctioning of emission permits particularly across the power sector. This will have the effect of completely removing the current perverse incentive to not accelerate emissions reductions from our domestic power sector and establish an accounting system that acknowledges the real savings made from decarbonising our power sector.

In summary, although the ETS introduces a complicated market mechanism into Scotland’s emissions inventory it does not prevent us from setting and meeting targets of at least 3% a year. In addition to this, further emissions reductions options for the non-traded sector are available to the Scottish Government than those highlighted in the Minister’s supplementary evidence, the combined effect of which is to make reductions of at least 3% per year highly achievable.

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9 This is almost double the CCC forecast for this sector (CCC, figure 14.5b)
Economic downturn and emissions reductions
The Scottish Government’s reluctance to follow the scientific evidence and deliver on their manifesto commitment to reductions of 3% ignores the fact that the economic downturn will result in an accelerated decline in emissions in the immediate future. Historical economic data shows that at times of recession, emissions have tended to decline by more than the slowdown in GDP. Although the volatility in emissions has reduced with time and the Scottish economy has become less carbon intense we can still expect a total decline in emissions of over 3% in parallel with the economic forecast of a 3.7% drop in UK GDP for 2009 made by the OECD. The response to the economic decline must recognise the opportunity to realise a new green economy and ensure we emerge on a low emissions trajectory, to do otherwise risk a false start under the Climate Change Act that could threaten our ability to help prevent dangerous climate change. Moreover, to stimulate domestic innovation rather than increased imports of technology and techniques, and thus gain maximum economic benefit from climate mitigation, Scotland will need stretching targets.

Conclusions
1. The science already exists that tells us Scotland must reduce its emissions by at least 3% per year, there is no scientific reason for this minimum not being established in the Bill from the outset.
2. The table of emissions saving measures presented in the Minister’s supplementary evidence omits considerable emissions reduction potential available to the non traded sector.
3. The Minister’s evidence underestimates the contributions to Scotland’s targets which will be made by the traded sector both in the current circumstances, and following a global deal at Copenhagen; and in this and other respects, over-estimates the contribution which would be required from the non-traded sector.
4. Annual reductions of at least 3% are therefore both necessary and achievable.
5. The current drafting of the Bill elevates political expediency above scientific necessity.

11 See http://www.oecd.org/dataoecd/52/29/42466854.pdf [Link no longer operates]
The Scottish Government figures for the reduction needed in the non-traded sector by 2020 to meet national 3% per annum figures are over estimated in several respects. The figure of 14MtCO₂ should be reduced in the following ways.

First, the baseline assumption of a 2 MtCO₂e rise in emissions in that sector is debateable. The CCC report would suggest a level baseline is more realistic. The CCC analysis suggests that excluding energy generation (the majority of the traded sector), air transport and land-use (ie sinks, not emissions), the reference projection is for no change between 2009 and 2020. Slight growth in road transport and agriculture emissions are offset by small declines in waste and residential emissions (CCC, figure 14.5b). Cambridge Econometrics modelling (also reported by the CCC, pp440-441) of the industry, services, road transport and residential emissions from Scotland suggests a reference scenario in which emissions decline by 3Mt-CO₂ in the period 2006-2020. On that basis the target reduction would fall to 12 MtCO₂.

Second the figures assume that the traded sector reduction is only directly equivalent to the target overall reduction (of 34% in the interim budget). This is false. The CCC assume that to deliver an overall reduction of 34%, the power sector (the majority of the traded sector) will deliver 40% reductions over 1990 levels (figure 5.22). Using this assumption in the Scottish figures cuts the target reduction by a further 2 Mt-CO₂e to 10 MtCO₂e.

Thirdly, the baseline figures being used by the Scottish Government appear to be those for 2006, not 2009, in which Scotland’s total emissions could well be 3Mt lower that in 2006, due to the continuation of current trends, accelerated by economic downturn. This would translate into a further reduction in the non-traded target of at least 1MtCO₂e, to just 9 MtCO₂e. This level equates to annual reductions in the non traded sector in the order of 3.5% per year. However there are still more factors which the Government has not considered which will reduce this further.

Fourth, the Government assumes that the traded sector in Scotland will not make any contribution to Scottish emissions reductions beyond that set by the ETS bubble. This is not a valid assumption. At the UK level a greater contribution could be accounted by auctioning less ETS credits, while in Scotland, the effect of better performance in the traded sector – eg through further exceeding our renewable energy targets - is that Scottish businesses will buy less auctioned credits, thus leading to a greater cut in emissions attributed to Scotland. This effect cannot be quantified, although it should be noted that the renewables industry suggests that by 2020 a 70% contribution from renewables to electricity demand is practical.

Fifth and finally, the Government does not quantify any increased ambition in the traded sector as a result of a global agreement and consequently improved EU targets any time before 2020. The CCC analysis of enhanced ambition in the energy sector suggests the emissions cut in this sector would rise to 56%, reducing the contribution required from the non traded sector to just 3.4 MtCO₂e (or roughly 1.25% per year).
## Appendix 2

Table of references and further options (the savings listed here are not cumulative as some are captured under different measures/recommendations. They are set out to provide a comprehensive description of the scale of reduction that is possible.)

<table>
<thead>
<tr>
<th>Sector</th>
<th>Measure</th>
<th>Emissions reduction potential (MtCO$_2$e)</th>
<th>Timescales</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Buildings</strong></td>
<td>Real Time Meter roll out across Scotland</td>
<td>5 -15% efficiency improvement in domestic housing.</td>
<td>Beginning immediately</td>
<td>-Study by the Environmental Change Institute Oxford University. <a href="http://www.eci.ox.ac.uk/research/energy/downloads/smart-metering-report.pdf">http://www.eci.ox.ac.uk/research/energy/downloads/smart-metering-report.pdf</a></td>
</tr>
<tr>
<td></td>
<td>Energy Efficiency measures. (Including e.g. use of fiscal incentives)</td>
<td>Annual potential of 4.7MtCO$_2$e (e.g. of fiscal incentive reduction 0.1MtCO$_2$e by 2010)</td>
<td>Beginning immediately</td>
<td>Energy Efficiency and Micro generation strategy for Scotland consultation response from Energy Savings Trust. <a href="http://www.scotland.gov.uk/Resource/Doc/194536/0052257.pdf">http://www.scotland.gov.uk/Resource/Doc/194536/0052257.pdf</a></td>
</tr>
<tr>
<td><strong>Transport</strong></td>
<td>E.g. reductions in work related car travel. Address freight emissions. Transfer short car journeys to walking and cycling. Increase public transport trips. (Excludes more efficient vehicles and fuels already in UKCCC)</td>
<td>Reduction of 26% possible.</td>
<td>2020</td>
<td><a href="http://www.bettertransport.org.uk/campaigns/climate_change/whats_needed">http://www.bettertransport.org.uk/campaigns/climate_change/whats_needed</a> Excluding the reduction component attributed to vehicle efficiency (measure already incorporated into UK CCC and Government figures)</td>
</tr>
<tr>
<td><strong>Renewable Heat</strong></td>
<td>Biomass Anaerobic respiration Ground source heat pumps Solar water heating Air source heat pump Micro CHP (increased use to meet 20% target rather than 11%)</td>
<td>20% renewable heat target. 1.85 MtCO$_2$e</td>
<td>2020</td>
<td>- FREDs report – Scotland’s Renewable Heat Strategy: Recommendations to Scottish Ministers: (scenario’s including 20 and 25%) <a href="http://www.scotland.gov.uk/Publications/2008/03/11102501/0">http://www.scotland.gov.uk/Publications/2008/03/11102501/0</a> (Carbon conversion based on AEA report to UK Government (DTI &amp; DEFRA) <a href="http://www.defra.gov.uk/farm/crops/industrial/energy/pdf/fes-renewable-chp.pdf">http://www.defra.gov.uk/farm/crops/industrial/energy/pdf/fes-renewable-chp.pdf</a> (conversion of TWh to MTC savings: 17TWh = 1 MtCe, 0.058 MtCe/TWh)</td>
</tr>
</tbody>
</table>

Note: In this we have not included any additional reductions from waste and agriculture which may be possible above those included in the UKCCC.
ADDITIONAL INFORMATION FROM SCOTTISH COUNCIL FOR VOLUNTARY ORGANISATIONS

The Scottish Council for Voluntary Organisations (SCVO) is the national body representing the voluntary sector. SCVO seeks to advance the values and shared interests of the voluntary sector. SCVO has a membership of over 1200 but also speaks on behalf of a much wider constituency of third sector organisations across Scotland.

SCVO welcomes the introduction of the Climate Change (Scotland) Bill. SCVO is especially concerned that inequalities at the global, national and local levels exacerbate the damaging effects of climate change on those least able to cope with and adapt to them. This has direct implications for the provision of services by many SCVO members.

As a prospective member of the Stop Climate Chaos Campaign (SCCS), SCVO supports the SCCS response (Annex I) to the call for views on the Bill by the Committee on Transport, Infrastructure and Climate Change with respect to the specific questions raised. Further to this, however, SCVO would particularly like to echo the points made below in responses by the Church of Scotland (Annex II) and the Royal Society of Edinburgh (Annex III) and to draw the attention of the Committee to the significant role which the voluntary sector and community groups have in offering solutions to both the mitigation of and adaptation to climate change.

“…it would be helpful for the legislation to embody a requirement for public bodies to engage with voluntary organisations in the delivery of this [public engagement] duty.”

Written submission from Church of Scotland to the Transport, Infrastructure and Climate Change Committee, para 11.

“Central and local government are crucial in providing leadership and setting the terms of that engagement, but non-governmental and voluntary bodies will need to energise civic society and promote individual and collective responsibility.”

Written submission from Royal Society of Edinburgh to the Transport, Infrastructure and Climate Change Committee, para 23.

The Climate Change (Scotland) Bill has set ambitious targets on emissions reductions, which are to be applauded. For behavioural change to occur on the scale required to meet these targets and, more importantly, for there to be a genuine reduction in overall CO2 emissions, individuals and communities must be thoroughly engaged in the process and an integral part of the solution: they will need to understand fully the reasons behind what will inevitably be the harsh realities of change and difficult policy decisions.

The current iteration of the Bill fails to recognise properly the fundamental need for public involvement.

The voluntary sector has the potential to play a central leadership role in facilitating behaviour change amongst communities across Scotland.

SCVO believes that provision for the need for engagement to be incorporated in the Bill can be accommodated, as follows:
Part 1 – Emissions Reduction Targets
4 Setting annual targets

Recognition of the opportunities which community groups and the public present as activists in addressing climate change and contributing to reduction targets is necessary. When setting annual targets, in addition to those issues listed under 4 (a)-(h), it is proposed that Scottish Ministers should also have regard to the capacity and potential of a mobilised public to help achieve these.

Part 2 – Advisory functions
20 Scottish Committee on Climate Change + Schedule 1
22 Advice on annual targets etc

With reference to the establishment of a Scottish Climate Change Committee, it is important that representation of the third sector be included on the Committee to ensure that the role of the sector as a contributor to solutions is recognised in advice to Ministers. Such representation would be relevant, for example, with respect to 22 (3) (c), i.e. the sectors of the Scottish economy in which there are particular opportunities for contributions to be made towards meeting the targets through reductions in emissions of greenhouse gases; and would acknowledge that such opportunities extend beyond the confines of ‘the economy’.

Part 4 – Duties of public bodies relating to climate change
36 Duties of public bodies relating to climate change

There is specific need within the Bill for commitment by the Scottish Government actively to engage with communities in the promotion of understanding climate change and the implications of the Climate Change (Scotland) Bill, i.e. to explain the scale of the problem and the necessity for targets, what these targets are and how they are to be achieved. It is proposed that included in the duties of public bodies is a binding commitment to engage with communities and the general public on promotion of the objectives of the Bill.

Part 4 – Duties of public bodies relating to climate change
38 Reporting on climate change duties

Following on from the previous point, Ministers’ duties on reporting under the Bill should therefore incorporate reporting on the extent and effectiveness of engagement with the public, as proposed above.

Background to the role of the voluntary sector

It will only be with concerted and collective effort that the issue of climate change can be addressed and we believe that this is dependent on action at ground level by an informed and engaged public. With appropriate support, the voluntary sector is well placed to complement this effort and to help mobilise communities and individuals in responding to the challenge of climate change. A number of voluntary organisations have developed experience and are already dealing with the consequences of climate change.
SCVO recognises that the effects of climate change in Scotland will affect the poorest most acutely. The impact of rising fuel prices and concomitant increases in fuel poverty already bear this out. It will be Scottish communities which experience the impacts of climate change most directly and it must therefore be those same communities which need to be empowered to be a focus for mitigation and, especially, adaptation efforts. Through its wide membership, SCVO is positioned to support communities to respond to climate-induced events and anticipate future needs.

There is a range of examples across Scotland in which the voluntary sector has embarked on initiatives which, whether or not it is their primary objective, contribute to mitigation efforts and progress towards a low carbon society. These include community renewable energy projects, re-use and recycling initiatives, and cooperative transport schemes. They are inspired by a diversity of individuals, voluntary organisations, community and faith groups, and social enterprises. They are not isolated cases and reflect a growing willingness amongst the public to act. Despite this, the level of understanding amongst the public overall of the relevance of climate change and of the Climate Change (Scotland) Bill in particular, appears to be low. Further, there is an assumption that, for example, when an extreme weather event occurs, it is the public authorities who will come to the rescue. If predictions about climate change are to be believed, the frequency and extent of such events in future mean that it will be vital for communities themselves to understand the risks involved and to build up resilience to the associated dangers. Again, the voluntary sector can make a positive contribution to working with communities to strengthen their ability to adjust to changing conditions.

SCVO strongly believes that recognition of the role of the public and the capacity of the voluntary sector working with communities should be included in this extremely important piece of legislation to ensure that efforts to address climate change are maximised across society.

Annex I – Written submission from Stop Climate Chaos Scotland to the Transport, Infrastructure and Climate Change Committee

Annex II – Written submission from Church of Scotland to the Transport, Infrastructure and Climate Change Committee

Annex III – Written submission from Royal Society of Edinburgh to the Transport, Infrastructure and Climate Change Committee
CLIMATE CHANGE (SCOTLAND) BILL
LETTER 18 MARCH 2009 – ANNEX A – 3% PER YEAR EMISSION REDUCTIONS

I wrote to you on 18 March on the Climate Change (Scotland) Bill and at Annex A provided information on officials’ analysis of the proposal for three percent, year on year, annual reductions to 2019.

Since that letter, work has been ongoing to further refine the data we used as the basis of our analysis and to update estimates of abatement potential. This has led us to revise some of the figures which were set out in my earlier letter.

To allow the Committee to make its recommendations in the light of the most up to date information, I have set out the changes in the figures from my previous letter in Annex 1 below.

I would stress that the revised figures set out below are current “best estimates” of potential savings. As you are aware there is a considerable amount of analytical work being commissioned in the field of climate change and no doubt this will provide further refinements to the data. I would intend to keep the Committee advised of any further revisions.
The updating of the figures was completed just as my officials received a copy last week of the supplementary evidence paper from Stop Climate Chaos Scotland (SCCS). Unfortunately, there were significant errors in the figures used in this paper, particularly those seeking to reflect Scottish Government analysis. Officials have had discussions with SCCS and I understand SCCS has now issued a revised paper to Committee members.

Nonetheless, a number of concerns remain regarding the issues raised in the SCCS paper and I address some of these briefly in Annex 2 below.

However, this does highlight the complicated nature of some of the key principles in the proposed legislation and delivery of it. Given this, I would be happy for officials to work with Committee clerks in setting up additional informal meetings with the Committee in the coming weeks to discuss further any of these key issues.

STEWART STEVENSON
3% PER YEAR EMISSIONS REDUCTIONS

1. Annex A from the letter “CLIMATE CHANGE (SCOTLAND) BILL”, sent by The Minister for Transport, Infrastructure and Climate Change to the Convener of the TICC Committee on 18 March 2009 sought to demonstrate that adopting even the most radical measures proposed by the Committee on Climate Change (CCC) would be far from sufficient to meet 3% per year emission reductions. It was stated that the measures proposed by the CCC to meet its “Intended Target” of a 42% reduction by 2020 (against 1990) would leave a gap of over 7 MtCO$_2$e compared with the reductions needed to 2020.

2. This is a complex area and analysis of potential carbon savings is ongoing and, since the letter was sent, officials have refined their estimates. It is now estimated that the more radical (42%) measures proposed by the CCC, alongside current Scottish Government policies, would leave a smaller gap, of some 5 MtCO$_2$e, in the reductions needed to 2020.

3. The reasons for this change are as follows.

   a. Slight adjustments have been made to the assumed path of the Scottish traded sector from 2006 to 2020. The CCC also recently revised its “business as usual” projections to 2020 for transport and for non-CO$_2$ greenhouse gases. These two changes mean that, to meet the target in 2020 associated with a 3% annual reduction trajectory, abatement of around 13 MtCO$_2$e against “business as usual” is needed between 2006 and 2020 (rather than the 14 MtCO$_2$e stated in the previous letter).

   b. Estimates of the potential abatement from each sector have also been revised, to take into account where Scotland differs from the rest of the UK.

   c. The greatest change in estimated abatement potential is from forestry. The previous paper took a pro-rata share of the CCC’s estimated UK savings from forestry. More robust estimates from Forestry Commission Scotland of the savings that would be achieved by a 15 000 hectares per year planting rate in 2020 are now being used instead. This adds almost 1 MtCO$_2$e to the savings estimated previously.

   d. Other slight increases in estimated abatement potential come from domestic buildings, transport, waste and agriculture and these have now been factored in.

   e. In total, these changes increase the possible abatement to some 8 MtCO$_2$e in 2020, leaving the aforementioned 5 MtCO$_2$e shortfall. As was stated in the earlier letter, not all of these savings would necessarily be available because some of them are from UK and EU measures which are not currently being implemented.
Stop Climate Chaos supplementary paper

The following are headlines covering some of our concerns over the issues raised in the SCCS supplementary paper.

Table at page 3 of the supplementary paper

As set out above the table uses incorrect figures and double counts many of the savings identified as additional. SCCS have agreed to provide the Committee with a revised paper.

Projections

The CCC’s revised “business as usual” projections, discussed in Annex 1, show a rise of around 1 MtCO$_2$e in non-traded sector emissions between 2006 and 2020. The projections used by SCCS in their paper exclude the absorption of CO$_2$ from forests and other land, which is included as standard in Scottish emissions figures. This has a material effect on projections and we are unclear why SCCS has adopted this approach.

Additional savings identified by SCCS

The savings listed in the table in Appendix 1 of the SCCS paper have been drawn from various documents, and it is not clear how much of these savings are already accounted for in either the CCC’s “business as usual” projections or the measures to deliver their Extended or Stretch Ambition. Additionally, the costs per tonne of CO$_2$e abated may not have been fully taken into account, whereas the CCC, in recommending measures, does consider cost effectiveness.

Future contribution to carbon savings by the Traded Sector

The 18 March letter to the Committee set out the Scottish Government analysis of the 3% proposal on the basis of current circumstances i.e. without there being a global deal. The Bill will become law before such a global deal and therefore we need to consider targets on the basis of the current ability to deliver.

We are aware of the additional expectation that will come upon the Traded Sector in the event of any global deal, and of the CCC’s recommendations for delivery of a 42% target. It was made clear at the end of the 18 March letter to the Committee that the Scottish Government would review the 2020 target in the light of changed international circumstances.

The SCCS supplementary paper makes a number of points around the Traded Sector of which we have concerns. Officials will have continuing dialogue with SCCS and would be happy to discuss further with the Committee at any future informal session.
CLIMATE CHANGE (SCOTLAND) BILL

Transport, Infrastructure and Climate Change Committee

Stage 1 Report

SCOTTISH GOVERNMENT RESPONSE

5 May 2009
# Climate Change (Scotland) Bill

## Transport, Infrastructure and Climate Change Committee

**Summary of Recommendations on Parts 1-4**

### High-level Summary

<table>
<thead>
<tr>
<th>The Committee welcomes the Bill and endorses its general principles.</th>
<th>Scottish Ministers welcome the Committee’s support for the Scottish Government’s world leading legislation to tackle climate change.</th>
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<tr>
<th>The Committee affirms its support for the inclusion of the six key greenhouse gases within the Bill and agrees with the general balance of opinion that the 80% emissions reduction target for 2050 is the minimum which is necessary.</th>
<th>Scottish Ministers welcome this recognition and support for these key elements of the Bill.</th>
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<tr>
<th>The Committee believes that the framework for emissions reductions targets set down for the period between 2010 and 2019 needs to be more robust. The Committee wishes to see the interim target brought forward from 2030 to 2020, in line with changes proposed by the UK Government in advance of international discussions due to take place in Copenhagen later in 2009.</th>
<th>The Scottish Government has committed to introducing a new 2020 interim target in the Bill to replace the existing 2030 target. This new target will be pivotal in incentivising early action to reduce greenhouse gas emissions during the next decade, steered by the statutory annual targets to be set in line with the 2020 target.</th>
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<tr>
<th>The Committee calls on the Scottish Government to put before the Parliament at the earliest possible date a comprehensive strategy document outlining how it intends to achieve the targets set out in the Bill.</th>
<th>The Strategic Overview Project looks at the high level measures required in each sector to meet our 2020 targets and the transformational measures that we will need to achieve our 2050 target and deliver a low carbon economy. One of the key outputs of the Strategic Overview Project will be an Indicative Delivery Plan which will be published in summer 2009. This will involve engagement with key stakeholders and act as a bridge to the more detailed statutory Report on Policies and Proposals which will set out the measures to deliver our annual targets to 2022, to be published summer 2010.</th>
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**Targets - methodology**

<table>
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<tr>
<th>Recommendation 1</th>
<th>A review of the process of producing the annual disaggregated greenhouse gas inventories has been commissioned jointly by the UK Government and Devolved Administrations. The review will consider the practicability of whether data can be published earlier, as well as the potential to produce provisional Scottish emissions estimates in advance of the final Scottish inventory. The Committee will be advised of the progress of this work. SEPA is among the key data providers to the UK’s emissions inventories. The Scottish Government will continue to work with SEPA to explore how it can support the delivery of climate change objectives.</th>
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<tr>
<td><strong>Recommendation 2</strong></td>
<td>When producing the final annual assessment of Scottish greenhouse gas emissions, a significant amount of time is devoted to data quality assurance processes. As stated in response to Recommendation 2, the Scottish Government is reviewing whether data can be published earlier, and importantly without compromising accuracy. The outcome of this work will also inform decisions around the use of provisional emission estimates in the future.</td>
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The Committee recommends that the Scottish Government increases its efforts to identify the means by which the 18 to 20 month reporting time [for reporting emissions] can be reduced and keeps this Committee up to date with its progress in meeting this objective. The Committee notes the potential expertise offered by SEPA in the field of emissions monitoring and recommends that the Scottish Government considers how this could best be employed to support the Bill framework. The Scottish Government will continue to work with SEPA to explore how it can support the delivery of climate change objectives. When producing the final annual assessment of Scottish greenhouse gas emissions, a significant amount of time is devoted to data quality assurance processes. As stated in response to Recommendation 2, the Scottish Government is reviewing whether data can be published earlier, and importantly without compromising accuracy. The outcome of this work will also inform decisions around the use of provisional emission estimates in the future. SEPA is among the key data providers to the UK’s emissions inventories. The Scottish Government will continue to work with SEPA to explore how it can support the delivery of climate change objectives. SEPA is among the key data providers to the UK’s emissions inventories. The Scottish Government will continue to work with SEPA to explore how it can support the delivery of climate change objectives. When producing the final annual assessment of Scottish greenhouse gas emissions, a significant amount of time is devoted to data quality assurance processes. As stated in response to Recommendation 2, the Scottish Government is reviewing whether data can be published earlier, and importantly without compromising accuracy. The outcome of this work will also inform decisions around the use of provisional emission estimates in the future. SEPA is among the key data providers to the UK’s emissions inventories. The Scottish Government will continue to work with SEPA to explore how it can support the delivery of climate change objectives. When producing the final annual assessment of Scottish greenhouse gas emissions, a significant amount of time is devoted to data quality assurance processes. As stated in response to Recommendation 2, the Scottish Government is reviewing whether data can be published earlier, and importantly without compromising accuracy. The outcome of this work will also inform decisions around the use of provisional emission estimates in the future.
### Recommendation 3

The Committee recommends that the Scottish Government clarifies what emissions data it intends to place in the public domain in order to allow the Parliament and other interested parties to scrutinise its performance in meeting its targets.

The annual *Greenhouse Gas Inventories for England, Scotland, Wales and Northern Ireland* is the main source of information on greenhouse gas emissions in Scotland. This document is published annually and its reporting is consistent, as far as possible, with international reporting guidelines.

As confirmed to the Committee in March 2009, Scottish Ministers are committed to publishing the formal advice they receive from the UK Committee on Climate Change on annual targets.

### Recommendation 4

The Committee recommends that a mechanism for reporting on consumption should be established which is in addition to, but separate from, the framework of targets set out in the Bill.

The Scottish Government recognises the growing importance of the need to consider the greenhouse gases associated with Scotland’s consumption and has noted the Committee’s recommendation.

The Scottish Government has established a National Indicator to reduce the overall ecological footprint of Scotland’s consumption and production.

The ecological footprint gives an overall measure of the global impact of our everyday choices and offers an estimate of the land and sea area needed to provide all the energy, water, transport, food and materials that we consume.

Research is underway to update Scotland’s ecological, and carbon, footprint. Outputs of the current work are expected in 2010.

The complex nature of the calculation of this indicator means there is a substantial lag in providing estimates. Data lag can exceed three years.
<table>
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<th>Recommendation 5</th>
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<tr>
<td>The Committee recommends that the arrangements for reporting on consumption should be flexible enough to take account of developing international understanding of the methodology for consumption reporting.</td>
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<tr>
<td>Noted.</td>
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<th>Recommendation 6</th>
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<tr>
<td>The Committee is attracted to a suggested approach in which data on cumulative emissions should form part of the reporting regime associated with the Bill, but be treated separately from the monitoring of progress on meeting the annual targets. The Committee recommends that the Scottish Government responds to this suggestion ahead of the start of Stage 2 of the Bill.</td>
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<tr>
<td>Noted.</td>
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<th>Recommendation 7</th>
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<tr>
<td>The Committee recommends that appropriate provisions are included on the face of the Bill to require a limit on international credits to be set by Ministers subject to the approval of Parliament.</td>
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<td>Scottish Ministers will bring forward an amendment at Stage 2 to introduce a requirement for Ministers to set a limit on the use of international credits subject to the approval of Parliament.</td>
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<th>Recommendation 8</th>
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<tr>
<td>The Committee therefore recommends that the Scottish Government should be required, in setting out its approach to the meeting of the targets, to define and quantify how each of the four key sectors; land-use, energy generation, energy efficiency and transport are expected to contribute to overall emissions reductions.</td>
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<tr>
<td>The Government’s draft Indicative Delivery Plan, to be published in summer 2009, will set out the key sectors for emissions reductions - heat supply and demand, electricity supply and demand, transport, rural land use and waste - and identify where action will have to be taken to meet Scottish targets.</td>
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</table>
## Aviation and shipping

### Recommendation 9

The Committee recommends, as a first step, that the Scottish Government considers how the multiplier effect for radiative forcing can be incorporated into the data on aviation emissions, so that additional damage to the atmosphere that occurs when emissions take place at high altitude is taken into account.

The Committee suggests that the Scottish Government requests advice from the UK Committee on Climate Change on how best to measure and incorporate these effects.

Section 14(3) of the Bill requires Scottish Ministers to request expert advice before bringing forward an order to commit to a methodology to calculate Scotland’s share of international aviation and international shipping emissions.

Scottish Ministers intend to seek this advice from the UK Committee on Climate Change and anticipate the Committee will offer a view on radiative forcing. This advice will be sought in advance of bringing forward secondary legislation under this section — required by June 2010.

### Recommendation 10

The Committee requests clarification on the approach which the Scottish Government intends to take in relation to shipping emissions in advance of bringing forward an order under section 14 of the Bill.

The Scottish Government is content to commit to consulting with the Committee on future orders under section 14.

### Recommendation 11

The Committee recommends that there should be separate provisions covering aviation and shipping emissions in the Bill.

Section 14 of the Bill currently offers a flexible approach, permitting separate orders on international aviation emissions and international shipping emissions to be brought forward.
### The interim target and targets to 2019

<table>
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<tr>
<th>Recommendation 12</th>
<th>The Scottish Government intends to introduce an amendment to the Bill to introduce a new 2020 target to replace the existing 2030 target.</th>
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<td>If the government is now willing to set a challenging interim target for 2020, it must buttress that approach either by specifying percentage annual targets between 2010 and 2020 or by bringing significantly forward the date by which it expects Scotland to be on track with a 3% annual reduction in emissions.</td>
<td>In line with the UK Committee on Climate Change's first report to the UK Government (December 2008), Scottish Ministers will propose that this target will be set at “at least 34%”.</td>
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<tr>
<td>The Committee recommends that the Scottish Government should introduce more challenging provisions into the Bill for the period 2010 to 2019 in order to promote early action to reduce emissions.</td>
<td>Scottish Ministers also intend to introduce an amendment requiring that the interim target must be “at least 42%” once the EU adopts at least 30% as its target for greenhouse gas emission reduction over the period 1990 to 2020.</td>
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<tr>
<td>The Scottish Government should accompany a challenging interim target for 2020 with either specifying percentage annual targets between 2010 and 2020 or by bringing forward the date by which it expects Scotland to be on track with a 3% annual reduction in emissions.</td>
<td>A new enabling power will accompany the amendments for the new 2020 target to allow the Scottish Ministers to increase the 2020 target.</td>
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<td>As already indicated the Scottish Government will formally seek the advice of its independent advisers, the UK Committee on Climate Change, for recommendations on the annual targets to 2022. These annual targets will be brought forward for agreement by the Scottish Parliament by 1 June 2010.</td>
<td>As Scottish Ministers are determined that this new 2020 target will provide a meaningful incentive to take early action to reduce emissions in the short term to 2020.</td>
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<td>In setting the 2020 target the Scottish Government has considered the best evidence available, principally the first report of the UK Committee on Climate Change, in addition to internal analysis by experts within the Scottish Government and information on UK carbon budgets to 2022 announced as part of the Chancellor's Budget Statement.</td>
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Recommendation 13

The Committee identified it wished further information on the scientific and policy advice on which the Scottish Government is basing these decisions on, the extent to which it has calculated the financial implications of the decisions and a robust appraisal of any impact on jobs.

The Stern Report and the UK Committee on Climate Change's first Report both clearly set out that the cost of inaction outweighs the costs of tackling climate change. This is explained in the Financial Memorandum for the Bill.

As the Scottish Government takes forward its work on delivery and the development of the Scottish Report on Policies and Proposals, we will be refining our understanding on the costs of delivery and the consequential opportunities for jobs and sustainable economic growth by moving to a low carbon economy.
## Achieving the targets

<table>
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<th>Recommendation 14</th>
<th>The Committee recommends that Ministers bring forward proposals for an engagement strategy as part of their implementation plan for the Bill.</th>
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<td></td>
<td>The Scottish Government will publish a first version of the Indicative Delivery Plan in summer 2009. Officials will be engaging on this with key stakeholders over the summer and these discussions will help take forward the work to develop the Scottish Report on Policies and Proposals. The Scottish Ministers see such engagement as a key aspect of implementing the Bill over the short, medium and long term.</td>
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<tr>
<th>Recommendation 15</th>
<th>The Committee calls on the Scottish Government to ensure that its statutory report on proposals and policies provides a comprehensive overview of the potential contribution of all sectors in society to achieving emissions reductions.</th>
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<td>This is the purpose of the Scottish Report on Policies and Proposals - to set out the measures the Scottish Ministers believe are necessary to deliver the annual targets from 2010 - 2022.</td>
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<th>Recommendation 16</th>
<th>The Committee requests that the Scottish Government provides a clear timescale for the production of the strategy overview discussion document, and an indication as to its contents, before Stage 2.</th>
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<td></td>
<td>The first version of the Indicative Delivery Plan will be published in summer 2009. It will set out, at a strategic level, the measures required in the key sectors to meet the 2020 target and the transformational measures necessary to meet Scotland's long term emissions reduction targets. This work will draw on the best available evidence including the first report of the UK Committee on Climate Change.</td>
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## Advisory Functions

**Recommendation 17**

The Committee recommends that the Scottish Government enters into discussions with the UK Committee on Climate Change with a view to conducting a realistic analysis of the nature, level and frequency of the advice it is able to provide and the additional dedicated financial and human resources which might be required.

This Committee therefore further recommends that this information should be made available to the Parliament prior to the beginning of Stage 2. If the UK Committee on Climate Change is not able to provide the necessary commitments in respect of its resources and engagement with Scottish interests, then the Scottish Government should consider what other models might be appropriate.

Scottish Ministers are pleased that the Committee supports its use of the UK Committee on Climate Change in the first instance for expert advice.

The Minister for Transport, Infrastructure and Climate Change confirmed to the Committee by letter on 18 March that Scottish Ministers will take expert advice from the UK Committee on Climate Change prior to bringing forward an order to establish annual targets. Scottish Ministers have confirmed that they will publish this advice.

Scottish Ministers believe it would be premature to seek that advice formally when the Parliament is still in the process of scrutinising the Bill. Meantime officials continue to work closely with the UK Committee to ensure that the necessary work is in place to enable the Committee to give appropriate advice on annual targets when required.

Following Royal Assent, there will be a need to discuss with the UK Committee the advice and support it can provide to the Scottish Government more generally. Section 38 of the Climate Change Act 2008 provides a statutory context for this - placing a duty on the UK Committee to provide advice to the national authorities on request, either in relation to the UK Act, climate change more generally, or to Devolved Administration targets. The UK Committee also has a well-established business planning process, involving a Sponsor Group comprising representatives of UK Government and Devolved Administration representatives. The annual business planning process provides an opportunity for the UK Government and Devolved Administrations to request advice under section 38 of the 2008 Act and is a mechanism for ensuring that the UK Committee can plan and manage its work and resources effectively.

As noted in the Financial Memorandum, Scottish Ministers believe that requesting advice from the CCC is more cost-effective than any other option. Should this position change for any reason, Ministers would of course investigate alternative options for receiving expert advice - for which the Bill makes provision.

The UK Committee's corporate plan will be published shortly and will reflect Scottish Government requirements. Scottish Ministers are content to provide further information on this before Stage 2.
**Reporting Duties**

**Recommendation 18**

The Committee notes the requirement in the Bill for Ministers to provide a statement to the Parliament in particular circumstances, such as if an annual emissions target has not been met.

The Committee considers that this provision is welcome, however, it notes that a requirement only to give a statement to the Parliament would not allow full and robust questioning of Ministers.

The Committee considers that a more appropriate option would be that a replacement provision be placed in the Bill requiring Scottish Ministers to make themselves available to attend a public meeting of the parliamentary committee (or committees) with climate change issues within its remit, to give evidence on their reports on meeting annual targets.

Scottish Ministers are committed to open and transparent scrutiny of their actions to deliver the new Scottish climate change targets.

The requirement for Ministers to provide an annual statement for Parliament reflects this and offers the Parliament an opportunity to question Ministers.

It is at the discretion of the Parliament whether it chooses to accept such an offer and the length it assigns to questioning the Minister. Such a statement can also be accompanied by one or more invitations to the relevant lead Minister to give evidence to Parliamentary Committees.

Section 34 of the Bill provides a wide selection of mechanisms by which Parliament can hold Scottish Ministers to account. It includes an offer to meet with all the Conveners of Parliamentary Committees.

These provisions far exceed what has ever been offered to the Scottish Parliament in primary legislation and demonstrate the willingness of Scottish Ministers to extend the boundaries of Parliamentary scrutiny in recognition of the significance and crosscutting nature of climate change.

The Government regrets that the Committee do not appear to have accepted these provisions in the spirit in which they were intended.

The character of the engagement between Government and Parliament should reflect the need for all policy areas to act on Climate Change.

The Committee has an opportunity to amend these provisions at Stage 2 if it wishes.
### Duty on public bodies

**Recommendation 19**

The Committee recommends that the Scottish Government should create a general duty on public bodies to take account of climate change in their activities, although the Committee is of the view that concerted action will be required in order to translate this general duty into meaningful action.

Scottish Ministers believe it is not appropriate to apply rigid and inflexible duties in primary legislation. The Bill contains enabling powers to permit such duties to be applied in the future if the voluntary approach fails.

Scottish Ministers are very supportive of the current initiatives being undertaken to reduce greenhouse gas emissions in the public sector. One noteworthy example is the commendable support that CoSLA and Scottish Local Authorities have shown in taking forward Scotland’s Climate Change Declaration. Forcing inflexible and unchangeable duties on such bodies in this Bill threatens to undermine the excellent work already underway in this area.

If in time additional efforts or focus are required, either widely across the public sector or more specifically in targeted areas, the enabling powers in the Bill allow this to be taken forward in a consultative manner, with the support of Parliament.

Scottish Ministers maintain that this voluntary response is the better approach rather than applying a duty on public sector bodies now – with the powers available in the Bill able to be called into play if considered necessary at some future date.
Recommendation 20

The Scottish Government has considered this recommendation. It considers that providing a list of public bodies in the way suggested by the Subordinate Legislation Committee would not be in line with the approach adopted in the Freedom of Information (Scotland) Act 2002. The 2002 Act includes a list of this kind because the Act itself places direct duties on the bodies listed. The provisions in the Climate Change (Scotland) Bill do not apply a climate change duty on public bodies but instead create an enabling power under which such duties can be created in secondary legislation.

Including in the Bill a list of public bodies to which a climate change duty might be applied in the future could cause significant confusion for those bodies. It would be highly likely that bodies would need to be included in the list for the sake of completeness but upon which climate change duties may never need to be applied. If multiple duties with differing purposes are created, some bodies may also be subject to different combinations of duties.

The Scottish Government’s preference is to include details of public bodies to which climate change duties apply in the secondary legislation used to create those duties. This approach will be clearer for the bodies involved and will avoid the need to amend the Bill every time a new duty is created under the enabling power in section 36(1).

The Subordinate Legislation Committee recommended that the wide scope of the enabling power in section 36 of the Bill could be mitigated to some extent by the provision of a list of public bodies to whom the power is to apply along with a power to add to the list subject to affirmative procedure.

This Committee endorses this recommendation and seeks a response from the Scottish Government on this point ahead of Stage 2. The Committee recommends that full consultation should be carried out in advance of any affirmative subordinate legislation being brought to the Parliament under this section.
### Adaptation

**Recommendation 21**

The Committee supports the adaptation provisions in the Bill and looks forward to considering the first report in this subject published by the Scottish Government on this subject.

The Scottish Government welcomes the Committee's support for the adaptation provisions.

### Muirburn

**Recommendation 22**

On the basis of the comments made by the Rural Affairs and Environment Committee and following the Minister for Environment's stated intention to bring forward an amendment to the muirburn provisions at Stage 2, the Committee is content with these proposals.

The Scottish Government welcomes the Committee's support for the muirburn provisions and for the Government's intended amendment at Stage 2.

Annex A contains a response to the specific comments made by the RAE Committee.
Recommendation 23
This Committee endorses the recommendations in the report of the Rural Affairs and Environment Committee and notes that the Scottish Government has recently changed its position on one of these recommendations - the leasing proposals. This Committee notes that further clarification may be needed on the implications of the Scottish Government's policy change, particularly the status of the funding for the mitigation of climate change which was mentioned in the Policy Memorandum as resulting from this proposal.

Now that the leasing proposal is no longer being taken forward, the Scottish Government needs to explore other options to achieve the annual 10,000 hectare woodland creation target. The ability to form companies for renewable energy development will provide funding in the medium to long term. FCS is also exploring options for help in the short term, including improving woodland creation measures in the SRDP and further use of the existing 'repositioning' programme (whereby woodland of low public benefit is sold to provide income to buy land which can be planted for greater public benefit).

Annex A details responses to the RAE Committee recommendations.

Recommendation 24
The Committee recommends that in future, where there is a strong possibility that legislative proposals will be substantially altered by the outcome of a consultation, they are only brought to the Parliament once that consultation has been completed and the results properly assessed.

The Committee's recommendation is noted. Scottish Ministers agree that Bill provisions should be fully assessed before they are brought to Parliament. However in this case the leasing proposal arose after the Bill process had begun. The proposal had the potential to realise £200m, so it was certainly worthy of serious and immediate consideration. Gauging public opinion was, of course, essential, and the consultation exercise, analysis of responses, and determination of recommendations were carried out as quickly as possible (in light of the ongoing Bill) but also with due diligence.

The Committee will wish to note that the Economy, Energy & Tourism Committee recommendations are detailed in Annex B.
## Recommendation 25

This Committee endorses the conclusions of the RAE Committee’s report on the Bill and calls on the Scottish Government to respond in full to its recommendations. The RAE Committee notes that there exists opposition to the inclusion of this enabling power within the Bill. This Committee notes that the carrier bag proposal in 2006 was subject to a separate and full bill scrutiny process, rather than being included as a piece of enabling legislation within a wide-ranging bill.

Annex A details responses to the RAE Committee recommendations.

The conclusions of the RAE report on the Bill called for the Scottish Government to have regard to a range of factors. The point at which these factors will come into play is that at which any of the powers proposed in the Bill are used to make legislation. At that point the Scottish Government will have regard to these factors to the extent that they are relevant to legislation being put forward.

In the interim many of the issues the Committee identified will be addressed in a consultation on a revised National Waste Management Plan for Scotland, which will be issued later in 2009. This national plan is the proper context to address many of these themes, which are considerably wider in their application than in the Climate Change (Scotland) Bill.

As regards carrier bags in particular, the scrutiny afforded to this issue in 2006 has informed the development of proposals now. Notably, the current proposals are not restricted to only plastic bags.

## Recommendation 26

This Committee notes the evidence that action is already being taken by some retailers in respect of charging for carrier bags, and that public attitudes in relation to recycling and reusing carrier bags appear also to have shifted within the last few years. The Committee recognises that either the current provisions or a separate Bill could provide the means to implement a carrier bag charging regime.

The Scottish Government welcomes the action being taken by retailers not only in respect of charging, but also on other ways of reducing bag use. This action is being taken in the context of changed public attitudes. As the Cabinet Secretary for Rural Affairs & the Environment informed the RAE Committee on 4 February 2009, we "would not expect to use the provisions if we achieved the same objective outwith legislative routes. However, we are not yet at that point and it is important that Parliament and the Government have the wherewithal to achieve our objectives for Scotland."
### Recommendation 27

The Committee recommends that the Scottish Government reflects seriously as to whether its approach in relation to this provision is the correct one. The Committee is not convinced as to the value of this approach, and notes that the timing of the proposal may owe more to the availability of this Bill as a suitable legislative vehicle for introducing enabling powers rather than the powers being urgently required.

The Scottish Government notes that a similar provision is now in force in all other parts of the UK. Indeed, the Environment Minister of the Welsh Assembly Government has instructed her officials to prepare regulations. Such legislation could provide useful lessons. At the very least, it is appropriate that Scotland should have a similar weapon in its armoury at a time when this issue is under active consideration elsewhere in the UK.
### Financial Memorandum

#### Finance Committee Report

<table>
<thead>
<tr>
<th>Conclusion 28</th>
<th>The Scottish Government welcomes the acknowledgement by the Finance Committee that there is uncertainty over some of the costs associated with bringing forward long term targets for reducing carbon emissions and is pleased to note that the Committee accepts that the margins of uncertainty are adequately reflected in the Financial Memorandum.</th>
</tr>
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<tbody>
<tr>
<td>The Committee acknowledges the uncertainty over some of the costs associated with the Bill, particularly in relation to the performance of unproven technologies and methods for reducing carbon emissions. The Committee accepts that the Financial Memorandum adequately reflects these margins of uncertainty.</td>
<td>The Committee notes the enabling nature of the Bill, particularly Part 5 and considers that the Financial Memorandum would have been stronger if modelling work had been carried out on the potential financial impact of the measures on businesses and public bodies. The Committee also considers that in a number of areas insufficient policy direction has been provided, which has made it difficult for local authorities and businesses to be able to assess the financial impact of the proposals.</td>
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<table>
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<tr>
<th>Conclusion 29</th>
<th>The Scottish Government notes the Committee's views on the enabling powers in the Bill and the associated financial information provided in the Financial Memorandum. The Committee will wish to note that the Financial Memorandum will be revised at Stage 2 to take account of changes to the Bill, including the Part 5 forestry and non-domestic building provisions. Officials are also looking to include any new costing information which has become available since the introduction of the Bill. In particular, the UK Committee on Climate Change's first report in December 2008 and the UK Carbon budgets, announced by the Chancellor in April, are being scrutinised for additional information to help aid the financial information presented on the Bill.</th>
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</table>
The Committee notes that the Scottish Government is currently undertaking significant pieces of work to finalise some aspects of its policy, namely the Strategic Overview project, an options review on forestry proposals and the consideration of energy efficiency scenarios and considers that this work will provide vital indications of future costs. Given the significant implications of this work, the Committee would have preferred that it had been completed in time for its consideration of the Financial Memorandum to the Bill. As a result, the Committee expects to take an interest in scrutinising the financial impact of the outcomes of this work. The Committee, nonetheless, welcomes the Government’s commitment that all substantive regulations will be accompanied by a fully costed regulatory impact assessment.

These points are noted.

Scottish Ministers welcome the Finance Committee’s continuing scrutiny of the different policy objectives contained in the Bill and are happy to work with the Committee to provide further information as it becomes available in the future.

As confirmed to the Finance Committee, as the range of enabling powers in the Bill are brought forward for implementation, all secondary legislation instruments presented to Parliament for consideration will be accompanied by costed regulatory impact assessments.

As the Committee will be aware, the Financial Memorandum sets out the current understanding and knowledge on costs. Further detail on the costs of delivering measures to meet the 80% target can be found in the AEA Report "Mitigation against climate Change in Scotland: Identification and Initial Assessment of Policy Options" commissioned by the Scottish Government and published in November 2008. This can be found at:

http://www.scotland.gov.uk/Publications/2008/11/19142102/0

Work is ongoing through the Strategic Overview Project to refine the Scottish Government’s understanding of the costs involved in delivering measures to meet the climate change targets. This work will continue as the statutory ‘Report on Policies and Proposals’ is developed for publication in 2010.
<table>
<thead>
<tr>
<th>Conclusion 31</th>
<th>Scottish Ministers welcome the Finance Committee's continuing engagement with the Bill and its associated future statutory instruments. Scottish Ministers are happy to work with the Committee to provide additional information as it becomes available.</th>
</tr>
</thead>
</table>
| The Committee has given notice that it may seek to track subsequent statutory instruments made under the provisions in the Bill and seek to scrutinise their financial implications. | **Recommendation 32**  
Given the long-term perspective of the Bill, and the wide range of policy streams that may contribute to its implementation, the Committee recommends that the Scottish Government should consider how it will monitor and control the cumulative costs of implementation.  
1. | Scottish Ministers acknowledge the Finance Committee's recommendation and will consider this carefully as delivery plans crystallise and carbon accounting mechanisms develop and mature. |
**Transport, Infrastructure and Climate Change Committee**

**Recommendations on the Financial Memorandum**

<table>
<thead>
<tr>
<th>Recommendation 33</th>
<th>Scottish Ministers welcome the Committee's endorsement of the Finance Committee's recommendations.</th>
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<tbody>
<tr>
<td>This Committee endorses the conclusions contained in the report of the Finance Committee and in particular its strong comments regarding the uncertainty of the figures contained in the Financial Memorandum.</td>
<td>As indicated to the Finance Committee, the Scottish Government is considering ways in which the financial information in the Financial Memorandum can be updated and improved.</td>
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<tr>
<td>The Committee welcomes the intention of the Finance Committee to take an interest in the financial impact of the outcomes of the Scottish Government's ongoing work on climate change, and the indication that it may scrutinise the financial impact of any subordinate legislation brought forward under the Bill. However, the Committee believes that the financial information provided is totally inadequate given the scope and importance of this piece of legislation and a revised financial memorandum is required before the Bill can be approved.</td>
<td>The Committees will wish to note that Scottish Government officials are considering new costing information which has become available since the introduction of the Bill. In particular the UK Committee on Climate Change's first report in December 2008 and the UK Carbon budgets, announced by the Chancellor in April, are being scrutinised for additional information to help aid the financial information presented on the Bill.</td>
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<td>This Committee recommends that the Scottish Government prepare a revised financial memorandum in advance of Stage 3 consideration of the Bill.</td>
<td>Where updated and improved information is available, with Parliament approval, Scottish Ministers will seek to revise the Financial Memorandum to include this new and additional information.</td>
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<tr>
<th>Recommendation 34</th>
<th>The Scottish Government has noted this recommendation.</th>
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<td>The Committee recommends that the Scottish Government provides, as a matter of urgency, details on how it intends to assess and present the job implications of plans it brings forward under this Bill. The Committee recommends that these plans must be developed in partnership with employers and trade unions to ensure that potential job losses can be avoided and job opportunities in sustainable industries are maximised.</td>
<td>The Energy Efficiency Action Plan will include consideration of skills and training issues associated with the development of energy efficiency, and an assessment of the potential for jobs which will of course contribute to the nation's economic recovery.</td>
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</table>
This work is being led by the Energy Efficiency Programme Board, recently established by the Scottish Government.

The Renewable Heat Action Plan “will include consideration of skills and training issues associated with development of the renewable heat market. The wider Renewables Action Plan, which will be published later in 2009, is being structured in the context of the Scottish Government’s commitment to economic recovery, and will include an assessment of the potential for jobs within the renewable energy sector overall, including renewable heat.

This will cover opportunities from the short-term need to up-skill plumbers to install microgeneration, to the likely growth of maintenance jobs on onshore windfarms, to the longer-term potential transfer of skills from the oil and gas sectors across to the emerging marine energy sector. This work is being led by the Renewable Energy Skills Group, chaired by the Scottish Funding Council.”

Scottish Ministers are committed to working in partnership with employers and unions.

In particular under the terms set out in the Memorandum of Understanding, signed in December 2007, the Government will continue to work with the STUC to ensure that all job opportunities are fully maximised and to ensure that any job losses are kept to a minimum.
<table>
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<tr>
<th>Recommendation 35</th>
<th>Scottish Ministers are happy to respond to the recommendations made by the Subordinate Legislation Committee. Both Committees will wish to note that these recommendations are responded to in Annex C of this document.</th>
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<tbody>
<tr>
<td>The Committee notes the Subordinate Legislation Committee’s recommendations and recommends that the Scottish Government provides a written response to this Committee and the Subordinate Legislation Committee ahead of the start of Stage 2 which addresses the points raised in the Subordinate Legislation Committee’s report.</td>
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## Forestry

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<thead>
<tr>
<th>Recommendation RAE 1</th>
<th>On 13 March the Convener was informed that Ministers do not intend to use the powers provided for in section 47 of the Bill to make an order allowing leases and cutting rights over parts of the national forest estate. Accordingly Scottish Ministers will bring forward an amendment at Stage 2 to remove section 47(4).</th>
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<tr>
<td>The Committee ...</td>
<td><strong>Recommendation RAE 2</strong>&lt;br&gt;<strong>Recommendation RAE 3</strong>&lt;br&gt;<strong>Recommended by</strong></td>
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<td>... proposal and amends the enabling section in the Bill.</td>
<td>If the Government proceeds with the leasing proposal in the Bill the Committee considers that it should clarify, before the end of Stage 1, how it envisages the mechanism for allocating funding released towards woodland creation working in practice, and to what extent the leasee will be able to call upon SRDP funds. The Government should also provide further detail on the calculations upon which the proposal’s viability has been assessed.</td>
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<tr>
<td>... leasing proposal in the Bill the Committee considers that it should clarify, before the end of Stage 1, how it envisages the mechanism for allocating funding released towards woodland creation working in practice, and to what extent the leasee will be able to call upon SRDP funds. The Government should also provide further detail on the calculations upon which the proposal’s viability has been assessed.</td>
<td><strong>Recommended by</strong></td>
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<td>The Committee ...</td>
<td>Scottish Ministers can confirm that the leasing proposals are not proceeding.</td>
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<td><strong>Recommended by</strong></td>
<td>Scottish Ministers can confirm that the leasing proposals are not proceeding.</td>
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<td><strong>Recommended by</strong></td>
<td><strong>Recommended by</strong></td>
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<td>Recommendation RAE 4</td>
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<td>If the Government proceeds with the leasing proposals, the Committee considers that detailed costings showing the economic viability of the remainder of the national forest estate should be provided to Parliament.</td>
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<td>Noted.</td>
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<td>Scottish Ministers can confirm that the leasing proposals are not proceeding.</td>
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<th>Recommendation RAE 5</th>
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<tr>
<td>The Committee notes and shares the Minister’s reservations on a not-for-profit trust. Should the proposal for a trust proceed by way of secondary legislation, the Committee requests that an explanation of potential state aid issues be made available to Parliament, as well as a convincing justification for the inclusion of such a proposal.</td>
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<tr>
<td>On 13 March the Convener of the RAE Committee was informed that, given the decision not to proceed with the leasing option, there is no need for further consideration of transferring the proceeds from a lease, or the landlord’s interest in the land, to a not-for-profit trust.</td>
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<th>Recommendation RAE 6</th>
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<td>The Committee expressed its concern at the interpretation of the Government’s message that there will be no compulsory redundancies. The Committee seeks assurances from the Government that if employees refuse to transfer to the private company leasing the land, that this will not impact on their employment rights and therefore they should not be deemed to have resigned.</td>
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<tr>
<td>Noted.</td>
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<tr>
<td>Scottish Ministers can confirm that the leasing proposals are not proceeding.</td>
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<th>Recommendation RAE 7</th>
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<td>The Committee seeks assurances from the Government and the Forestry Commission that there will be no compulsory redundancies and that they will seek to secure that transferred employees’ contractual obligations include conditions of service equivalent to those adopted by the Forestry Commission. Finally, the Committee seeks assurances that the Government</td>
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<td>Noted.</td>
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<tr>
<td>Scottish Ministers can confirm that the leasing proposals are not proceeding.</td>
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and Forestry Commission will take steps to ensure longer term security for affected staff, improving on the short term security provided by TUPE regulations.

Recommendation RAE 8

The Committee appreciates assurances from the Minister on the importance the Scottish Government would place on contract conditions for any private company leasing land. However, placing restrictions on the private investor would reduce the attractiveness of the lease and the likely income available from it. If the proposal goes ahead, the Committee believes that Parliament must have the opportunity to view and comment on the draft contract or a summary of its requirements before it is finalised.

Noted.

Scottish Ministers can confirm that the leasing proposals are not proceeding.

Recommendation RAE 9

Should legislating for this policy in this Bill remain the Government's position, the Committee recommends that the Bill be amended to cap the scope of the powers provided to reflect the specific policy proposal behind these powers. In doing so, the Committee recommends that the Bill be amended to make the distinction between provisions enabling joint ventures and provisions enabling the leasing proposal, as at present the same provision enables both proposals.

Noted.

Scottish Ministers can confirm that the leasing proposals are not proceeding.

Recommendation RAE 10

The Committee specifically recommends that an upper threshold on the length of the land lease should appear on the face of the Bill as should a maximum threshold for the proportion of land to be leased at any one time.

Noted.

Scottish Ministers can confirm that the leasing proposals are not proceeding.
<table>
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<tr>
<th>Recommendation RAE 11</th>
<th>Scottish Ministers agree it would be useful for FCS to have the powers to do this. However the Climate Change (Scotland) Bill is not a suitable legislative vehicle for this, as the purpose of a community lease may extend beyond climate change.</th>
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<tr>
<td>The Committee recommends that the Scottish Government incorporates provisions to allow for community leasing in future legislation.</td>
<td>While there is considerable potential for renewable energy development on national forest estate, at present FCS can only lease sites to developers because it has no powers to enter joint ventures. Since joint ventures can offer better financial returns, Ministers intend to use the powers provided for in the remaining parts of section 47 to allow the FCS to form companies and enter into joint ventures for renewable energy development.</td>
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<tr>
<td>Recommendation RAE 12</td>
<td>The Committee acknowledges that joint ventures may not generate the same level of funds as the leasing proposal, or generate funds to the same timescale. However given the notable support for the joint ventures policy the Committee recommends that, in considering alternative approaches to leasing, the Government should explore the full potential of encouraging and supporting the establishment of joint ventures schemes.</td>
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**Waste**

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<tr>
<th>Recommendation RAE 13</th>
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<tbody>
<tr>
<td>The Committee would appreciate further information from the Cabinet Secretary for Rural Affairs as to how food waste will contribute to the targets for recycling and composting and whether energy from food waste will be counted as contributing towards the cap on energy-from-waste.</td>
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<tr>
<th>Recommendation RAE 14</th>
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<tr>
<td>The Committee recommends to the lead committee that, in taking forward the waste reduction and recycling provisions in an effort to achieve zero waste, the Scottish Government should have regard to the following—</td>
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<tr>
<td>☞ the urgent need to focus on reducing commercial and industrial waste being sent to landfill;</td>
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<tr>
<td>☞ the need to address the lack of infrastructure available to implement the policy intentions in the Bill;</td>
</tr>
<tr>
<td>☞ the need to consider issues raised by the Environment and Rural Development Committee in Session 2 on charging by sellers of goods for the supply of carrier bags;</td>
</tr>
<tr>
<td>☞ the opportunity that current international market conditions could present for Scottish market development;</td>
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<tr>
<td>☞ the need to ensure measures undertaken are in accordance with both the Government's definition of 'recycling' and with the waste hierarchy set out in the Waste Framework Directive;</td>
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<tr>
<td>☞ the benefits of the Government endorsing one method of measuring 'carbon footprints' and to establish criteria based on this reflecting which practice is more sustainable than another); and</td>
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| The Cabinet Secretary for Rural Affairs & the Environment wrote to Maureen Watt MSP, the Convener, on 10 March with this information. His letter is published on the Committee's website in the papers for its meeting of 18 March 2009. |

| The Scottish Government will take this into account in taking these provisions forward. |
| In the case of the point on social and economic factors, it also notes that this is not a matter primarily to be addressed through legislation on waste. |
The need to take into account any potential negative impact on social and economic factors including in remote and rural areas, of aiming towards ambitious targets to reduce carbon emissions.

The Scottish Government will take these into account in taking these provisions forward.

Recommendation RAE 15
The Committee recommends that the Scottish Government should provide specific costed proposals for such an organisation (i.e. “clearing-house” establishment) to Parliament well in advance of the relevant instrument of subordinate legislation being laid to afford the relevant committee the opportunity to fully scrutinise the proposals.

Should the Scottish Government proceed with proposals for a “clearing house” arrangement we will seek to ensure that costed proposals are available at the stage of formal consultation, which would precede the laying of any Regulations.

Muirburn

Recommendation RAE 16
The Committee appreciates the Minister’s reassurances that the Government will actively consult with all key stakeholders at an early stage in its deliberations on how to use this power.

Scottish Ministers will seek to amend section 46 of the Bill, to make the order-making power subject to affirmative parliamentary procedure. By making this change, this will support active consultation with key stakeholders at an early stage, prior to Parliamentary scrutiny. The Scottish Government has initiated separate discussions with stakeholders covering the other issues raised in the consultation around the Climate Change (Scotland) Bill.
**Conclusions**

<table>
<thead>
<tr>
<th>Recommendation RAE 17</th>
<th>Waste</th>
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<tr>
<td>Concerns with the level of detail available in the Bill and accompanying documents for certain proposals; the inclusion of important proposals within subordinate legislation only (which impacts on the potential for full parliamentary scrutiny); and concerns with the timing of some of the consultations for the Bill's provisions;</td>
<td>It is customary for environmental legislation to delegate powers to the Scottish Ministers to make secondary legislation to introduce important aspects of the programme: an example is the Water Environment &amp; Waters Services (Scotland) Act 2003. Inclusion of detailed legislation on the waste provisions would seriously distort the Bill.</td>
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<td>In any event we do not intend to regulate in the current economic situation. This gives sectors producing waste a chance to develop voluntary measures. If these are insufficient, regulation will need to be based on the situation prevailing at the time. They are also likely to need regular updating in the light of market developments etc.</td>
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<tr>
<td>Forestry</td>
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<td>As noted by the Committee in paragraph 63, the Order making power at section 47 is subject to affirmative resolution procedure. A section 47 Order could only modify a function for a climate change related purpose, and it could not remove forestry functions without a clear climate change justification. Nor could the power be used to remove over arching duties imposed by other legislation, such as the biodiversity duty in the Nature Conservation (Scotland) Act 2004.</td>
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<td>Wherever possible, the Government prefers to complete consultations before introducing legislation. However, it is important that the Government responds to new information and evidence, as it did by introducing the forestry provisions in the light of advice from the AEA Technology Report on options for mitigating climate change in Scotland. Consultation on the forestry provisions closed on 27 January, and a preliminary analysis of responses was provided to</td>
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the Rural Affairs and Environment Committee in advance of its session on 11 February, when it took evidence on forestry.

<table>
<thead>
<tr>
<th>Recommendation RAE 18</th>
<th>Noted.</th>
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<tbody>
<tr>
<td>The negative reception from stakeholder groups that the provisions on leasing Forestry Commission Scotland land to release capital has received and the Committee’s recommendations in response to this - including potential amendments to the Bill should the leasing proposal remain on the face of it;</td>
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<thead>
<tr>
<th>Recommendation RAE 19</th>
<th>The Scottish Government is conscious of these challenges and will seek to minimise them through consultation with interested parties.</th>
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<tbody>
<tr>
<td>The likely challenges faced by the Government, local authorities and others in implementing the waste reduction and recycling provisions in an effort to eventually achieve the zero waste target including insufficient infrastructure.</td>
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**Annex B**

**Economy, Energy and Transport Committee Report**

**Summary of Recommendations**

"The TICC Committee notes that the recommendations in the EET Committee’s report are made directly to the Scottish Government, rather than the TICC Committee as lead committee on the Bill. The Committee endorses many of the recommendations contained in the EET Committee’s report."

<table>
<thead>
<tr>
<th>Recommendation EET 1</th>
<th>Energy Efficiency</th>
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<tbody>
<tr>
<td>The Scottish Government should take all the necessary steps to ensure that efforts are made to improve energy efficiency and the take-up of renewable heat and micro-generation technologies, and that the Minister brings forward amendments at stage 2 to maintain and extend the existing legislative provision in respect of living accommodation.</td>
<td>The Scottish Government will ensure that all efforts are made to improve energy efficiency and the take-up of renewable heat and micro-generation technologies.</td>
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<tr>
<th>Renewable Heat</th>
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<tr>
<td>At Stage 2, it is the Scottish Government’s intention to bring forward amendments to outline a range of measures that will be included in the Renewable Heat Action Plan to improve and promote the take-up of renewable heat.</td>
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<table>
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<tr>
<th>Recommendation EET 2</th>
<th>Energy Efficiency</th>
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<tbody>
<tr>
<td>The Scottish Government should clearly set out how the monitoring and reporting procedures within this Bill will work and clarify the roles of various bodies in this respect.</td>
<td>The Energy Efficiency Action Plan will outline how the Scottish Government intends to monitor, report and evaluate those actions contained in the plan.</td>
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<th>Renewable Heat</th>
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<tr>
<td>The Renewable Heat Action Plan will outline how the Scottish Government intends to monitor, report and evaluate those actions contained in the plan.</td>
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<th>Buildings</th>
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<tr>
<td>It is intended that a national electronic database be established to assist with the monitoring and reporting procedures of the Assessment of the Carbon Energy Performance (ACEPs) of non-domestic buildings emerging from Section 50.</td>
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<tr>
<td>Recommendation EET 3</td>
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<tr>
<td>The Scottish Government should add the setting of targets for its energy efficiency and renewable heat initiatives to the relevant sections of the Bill and brings forward the necessary amendments.</td>
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<tr>
<td><strong>Renewable Heat</strong></td>
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<tr>
<td>The Renewable Heat Action will contain a target for renewable heat – the proposal is that 11% of heat demand in Scotland should be sourced from renewable heat by 2020. The heat target is part of the overall target to meet the EU 2020 target of 20% of final consumption of energy from renewable sources.</td>
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<tr>
<td>Recommendation EET 4</td>
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<tr>
<td>The Scottish Government should investigate and report back to the EET Committee, if possible before Stage 2, on whether some form of rebate through local taxation systems to incentivise the take-up of energy efficiency, renewable heat and/or microgeneration technologies in the domestic and non-domestic sectors should be introduced, drawing on the experience and the success of such schemes in other parts of the UK.</td>
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</table>
Recommendation EET 5

The Scottish Government should makes all efforts to ensure that the education and training sector in Scotland is well-prepared and can respond to the growth in employment opportunities by providing the right number of people with the right skills at the right time, and reports back to the Committee on this as soon as possible.

The Scottish Funding Council has set-up a Renewable Core Skills Group, to look at the skills needs for the renewables sector in Scotland. Represented on the Group are: sector skills councils, Skills Development Scotland, higher and Further Education sector, along with Scottish & Southern Energy, Scottish Power and Scottish Renewables.

In addition the Sector Skills Council is doing some research for Scottish Government on...
the longer term sectoral needs – from microgeneration installation to wind farm maintenance to marine energy engineers.

The provisions under section 50 allow for an evolution of the existing energy performance certificate arrangements for buildings. The skills base has already been established and is growing rapidly. In terms of the basic cost-effective improvements that would form the backbone of Action Plans emerging from ACEPs, they would in the first instance be the tried and tested methods such as, insulating hot water tanks and roof spaces. Again the skills for this type of work already exist within the construction industry.

<table>
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<tr>
<th>Recommendation EET 6</th>
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<tr>
<td>The Scottish Government should ensure that energy efficiency projects are in a position to play a full and meaningful part in meeting the statutory targets for 2010 and thereafter.</td>
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Current Scottish Government programmes and policies on energy efficiency will contribute to its 2010 statutory target.

The forthcoming Energy Efficiency Action Plan will detail the range of Scottish Government policies and programmes that will continue to deliver significant improvements in the energy efficiency of all sectors. The plan will include details on:

- recent announcements on funding for a major area-based home insulation scheme;
- recent announcements to bring forward proposals for a significant loan scheme; and
- an outline of current financial incentives (such as the Energy Assistance Package, household and community grants for microgeneration; the new area based home insulation scheme; the Central Energy Efficiency Fund for the public Sector; and the Energy Saving Scotland – small business loans).

The plan will also outline how the Scottish Government is working to maximise the impact of UK Government policies and programmes in Scotland, for example the Carbon Emission Reduction Target and the
| Recommendation EET 7 | The Scottish Government should ensure that a revised financial memorandum be produced and we would expect the costs identified above to be covered within this. | The development of the Energy Efficiency Action Plan itself will have no new costs associated with it, but will be met from existing resources. The measures contained within the action plan will all have costs attached to them, but as these are measures which are already in place, or have been planned within the current spending review period, these already have funding attributed to them. Any new measure or programme which is not currently funded or has funding agreed will be subject to the usual financial scrutiny as part of the annual budget process or spending review. The development of the Renewable Heat Action plan itself will have no new costs associated with it, but will be met from existing resources. The measures contained within the action plan will either be costed from existing budgets or new activity will be subject to the relevant financial assessment. |

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The Climate Change Bill includes a mandatory provision to introduce an energy efficiency action plan for Scotland. We believe that having a legislative requirement to develop, revise and report on an action plan will give action on energy efficiency a level of scrutiny which the issue requires.

Ministers could publish an action plan before the Climate Change Bill becomes an Act but this would not fulfil our requirements under the Act - Scottish Ministers would still have to produce and publish another action plan within 12 months.

On the assumption that the Bill will be passed in summer 2009, the action plan will be published shortly thereafter.
Officials are currently finalising draft regulations, 'The Carbon and Energy Performance of Non-domestic Buildings (Scotland) Regulations 2009'. These mock regulations will be shared with both the EET and TICC Committees.

It must be borne in mind that these are 'mock' regulations which have not been subject to detailed research nor to the scrutiny of a working party nor public consultation. They will however give Committee Members and others involved in Parliamentary debate a 'flavour' for how the enabling powers are to be used.

The costs identified within the current Financial Memorandum are still relevant, having regard to the enabling provisions within Section 50 of the Bill, but we intend to reduce the number of scenarios in an amended version. However to provide further assistance, Scottish Government officials will arrange for illustrative costs to be provided for the 'mock' regulations.

Recommendation EET 8

The Scottish Government should introduce within a reasonable timeframe, an action plan to improve the take-up of renewable heat technologies in Scotland and to work with all the necessary parties to achieve progress in this area, and provides a clear timetable from the Minister for the introduction of the heat plan before Stage 2 of the Bill.

The Scottish Government consulted on a Renewable Energy Framework late last year, October 08 to December 08, which, included a draft Renewable Heat Action Plan. The consultation responses were published on Scottish Government's website on 30 January 2009. The responses will help inform the Renewable Energy Action plan, which will be published over the summer 2009 and will include a Renewable Heat Action Plan.

In summary the timetable for producing a Renewable Heat Action Plan will be summer 2009.
<table>
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<th>Recommendation EET 9</th>
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<tr>
<td>The Scottish Government should ensure that combined heat and power systems, preferably using sustainable energy sources, are a part of its action plans for renewable heat and energy efficiency.</td>
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<td>Recommended.</td>
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<th>Recommendation EET 10</th>
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<tr>
<td>The Committee recommends that all the relevant secondary legislation proposed under sections 48-51 is subject, if they are not already, to affirmative resolution.</td>
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<tr>
<td>Noted.</td>
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</tbody>
</table>
Annex C
Subordinate Legislation Committee Report
Summary of Recommendations

Independence of the Advisory Body

Recommendation SLC 1

The Explanatory Notes with the Bill (paragraph 33) and the Policy Memorandum (paragraph 31) indicate that Ministers will require to seek expert, independent advice from the advisory body, but that "independent" is capable of having different meanings and does not necessarily refer to a body which is wholly independent of the Scottish Ministers.

In particular, the SLC draws attention to the fact that the Scottish Ministers will be responsible for appointing the members of a Scottish CCC and will be able to issue directions and guidance to the Committee.

The Scottish Government recognises the point that is being made here. The Explanatory Notes and Policy Memorandum seek to capture the spirit of the advice which will be provided by the advisory body.

The UK Committee on Climate Change has already demonstrated that it will advise Government to set very challenging targets. Its advice is transparent. The foundation of its independence is that its advice is based on evidence and analysis.

Should a Scottish Committee on Climate Change be established in the future, or equivalent advisory powers conferred on an existing body, it is intended that the expert advice be provided in a similarly transparent way, based on evidence and analysis rather than political imperative.
Public bodies upon which a climate change duty may be placed

Recommendation SLC 2

The SLC believes that the power under section 36(1) to impose climate change duties on public bodies is extremely wide in its scope, in particular as neither the public bodies which may be subject to climate change duties nor climate change duties themselves are adequately and clearly defined.

The Committee recommends that this could be mitigated to some extent by provision of a list of public bodies to which the power is to apply along with a power to add to the list subject to affirmative procedure.

Recommendation SLC 3

The Committee recommended that guidance issued to public bodies under section 37 should be laid before Parliament for a period prior to implementation, and any resolutions of the Parliament made in respect of the draft guidance during that period taken into account.

The Scottish Government response is at recommendation 20 in the main body of this document.

This would be a highly unusual course of action.

It is intended that this guidance assist in developing consistency of approach across those public bodies to which specific climate change duties apply. It could also include examples of best practice.

Laying such guidance before the Scottish Parliament would seem disproportionate in this context. However, Scottish Ministers would be happy to discuss with the relevant Parliamentary Committees enhanced consultation arrangements for the development of section 37 guidance.
### Forestry

**Recommendation SLC 4**

The SLC believes that powers in section 47 [Forestry] are very wide in scope as there is no restriction in the Bill on what may be done in exercise of the power beyond that it must deliver a climate change purpose.

Before exercising the power in section 47, the Scottish Ministers must satisfy the test that the exercise of the power will assist in reducing emissions or otherwise contribute towards mitigating climate change.

This could, for example, require the national forest estate to be managed in ways that assist with carbon sequestration.

But it could not, for example, remove forestry functions without a clear climate change justification - and it is hard to conceive of circumstances where there would be this justification, given the positive role of forestry in relation to climate change mitigation.

### Waste

**Recommendation SLC 5**

The SLC has reported that most of the waste powers (sections 52, 53, 54, 56 and 57) are expressed in very broad terms and that there is nothing on the face of the Bill to restrict their application to purely commercial activity.

It is appropriate that the waste provisions be expressed broadly. The sectors which can contribute most to improved resource use through waste prevention and recycling, and thus help mitigate climate change, will not necessarily remain static over the period between now and 2050.

Recent movement on the markets for recyclate demonstrates this. Any regulations made will need to be able to respond to market conditions, which cannot necessarily be foreseen at this point. It is therefore appropriate that the powers should enable whatever action becomes necessary over time to be taken.
The fact that the regulatory powers are not necessarily restricted to commercial activity is also appropriate. For example, it is at least as worthwhile for a private individual constructing a new ten-bedroomed house to develop a waste prevention and management plan as it would be for a commercial enterprise. Evidence from England is that these plans actually start to save money at a level of project between £250,000 - £300,000. This is a level which will include a great deal of non-commercial activity.

Nevertheless, it is the Scottish Government's intention to avoid creating unnecessary burdens in developing regulations under these powers.
Climate Change (Scotland) Bill: The Cabinet Secretary for Finance and Sustainable Growth moved S3M-3963—That the Parliament agrees to the general principles of the Climate Change (Scotland) Bill.

Sarah Boyack moved amendment S3M-3963.2 to motion S3M-3963—
insert at end—

“and, in so doing, further agrees that unambiguous quantified targets for the reduction of greenhouse gas emissions for the period between 2010 and 2019 are needed so that the current government and governments elected in 2011 and 2015 can be held to account for delivering early action on tackling climate change”.

Alison McInnes moved amendment S3M-3963.1 to motion S3M-3963—
insert at end—

“and, in so doing, calls on the Scottish Government to publish an energy efficiency action plan within six months and to bring forward amendments at Stage 2 that set out substantive transparent measures to put Scotland on a steady path to achieving the Bill’s emissions reduction ambitions, including early action to meet a scientifically credible 2020 interim target, the measurement and reporting of cumulative emissions, broad sectoral targets, a duty on public bodies to take account of climate change in their activities, the inclusion of Scotland’s share of international aviation and shipping emissions in its emission targets, a limit on the use of international carbon credits and a robust reporting mechanism that allows for detailed parliamentary scrutiny of progress”.

The Presiding Officer used his discretion under Rule 11.3.3 to put the question on the motion and amendments at Decision Time on Thursday 7 May 2009.
Climate Change (Scotland) Bill: Stage 1

The Presiding Officer (Alex Fergusson): The next item of business is a debate on motion S3M-3963, in the name of Stewart Stevenson, on the Climate Change (Scotland) Bill. I am using my discretion under rule 11.3.3 of standing orders to allow the question on the motion, together with the questions on the two amendments, to be put at decision time tomorrow night. Accordingly, members are reminded that debate will be concluded tomorrow afternoon.

15:04

The Cabinet Secretary for Finance and Sustainable Growth (John Swinney): It seems entirely fitting that, 10 years to the day since the first elections to this Parliament, we are meeting to consider ground-breaking legislation and to set out our approach to tackling climate change. Surely coincidence highlights the necessity of this Parliament fulfilling its role in realising the potential of our country and addressing the challenges that face it in the 21st century.

The bill could not be of greater importance. Climate change is the greatest environmental threat facing humankind. If global action is not taken to reduce emissions significantly, the world faces an uncertain future. Even during the short time that we have been considering the Climate Change (Scotland) Bill, the outlook on climate change has worsened.

About 2,000 international scientists met in Copenhagen in March and confirmed the overwhelming evidence that humans are causing global warming and that climate change is happening faster than was previously predicted. The Climate Change (Scotland) Bill is a call to action—a motivation for all of us to make a difference. That aspiration lies at the heart of the energy and commitment behind the establishment of this Parliament and enabling it to make a contribution not only to the lives of people in this country, but to the lives of those who live in other countries. Many people in developing countries are likely to be the worst affected by the impact of climate change. Those of us who live in the developed world will also see changes in our weather patterns, with Scotland predicted to experience wetter winters and warmer temperatures throughout the year, which has implications for all of us. That puts the onus and responsibility on us all to act.

Patricia Ferguson (Glasgow Maryhill) (Lab): Given that poor communities and poor countries will, as the cabinet secretary rightly identifies, suffer most from climate change, and given that the average carbon footprint in the west is about 9.4 tonnes of emissions, compared with less than 0.1 tonnes in Malawi, does the cabinet secretary agree that we should be assisting the developing world with mitigation and adaptation measures, and that we should not need to dip into the international development budget, for example, in order to do so?

John Swinney: Patricia Ferguson makes an entirely valid point about the impact of climate change on people who live in developing countries. She also highlights an aspiration, with which I entirely agree, that there is an obligation on all of us in the developed world to make a contribution to assisting with and encouraging the steps that can be taken in those countries to adapt to the new climatic conditions. There is also a responsibility on us to act to ensure that we in no way extend or exacerbate the difficulties that those countries face. The matter of international aid budgets is reserved to the United Kingdom Government, but we would certainly encourage a focus in policy making on making progress on the questions that she raises.

Through the leadership that is being displayed by the Scottish Government, with Parliament's support, Scotland can make a difference on this vital issue, and 2009 is a particularly appropriate year in which action should commence. Against a background of worldwide economic problems, the countries of the world will meet in Copenhagen in December, under the auspices of the United Nations Framework Convention on Climate Change, to negotiate a post-Kyoto protocol climate change agreement. The discussions will be significant for setting the pace of action to tackle climate change through a new global agreement to accelerate emissions reductions. Such an agreement will trigger the European Union's commitment to review its present target for 2020 of a 20 per cent reduction in emissions to a much more ambitious 30 per cent reduction, and we will play an active part in working to secure a more ambitious agreement.

In the face of such a huge and complicated challenge, we might ask ourselves how Scotland can hope to play any meaningful role in global action. We are a country with just 5 million people, emitting just 0.15 per cent of global greenhouse gas emissions. However, as Patricia Ferguson said, the important point is that our emissions per head of population are far above our fair share, and they need to be reduced.

The Government has a clear and consistent vision of Scotland as a country that is leading the way among nations, and we are delivering our ambitions for Scotland. The Climate Change (Scotland) Bill is an opportunity for Scotland to act...
as a model of international best practice by setting a world-leading level of ambition.

**Brian Adam (Aberdeen North) (SNP):** Will the cabinet secretary give way?

**Patrick Harvie (Glasgow) (Green):** Will the cabinet secretary give way?

**John Swinney:** I give way first to Mr Harvie; then I will come to Mr Adam.

**Patrick Harvie:** I am grateful to the cabinet secretary, and to Brian Adam for his patience.

The cabinet secretary talks about Scotland giving leadership to the world, and the existence of the Climate Change (Scotland) Bill is one marker of that. However, the adoption of the UK’s approach to targets, with exactly the same interim and long-term targets as have already been adopted by the UK, does not mark the bill out as distinctive in any way. What is the rationale for an interim target that is based on an assumption that there will not be international agreement? Should we not assume that there will be such international agreement and step up to the plate with ambitious long-term and short-term targets?

**John Swinney:** Mr Harvie is in danger of talking down the level of ambition in the bill. To be fair to the Government—which I always want to be, of course—we have set out a range of radical and ambitious measures to set the pace of the agenda. I will talk in more detail about targets later, but in no way can the Government be described as lacking ambition on this fundamental issue for our society to address.

**Brian Adam:** It is of course important that Governments take action but, as the cabinet secretary said, it is also important for all of us to take action. I am sure that he is aware of representations on community engagement from eco-congregations such as those at Bucksburn Stoneywood church, Dyce church and Sheddocksley Baptist church in my constituency. What is the Government’s view on community engagement? Would it welcome an amendment to ensure that that is part and parcel of the bill?

**John Swinney:** The Government would certainly consider sympathetically any amendments on community engagement. Mr Adam kindly provides me with the opportunity to pay tribute to eco-congregations, which have contributed significantly. Some months ago, Mr McNulty led a debate in Parliament on eco-congregations. In my constituency, the Auchtergaven and Moneymie parish church was rebuilt in an immensely eco-friendly fashion. That is a tremendous example of a development in the religious community to deliver an environmentally friendly and enhancing facility in the community. At stage 2, the Government would look sympathetically on the point that Mr Adam makes.

Before I address the bill in detail, I will highlight several activities that are fundamental to the Government’s approach to tackling climate change. We have committed ourselves to introducing a new system of carbon assessment for the whole Scottish Government budget, which will begin to operate with our 2010-11 budget. We have an ambitious low-carbon energy plan that is based on 10 energy pledges. We are on track to exceed our target of generating 31 per cent of Scotland’s electricity from renewable sources by 2011. We are investing £2.6 billion over three years in greener transport to give people alternatives to cars. Once the carbon reduction commitment commences next spring, about 50 per cent of Scotland’s emissions will be covered by carbon trading schemes.

To complete the picture of existing initiatives, the £27 million climate challenge fund—a product of discussion between the Government and Mr Harvie and the Scottish Green Party in 2008-09—is proving to be a great success and is funding community carbon reduction projects throughout the country, which might relate to some of the aspirations that Mr Adam just mentioned.

A crucial point is that the Government is also preparing Scotland for the impacts of climate change. Our climate change adaptation framework will help decision makers to plan and prepare for change now. That will enable Scotland to be better placed to take advantage of opportunities and to build resilience.

I am proud that the bill will put Scotland at the forefront of international action to tackle climate change. It sets a target to reduce Scotland’s greenhouse gas emissions by 80 per cent by 2050. That target is challenging, but it is the minimum for which we should aim if Scotland is to contribute to the global efforts to tackle climate change.

However, 2050 is a long way into the future, and we need to be certain that we are taking effective action now. That is why Scottish ministers have put in place a system of annual targets, which is essential to provide the challenge and the imperative for action for ministers and our successors. That is the right thing to do, as it will require the Scottish Government and future Administrations to take action.

**Mike Rumbles (West Aberdeenshire and Kincardine) (LD):** Is not the whole point of producing legislation on an issue such as climate change to set not only targets, but penalties for people who do not achieve the targets? Has the cabinet secretary considered including penalties so that the bill means something?
John Swinney: A legitimate argument for adding penalties to the bill can be made, but the Government has not chosen to take that route. We would rather approach the bill from the perspective of motivating and encouraging action to tackle climate change than have a relatively false debate about how the Government would pay a penalty to itself for failures that might occur. I would prefer to ensure that ministers are subjected to rigorous scrutiny by the Parliament to make delivering the aspirations in the bill obligatory for ministers.

The Government proposes to make the bill tougher and stronger. Having listened to the stage 1 evidence, ministers agree that an earlier interim target than the 2030 target is appropriate to ensure early action. At stage 2, the Minister for Transport, Infrastructure and Climate Change will therefore lodge an amendment on introducing a new 2020 interim target. That will set the pace for emissions reductions during the next decade and ensure that ministers need to match the Scottish Government’s aspirations with action. I am pleased to confirm that Scottish ministers will introduce an interim target for 2020 that requires emissions reductions of at least 34 per cent.

The Government is committed to going further. That is why we are insisting that an obligation is put on ministers to increase the 2020 34 per cent target to at least 42 per cent, once the EU adopts at least 30 per cent as its target for reductions in greenhouse gas emissions over the period 1990 to 2020. I am absolutely committed to increasing the interim target as soon as possible, which is why I intend to add that commitment to the bill at stage 2.

We know that the expert advice of the UK Committee on Climate Change is that the UK should deliver emissions reductions of 34 per cent by 2020, given the current circumstances, with the target increasing to 42 per cent if a new international agreement is reached in Copenhagen. Scottish ministers agree that that is the minimum that we should aim to deliver.

Patrick Harvie: If the new interim target represents a steeper trajectory and earlier achievement of the cuts than was the case under the previous interim target, does it not follow by mathematical necessity that the annual targets in the period between now and 2020 must themselves be tougher? How can we take seriously a tougher interim target if the same annual targets are set to 2020?

John Swinney: Ministers will be required by regulation to bring forward annual targets. By clear necessity, those targets must create the capacity to deliver the 2020 target that we will set in the bill. The arrangements to lock in the requirement for action appear to me to be absolute.

We considered the 2020 target carefully. Scotland does not operate in a vacuum—many of the levers for reducing our emissions are controlled by the European Union and the United Kingdom Government. A prime example is energy generation, which is covered by reservations in the Scotland Act 1998, and emissions from energy generation fall within the EU emission trading scheme.

At this stage, going further than 34 per cent is just not an option. I will explain to Parliament why I believe that that is the case. Even if we deliver all the abatement measures that are set out in the UK Committee on Climate Change’s 500-page report, we could not deliver a 42 per cent reduction in emissions by 2020 without proportionate action being taken at the UK and EU levels. Our ambition is clear and our approach is realistic.

Long-term targets are important. As I said to Patrick Harvie, at the heart of the bill is a duty on Scottish ministers to set annual targets to define each step of Scotland’s emissions reduction journey. Those targets will be set in batches from 2010, thereby providing certainty about our emissions reduction trajectory.

Scotland’s share of international aviation and shipping emissions will be included in all the targets in the bill. I am proud that that is a world-leading step. I confirm our intention to amend the bill to remove any unintended ambiguity in that respect. That will ensure that Scotland’s share of those emissions will be covered from the setting of the first annual target onwards.

The bill requires that Scottish ministers obtain expert advice before they set annual targets. The Scottish Government will use the expert and independent UK Committee on Climate Change for advice in the first instance. On the basis of the ambition that the committee showed in its first report, “Building a low-carbon economy—the UK’s contribution to tackling climate change”, I am confident that it will recommend challenging targets for Scotland.

In the longer term, the bill provides flexibility for ministers to establish a Scottish committee on climate change or to apply new powers to an existing Scottish public body. I am also determined that the Scottish Government will focus on delivering emissions reductions in Scotland through domestic effort. That is why ministers propose the introduction of a provision to require Scottish ministers to limit the use of international credits to offset Scottish emissions.

Des McNulty (Clydebank and Milngavie) (Lab): I welcome what the cabinet secretary has just said on international credits. Does he have a percentage figure that he will share with the chamber for what the limit would be?
John Swinney: The Transport, Infrastructure and Climate Change Committee recommended to the Government that we should take a broadly comparable position to that which has been taken by the United Kingdom Government, and that is the position that the Government is currently considering.

Much has been said during the stage 1 evidence sessions on the application of duties on public bodies. The bill contains enabling powers to allow Scottish ministers to place specific climate change duties on the Scottish public sector in the future. For the record, I reiterate my support for working in partnership with the public sector and recognise that there are many good examples of initiatives that are being taken to reduce greenhouse gas emissions. I see no need to move away from that partnership approach and I am not willing to do anything that undermines it. I am encouraged by the fact that the Convention of Scottish Local Authorities shares the Government's view and I am disappointed that the Transport, Infrastructure and Climate Change Committee does not share the Government's confidence in proceeding in a partnership way.

On the issue of reporting and scrutiny, I make it clear that the Government will design, in partnership with the Parliament, the strongest and most obvious level of scrutiny of ministers and their performance in relation to the implementation of the bill. We have made a suggestion in the bill that ministers should be publicly scrutinised by a committee of conveners. We would be happy to have that scrutiny in public, and the proposal recognises that climate change affects all policy areas—it is not just the preserve of the Transport, Infrastructure and Climate Change Committee but affects justice, health, local government and the whole gamut of policy areas. That is why the Government has offered that particularly high level of scrutiny. I hope that the Parliament will consider that with the same generosity with which the Government made that suggestion to the Parliament.

The Government's desire is to create legislation that is world leading and enduring and which commands the support of every corner of the parliamentary chamber. We must recognise that, if we are to succeed in our aspiration of delivering on the climate change agenda, we must act with the support of every political party. That is the style that the Government will adopt in taking the bill through the Parliament.

I move,

That the Parliament agrees to the general principles of the Climate Change (Scotland) Bill.

Sarah Boyack (Edinburgh Central) (Lab): I concur with John Swinney that what we are debating today is a significant bill, and it is highly appropriate that we do so as we hit 10 years of the Scottish Parliament's operation. It will be the most important bill that we pass. We can debate that among ourselves afterwards, but in terms of its long-term ambitions and the challenge that it attempts to address, I think that that is a fair argument.

Nevertheless, the bill will be successful only if we all buy into it. That does not mean that we all have to agree with one another at this stage. There is time for more detailed consideration of the bill at stage 2. We believe that the bill is not strong enough at the moment and that there are significant gaps that need to be addressed. In particular, we think that climate change needs to inform all Government decisions from now on and that our agenda must involve all of us as citizens, consumers and people who are involved in businesses, trade unions and church groups.

I will address three things: the need to act now and to set ourselves the right targets and benchmarks; the need to get our governance structures right; and the need to put in place a series of policy programmes that tackle at the same time both the recession that we are currently experiencing and climate change.

Our top line is that the bill does not go far enough. We welcome the announcement and the comments that have been made by the cabinet secretary today, but we still feel that the bill does not go far enough. It does not address the early years, and it would represent a massive missed opportunity if the bill were to be passed as it is currently drafted. The policy in the Scottish National Party's manifesto for annual statutory targets of 3 per cent reductions was not one that we considered took the right approach during the election campaign, and we argued our corner. Given that that policy was dumped as soon as it had done its job of harvesting green votes for the SNP, we believe that it was more a cynical election strategy than a genuine commitment to radical action. The alternative approach that is laid out in the bill is simply not good enough. It is a betrayal of the trust of the many thousands of people who voted for the SNP on the basis of that policy.

The Minister for Transport, Infrastructure and Climate Change (Stewart Stevenson): Will the member take an intervention?

Sarah Boyack: No. I want to get started.

The critical time to act is now, and the action that we take must be meaningful and real. The driver for success must be tougher, quantified
interim targets. We have lodged our amendment to concentrate minds on that. We need to send businesses, Government departments and agencies and people in Scotland a clear message that the Parliament intends to act now. We believe that political accountability needs to be built into the system. We need to incentivise the sort of thinking that starts to turn things around now, not in 2018, on the eve of our having to meet a 2020 target. We believe that that 2020 target is too far off. Not only is it too far off to drive short-term action with a sense of urgency, but it is too far off to incentivise the medium-term policies that Governments will need to deliver on by 2020. It is three elections away. We need to bring the day of action closer to home—to the SNP today and to the next two Governments, which we hope will be Labour ones.

Stewart Stevenson: It might be helpful if the member understood that we are quite happy to support her amendment. Does she recognise that, by putting a 42 per cent figure on the face of the bill, as we intend to do in the context of European agreement on a 30 per cent figure, we are challenging our partners to step up to the plate so that, together, we can deliver—with annual targets every year to 2020—precisely what she is proposing?

Sarah Boyack: As we understand the position, the targets are not quantified. The targets in the bill will kick in from 2020 but, before then, the targets will be in regulations. We absolutely support a 34 per cent target. I understand that that is what John Swinney said will be in the bill, and that the 42 per cent target will be adopted if we get collective action at Copenhagen. I am not critical of the target that has been set for 2020. We understand why the Government has gone for that target. The challenge is to supplement it. We did not believe in annual targets, but we think that we need mid-points. We accept the point made by environmental campaigners that each Government should be accountable for what it does. We welcome the SNP’s support for our amendment today.

John Swinney: I think that I answered the point that Sarah Boyack is making when I responded to Patrick Harvie’s intervention. The setting of targets in regulations obliges ministers to act in a fashion that sets us on a trajectory that delivers the 2020 interim target, which we all now agree is exactly the right position.

Sarah Boyack: We think that we need quantifiable targets on the way, and our amendment is designed to ensure that the progress of each Government can be assessed.

Every time that respected scientists review the position on climate change, they tell us that, although they cannot be certain of how climate change will work in the future—particularly in relation to feedback mechanisms—the situation is more urgent than it was the previous time that they reported. That is what the Intergovernmental Panel on Climate Change and the UK Committee on Climate Change report, and that is why we want tougher earlier action. We do not agree with the setting of arbitrary annual targets, because different things can happen each year. We need to judge each Government on its track record.

We know that we need to go beyond paying lip service to the challenges and actually change how we do things. We believe that it is the next 10 years that are crucial, not the debate about 2050. It is easy to get sucked into discussions about long-term targets and ignore the short-term challenges. That is why we want to go for unambiguous, quantified targets.

We need to start doing something now, and we need to set ourselves on a path of radical reductions in carbon emissions. We need to focus not only on how we are doing, with annual reporting to the Parliament, but on the consideration of cumulative targets. Everything that we do in the early years has an extra dividend. We are not just meeting a target; we are ensuring that those carbon emissions are not created in the atmosphere for generations to come. Surely we can all agree about that. However, we do not believe that that will happen without more serious pressure, and that is the purpose behind our amendment, which is designed not only to affect the current Government but to signal to the system as a whole that we are all serious.

We believe that the Transport, Infrastructure and Climate Change Committee’s report on the Climate Change (Scotland) Bill is excellent. It is the latest stage in a lengthy process of debate. Similarly excellent is the report from the Rural Affairs and Environment Committee, particularly its recommendations on waste and the position that it took against dumping 25 per cent of the Forestry Commission’s estate. Further, the Economy, Energy and Tourism Committee has given us an invaluable set of recommendations, all of which the Government should implement.

We argued for a whole week’s debate on the bill not just because three committees have been involved in its consideration, but because of the range and depth of issues that the bill needs to address if we are to get it right. If we had only debated the issue this afternoon, we would not have covered the range of issues that need to be picked up before stage 3. Last month’s lobbying was a graphic illustration of the support that there is in our communities for radical climate change legislation.
Our support for the bill’s principles will be clear, but we want to flag up that many amendments will be needed to make the bill more radical and effective.

Mike Rumbles: Will the member give way?

Sarah Boyack: No. I need to get on.

Today we will focus on the overarching principles of the bill and amendments that are needed in that context; tomorrow we will focus on practical progress, provision for which needs to be slotted into the bill, to support economic activity and build a bridge from today's technology and expertise to future priorities. The recession makes such an approach all the more important.

There is a need to incentivise local authorities and businesses to rethink their day-to-day approaches. The briefings that we received from Scottish and Southern Energy and Scottish Renewables, and the business community’s contributions to our stage 1 consideration, made it clear that companies are beginning to focus on serious action. Businesses need amendments to the bill at stage 2 that introduce practical measures on energy efficiency and small-scale renewables. Such amendments would strengthen the bill and the ability of the Government and future Governments to deliver on carbon reductions, which are needed in all sectors.

If we are to make the bill work, the business community, trade unions and communities must buy into it. That is why we are committed to developing green jobs, not just in the renewables industry, which is hugely important, but in other industries. There are opportunities to invest in public transport and support for electric cars and other vehicles. There are opportunities in energy efficiency in the building industry, in relation not just to new developments but to the need to build mass markets for the retrofitting of our existing, inefficient infrastructure. We must not just talk a good game but put legislation on the statute book and implement it.

Public duties need to be more effective. We need climate change action at every level of government. What will the concordat deliver on climate change? The issue needs to be addressed. What carbon emissions reductions will be achieved? There will be different challenges and opportunities for each local authority, but there are huge common areas in which a common approach and clear leadership will deliver results. We need concrete results, not vague aspirational language. More work is needed.

Stewart Stevenson: Will the member take an intervention?

Sarah Boyack: I have taken a couple of interventions and I want to move on.

Particular issues need to be explored. After the debate, I will consider John Swinney’s comments about the nature of the advice that is given to ministers. The work of the UK Committee on Climate Change has been crucial in setting the UK Government framework, which the Scottish Government is adopting, and in translating IPCC findings into action. However, we need to consider particular challenges for Scotland that arise from the nature of our geography, land and communities. We also need a land use strategy, so that we can plan for the future and ensure that we do not ignore challenges until it is too late but address them head-on.

We particularly need to tackle our housing. A raft of practical actions are not in the bill. We welcome Government responses to the stage 1 report on minor issues, but we want more action. In particular, tax incentives are crucial, to ensure that people act. That view is shared by Scottish and Southern Energy and Scottish Gas. Such an approach could be linked with the energy efficiency action that was provided for in this year’s budget, which members supported. We need to ensure that there is area-based action from which every citizen in Scotland can benefit. In England and Wales, 67 local authorities are doing such work, and Northern Ireland is putting a system in place. We do not need to be told that the Scottish Government has no legal power to act, as the Government said in the paper that we received last night; we can use the bill to give the Government that power. The bill presents us with an opportunity to plug a gap, which we will try to take by lodging amendments at stage 2. We need practical policies now if we are to deliver on energy efficiency. We cannot let political prejudice stand in the way of action that is being adopted throughout the UK. Council tax incentives would be a good fit with other work that the SNP Government is undertaking.

We support the early production of an energy efficiency action plan. The plan has been delayed for years—the SNP Government is not the first Government to delay it—and is needed soon. I am not making an excessively party-political point when I say that we need to ensure that energy efficiency reaches the top of the agenda not just in a single debate but for the future. We need to do that within six months.

I think that all members agree that one of the toughest issues that we must address is emissions from aviation and shipping. We cannot turn back the clock on social aspiration and economic progress but we must find ways to take account of aviation and shipping. That is a challenge. It is vital that we do not ignore other forms of transport. Day to day, people make fundamental choices, but they are not being given the necessary, high-
quality public transport choices, particularly in areas where those could be delivered.

We need to introduce tougher, cumulative emissions targets to drive early action on the issues on which it will be relatively straightforward for the Government to act. In the first eight years of the Parliament, there was major investment—championed by Labour—in public transport, but that needs to continue at the same level.

It is inevitable that we will focus on hitting targets, but we must involve people, businesses, communities, churches, trade unions and schools. We all should feel part of the process, because there is an appetite for change. The bill will be a framework for action. It cannot be a question of passing the bill, putting it on the statute book and the Government, or even the Parliament, patting itself on the back for being radical. We need an implementation plan, which must be discussed during the stage 2 consideration of the bill. We must do that both to concentrate minds and to deliver policies that will create a track to a low-carbon society.

I agree with the cabinet secretary that the next Scottish budget must be more ambitious. We will need not only dedicated energy efficiency schemes and individual community schemes—welcome though those measures are—but mainstream Government expenditure if we are engaged with the climate change challenge and determine how to reduce carbon emissions. We are still waiting for some assessments to take place at a Scottish level to enable a public debate on that.

The power of the state, whether national or local, is crucial. The state has the potential to play a huge role in enabling us to make the transition to a low-carbon economy. Through public procurement of food, buildings, infrastructure or services, the Government can make practical greenhouse gas reductions in the early years, not just the later years. The Government should use the hiatus caused by the lack of investment, while we wait for the Scottish Futures Trust or public-private partnerships, to reconfigure contracts so that the next generation of investment in public transport and buildings is greener and more energy efficient and reduces carbon emissions from day one, not from some future point.

The challenge is in front of us all. It is time for the SNP to implement some of its forgotten manifesto pledges that would help to reduce carbon emissions. When new schools are built, they must all be heated and powered by on-site renewable energy. The same should go for hospitals and other public sector buildings.

We need a bill, targets to drive action, governance structures and the accountability mechanisms of the Parliament and wider public life. We also need to ensure that the bill is matched by the development of policy measures that will deliver carbon reductions. There has already been a robust debate on the bill in our communities. It is a landmark bill, but it needs significant amendment at stage 2.

I move amendment S3M-3963.2, to insert at end:

“and, in so doing, further agrees that unambiguous quantified targets for the reduction of greenhouse gas emissions for the period between 2010 and 2019 are needed so that the current government and governments elected in 2011 and 2015 can be held to account for delivering early action on tackling climate change.”

15:38
Alison McInnes (North East Scotland) (LD): I look forward to the bill progressing to stage 2 following this week’s debate but, through my amendment, I want to highlight some of the key changes that are needed to make it fit for purpose. It needs tougher targets, a greater depth and a robust reporting mechanism so that successive Governments can be held accountable for the rate of progress in this most pressing matter.

Over the past year, the Government has regularly made claims about its bill being an example for the world to follow—it could never be accused of modesty. Is the bill world leading? Not yet. At the moment, it is so lacking on early action that there is no certainty that the end target can be achieved, but I welcome the cabinet secretary’s comments on that and will reflect on what he said.

For two years, the Government has promised effective legislation on climate change. I do not want it to shirk its responsibility now because the task is difficult. In contrast to the SNP, the Liberal Democrats are determined that the bill should fulfill its potential and set a global example to other developed nations.

Scotland must not waste the chance to show the world the right way in legislating on climate change. The bill does not do that, but it could and should. I hope that there is cross-party support for further strengthening of the bill and for my amendment. Change can happen if enough people will it, and we have seen an enormous upsurge of interest in tackling climate change. That support from across the country should galvanise us and strengthen our resolve. People are asking us to be bold and will not forgive us if we are timid about it.

This is not about political point scoring; it is about doing what is necessary. As a Parliament, we can unite to make the Climate Change (Scotland) Bill a strong and effective bill that will ensure early and sustained action. We can signal that we want to grasp the opportunity, kick-start
change and give Scotland a positive edge and renewed confidence in moving forward.

Yesterday, the Government published its response to the committee’s recommendations. In some instances, what is proposed still falls short of expectations. I will address that issue alongside some of the main issues of the report and the bill.

The most disappointing aspect of the bill may be the lack of early action that is proposed. Yes, targets would be set from the outset, but there is no mention of the SNP’s promised 3 per cent annual cuts until 2020 and no interim target until 2030, although the minister has admitted that he will move the interim target to 2020, in line with the UK bill. I am eternally hopeful that he will introduce measures for real, early action.

Simply requiring a reduction each year until 2019 shows a lack of ambition and, more worrying, a reluctance to take responsibility. It is all very well for the minister to say that that approach will “balance science and achievability”, but he cannot duck the facts. The science is simple and it indicates that urgent action is needed now. The committee report recommends early and sustained action, which I believe should mean cuts of 3 per cent per annum from the outset. The Met Office puts it simply:

“Even if emissions start to decrease in the next two years and reach a rapid and sustained rate of decline of 3% per year, temperatures are likely to rise to 1.7 °C above pre-industrial levels by 2050 ... the risks of dangerous climate change will not increase slowly as greenhouse gases increase. Rather, the risks will multiply if we do not reduce emissions fast enough.”

Turning to cumulative emissions, I think that science is probably driving the composition of this bill more than it has that of any other. Percentage reductions are a necessary measure of progress, but the science of climate change speaks not in percentages but in absolutes. The key to success lies in the total amount of greenhouse gases that we release into the atmosphere. We know that the current concentration of carbon dioxide in the atmosphere is about 387 parts per million. Climate change prediction models are constantly updated, but we know that to have even half a chance of limiting climate change to a global temperature rise of 2°, we would need to stabilise the concentration at no more than 450 parts per million of CO₂. If we reached 550 parts per million before stabilising, we would be more likely to have a 3° or 4° temperature rise, with all the damaging effects that would go with that.

What that means is that we have a real, scientifically measurable limit on how much CO₂ equivalent we, as a world, can emit over the next 10, 20, or 50 years. From that, we can work out what Scotland’s fair share of those emissions will be. With that in hand, it would almost be irresponsible not to measure our cumulative emissions, report on them and track whether we are staying within bounds.

**Stewart Stevenson:** Does the member accept that, by having annual targets, we in effect set a cumulative limit on the amount of CO₂ that it is possible for our country to emit? Has she noted the Government’s commitment to do the arithmetic to support that and show the cumulative emissions?

**Alison McInnes:** I know that, when the Government consulted on the bill, it acknowledged that cumulative emissions measurements would be important but more difficult to do. I urge the Government to carry on with measuring both cumulative and annual emissions.

The Government needs to heed the science in setting the interim target for 2020 and the annual targets for the next 10 years. A 34 per cent target for 2020 is not challenging enough. Simply hitting 3 per cent each year, which is what the Government committed to do, would lead to a 43 per cent reduction by 2020. Indeed, more recent projections have suggested that our ambition for the bill should be a 50 per cent reduction. We must have an interim target that encourages early action and annual targets that do the same. It is not just me who says so: the committee heard time and again that early action is needed. Not only the environmental lobby but businesses and public bodies said that.

An ambitious target for 2050 is not enough. There must be a road map for getting there. Without proper interim targets and with no steep trajectory, we are left with the impression that the Government is happy to wait for technical fixes to be developed that will solve all our problems. We will need technology to help us, but we can do things now in the short term, such as pushing building insulation measures and promoting better fuel efficiency and greater energy efficiency. We can do things that will set us well on our way to the reductions that we need to make and which will give us time to work on the bigger fixes. Moreover, far from costing billions, they could save us all money.

Turning to sectoral targets, I believe that everyone will need to take action if the bill is to succeed. I do not believe that the bill should set out detailed targets for every sector, but it should be clear from the outset that action is required from all quarters to make a difference. The bill should require the minister to set broad sectoral targets on energy efficiency, energy production, transport and land use—the major sources of emissions—and to identify what is expected from the different sectors.
Stewart Stevenson: Will the member take a brief intervention?

Alison McInnes: Sadly, no, I have a lot to say before closing.

I also believe that a general duty to take account of climate change should be imposed on public bodies, which can play a pivotal role in setting an example. Voluntary action from local authorities and the likes of Scottish Natural Heritage is to be commended, but other public agencies, such as health boards, are not so far forward. By enshrining a general duty in the bill, we would signal from the outset that every body must play its part.

Another key issue, which should rightly be separated from transport in general, relates to shipping and aviation. I am glad that the minister will amend the bill to ensure that emissions from those sectors are included from the outset.

My colleague Liam McArthur will address in detail the energy efficiency issue that is highlighted in my amendment.

On international credits, Scotland must meet its targets mainly through domestic means if we are to ensure the greatest impact from our efforts. That will require us to set a limit on the amount of carbon emission reductions that can be accounted for through international credits. I welcome the minister’s comments on that today, as I believe that we should seek to maximise domestic effort. I suggest that the cap should be set at 20 per cent up to 2020 and that we should consider introducing a sliding scale thereafter.

On reporting mechanisms, the bill as introduced requires the minister to do nothing more than lay a progress report before Parliament. A 10-minute statement with 20 minutes of questions is worthless as a means of scrutinising an issue of such importance. If we are to hold successive Governments to account, the bill must provide a clear and robust reporting mechanism. A good example might be the national planning framework, on which Parliament is given a 90-day period for sustained analysis of results along with an iterative process that ensures that parliamentarians build up expertise in the matter. That allows scrutiny to become more robust as the years roll by.

I was slightly disappointed with the almost petulant comments in the ministerial response to the committee’s recommendation on reporting mechanisms. The response simply notes:

“the Committee do not appear to have accepted these provisions in the spirit in which they were intended.”

This is too serious and important an issue for that.

John Swinney: On that point, I agree that it is important that Parliament can exercise its own mind. That is why the Government has singled out a different mechanism for holding ministers to account on the targets: ministers would be required to appear in public before a group of committee conveners who represent all policy areas. That makes the point that climate change affects every aspect of legislative and policy activity within the Parliament—

The Deputy Presiding Officer (Alasdair Morgan): Quickly, please.

John Swinney: That is the point that I would like Parliament to consider in its deliberations.

Alison McInnes: I accept the spirit in which that offer is made, but I believe that the issue is of such importance that we must think hard about what the best mechanism is to tie in future ministers, who might not be so willing to come forward and talk voluntarily.

John Swinney: They will be obliged to do so.

Alison McInnes: We will need to come back to the issue. At the moment, I think that how we deal with the national planning framework provides one possibility. As I said, this is too serious an issue to rely on the spirit of the legislation. The reporting mechanism must be robust in providing proper scrutiny. Most important, the mechanism ought to be laid out in black and white to ensure that Parliament can effectively hold the Government of the day to account.

From the moment that it was published, the bill has received an unprecedented level of public response. Just a couple of weeks ago, 500 people gathered outside the Parliament building to demand that we deliver a strong climate change bill. We must show that Parliament is listening. Things can change, so we should stop saying that change is too difficult and start finding ways to make it happen. The current financial crisis has caused us many problems, but it also gives us an opportunity. Let us not rush blindly into getting back to business as usual. Let us grasp this opportunity and look to rebuild with a green agenda. We can refocus—

The Deputy Presiding Officer: The member really must conclude.

Alison McInnes: Presiding Officer, this is the first great bill of any substance that has come through my committee in the two years since I was elected. I feel truly privileged to have had the opportunity to work on the bill and to be part of the Parliament that will pass it—

The Deputy Presiding Officer: The member must conclude. I am sorry.
Alison McInnes:—but I want it to be something that I can be proud of.

I move amendment S3M-3963.1, to insert at end:

"and, in so doing, calls on the Scottish Government to publish an energy efficiency action plan within six months and to bring forward amendments at Stage 2 that set out substantive transparent measures to put Scotland on a steady path to achieving the Bill’s emissions reduction ambitions, including early action to meet a scientifically credible 2020 interim target, the measurement and reporting of cumulative emissions, broad sectoral targets, a duty on public bodies to take account of climate change in their activities, the inclusion of Scotland’s share of international aviation and shipping emissions in its emission targets, a limit on the use of international carbon credits and a robust reporting mechanism that allows for detailed parliamentary scrutiny of progress.”

15:49

Patrick Harvie (Glasgow) (Green): I thank the many witnesses who gave oral and written evidence to the Transport, Infrastructure and Climate Change Committee. I also thank my fellow committee members, the committee’s clerking team and the other committees that have contributed to the parliamentary scrutiny process for the bill. On this occasion, I will also thank my mum. When she dragged me at the age of six to sit at the back of Green party meetings, she might not have guessed that I would be here today but, without her, I am sure that I would not.

The story goes back somewhat further than that. It is more than half a century since the first scientific papers appeared that said that we had put rather a lot of CO₂ into the atmosphere since the industrial revolution and that maybe that was an area for future research. It is more than 30 years since scientific consensus began to emerge on the issue and more than 20 years since the emergence of political consensus that something must be done. We have spent all the intervening time determining what action must be taken.

It is 10 years since the Scottish Parliament first sat and members such as Robin Harper and, notably, Sarah Boyack, as well as members of all the parties, began to think about what we could do to tackle climate change. Halfway through this Government’s term in office, we are having a debate that we have waited for with anticipation. It is more than half a century since the first scientific papers appeared that said that we had put rather a lot of CO₂ into the atmosphere since the industrial revolution and that maybe that was an area for future research. It is more than 30 years since scientific consensus began to emerge on the issue and more than 20 years since the emergence of political consensus that something must be done. We have spent all the intervening time determining what action must be taken.

It is 10 years since the Scottish Parliament first sat and members such as Robin Harper and, notably, Sarah Boyack, as well as members of all the parties, began to think about what we could do to tackle climate change. Halfway through this Government’s term in office, we are having a debate that we have waited for with anticipation. We have yet to achieve political consensus that something must be done.

I will have time to address only some of the committee’s recommendations, but I am sure that those that we do not discuss during the debate will receive full scrutiny at stage 2. As I am opening the debate on behalf of my committee colleagues, it is important that I reflect the balance of views, including any differing opinions, rather than just having my own wee rant—that is for later. Thankfully, on this occasion, that is an easy task, because the committee has agreed on some important changes that should be made to the bill. Although each of us might have written a slightly different list of recommendations, I am delighted that we managed to produce a report that was signed up to fully by the whole committee—there was no split on any of our strong recommendations.

The Government’s response to our report—which, incidentally, arrived with us after 4 pm yesterday; the minister might want to avoid that in the future—dealt positively with some of the recommendations. In particular, I welcome the fact that there will be a limit on the use of international credits. The world cannot pay someone else to solve the problem. Those of us who live in countries that have a high per capita CO₂ impact must take responsibility for our actions.

There was recognition that some aspects of the parliamentary reporting mechanism should be re-examined at stage 2—not because we spurned the cabinet secretary’s generosity in producing proposals. I hope that when members of the committee are generous with the additional suggestions that they make at stage 2, the cabinet secretary will welcome that process and engage constructively in it.

Mike Rumbles: Does the committee’s convener agree that the bill lacks teeth? If we are serious about reaching the annual targets, would he be sympathetic to amendments at stage 2 that required, let us say, the appropriate minister to resign automatically? [Interruption.] Mr Stevenson is laughing.

Patrick Harvie: The appropriate parliamentary mechanism would be a motion of no confidence. If the member wishes to discuss one, he has my number.

Time and again, the committee heard compelling evidence that early cuts in emissions—specifically, those that are made in the first 10 years—are of the greatest importance. Before it published its report, the committee already knew that the 2030 target would be moved forward to 2020. However, we went further than that, arguing that the targets for the period leading up to 2020 must be made more robust, either by bringing forward the point at which annual reductions of 3 per cent must begin to be achieved or by building towards the achievement of such reductions.

The Government’s response has been simply to restate the intention to produce a 2020 target. Indeed, leaving its announcement of what that target would be until less than 24 hours before the debate ensured that the committee had no opportunity to take evidence or seek views on the
Government’s figure. Given that the Government has fallen in behind the UK Government’s approach of adopting a target of reducing emissions by 34 per cent by 2020, which could rise to a target of 42 per cent, it has now become a follower, even though it still claims a leadership role on climate change.

Stewart Stevenson: Can the member tell us of any other jurisdiction in the world that has made a commitment to meeting a target of reducing emissions by 42 per cent, if European Union agreement is reached? Has any other Administration made such a commitment?

Patrick Harvie: From a global leadership point of view, the jurisdiction that I would cite is the tiny and vulnerable Maldives, which is not waiting for 2050 or 2030, or for global action. Its ambition is to be carbon neutral in 10 years. If any country in the world could be forgiven for saying that climate change is someone else’s fault and someone else’s responsibility to deal with, it would be the Maldives, the capital city of which is hunched behind a tiny, vulnerable sea wall. Plans are already being made for evacuation, because the people know that they are going to lose their islands. That is leadership. What is the point of waiting until the world or Europe catches up? What is the point of assuming that the world will fail to catch up? The call for early action that was made by so many witnesses, endorsed by the science and recommended by the committee appears so far not to be heard.

As the bill stands, the first annual target will not be specified until the final year of the current Government’s term of office and not at the 3 per cent trajectory that is needed. The committee has argued for earlier specified annual targets. I think that that is the basis of the slight misunderstanding between the Government and Labour Party front benchers on the amendment. The issue of contention is whether the earlier targets are to be specified in the bill as opposed to specified by ministers after the bill has passed.

Future Governments will inherit the targets, but we should not give the Administrations that will be elected in 2011, 2015 and 2019 cause to resent a late start made in this session. The committee recommended two additional aspects to the reporting framework: to examine consumption-based emissions—the emissions in other countries for which Scotland is responsible—and the means of publishing data on cumulative emissions. Notwithstanding the minister’s response to Alison McInnes a few moments ago, the Government’s written response to the committee report has little to say on those and we will explore them further at stage 2.

The committee also recommended that the Government produce far more detail on key sectors of the economy: land use, transport, energy generation and energy saving. How much weight can those sectors pull? The Government responded by pointing to its intention to produce a draft indicative delivery plan some time in summer, presumably after the bill is passed. Fifty months after coming to office, the Government will have its first draft indicative ideas about where the cuts will come from—that is early action.

The transport issues that the committee addressed were mostly to do with aviation and shipping. We heard from the Sustainable Development Commission more recently; in its view, transport remains in general the area with the greatest mismatch between rhetoric and reality. The inclusion of aviation and shipping emissions is welcome, but there remain significant unanswered questions, not least on radiative forcing—as the committee noted—and on the Government’s intentions for aviation growth.

I must also note that since the publication of the committee’s report there have been suggestions that some in the industry are lobbying for a return of the air route development fund. It would be instructive to know whether the cabinet secretary considers such a proposal compatible with the climate change objectives.

At paragraph 202 of our report, we make a very clear call for public engagement to be put at the heart of the agenda, not just on policy development or strategy documents but in relation to public acceptance, positive attitudes, a can-do spirit, a willingness to think about shared and personal responsibilities, community efforts and lifestyle changes. The Government response on that recommendation is also disappointing. References to stakeholder discussions over the summer suggest that it has the wrong end of the stick.

On the need for scientifically informed debate, the Government claims to have considered the best evidence available. However, repeatedly, the committee heard concerns that, for the most part, the primary source is the IPCC’s fourth report. Even those who worked on that report now acknowledge that it is already out of date. The cabinet secretary referred to Copenhagen and the most recent scientific announcements.

We were surprised that the Government has not yet formally consulted the UK Committee on Climate Change. It states in its response that it believes that it would be premature to do so, yet we as members will be expected to address scientific evidence in support of amendments at stage 2. I hope that the Government will recognise that evidence needs to come from a broader base than simply the IPCC’s fourth report.
The final thought that I will share is my pleasure that the bill has been introduced during a period of minority government. Any Government will want to take seriously political advice on a measure that might be brave. I am very pleased that the bill that we finally pass will be the Parliament’s bill and not the bill as it was introduced.

15:59

Alex Johnstone (North East Scotland) (Con):
In the words of Kermit the Frog, “It’s not easy being green”. That comes with some sincerity from someone like me, who is from a background where green politics were not as important as they were in other areas. I have paid tribute before to members in the Parliament and those who have taken part in the broader political debate: they have done much to take green politics from the margins of political influence to the heart of policy making. The fact that we are in the chamber to debate the Climate Change (Scotland) Bill at stage 1 is evidence of their success.

We must now consider the nature of and the need for the legislation. Some members would not have been at all surprised if the Conservatives had in the past taken the position that there was no need to pursue such legislation. In truth, however, the mainstreaming of green policy and the understanding that the climate is changing has driven Conservative thinking as well as that of other political parties. It should therefore come as no surprise that the Conservatives wholeheartedly support the spirit of the bill.

Similarly, it might not have been a surprise to some if the Conservatives had decided that the right thing to do was to pursue the UK bill rather than separate Scottish legislation. Although we considered that possibility at the outset, two things became clear. First, Scotland is starting from a very different place in relation to climate change and how we deal with it and, secondly, it has a very different level of potential. Consequently, it is only right that Scotland should move ahead with its own legislation.

The proposal was first introduced in the form of an SNP manifesto commitment during the election campaign, which contained at its heart a target of an 80 per cent reduction in emissions by 2050. One of the first things that I had to do was to assess whether that was an appropriate commitment. At that time, the UK Government was moving towards a 60 per cent reduction by 2050. It was perhaps suspicion on my part that made me think that the Scottish National Party was simply trying to outbid the UK Government with a higher, more ambitious figure, but the fact that the UK Government quickly changed its position to pursue an 80 per cent target indicates that that figure was perhaps more appropriate.

One broad issue that arose during the Transport, Infrastructure and Climate Change Committee’s inquiry was the question of whether the target is ambitious. The Government is keen to say that 80 per cent is an ambitious target, but some organisations that appeared before the committee suggested that it is not. I suggest that it is an appropriate and ambitious target but only if we take into account genuine short-term measures with regard to how we will achieve it.

The second most important and significant issue is the decision to go for a 2020 rather than a 2030 target. That 2030 target was, I believe, simply too far in the future and, however ambitious we set it, would not have set the agenda for early progress. Consequently, the Government’s decision to pursue a 2020 target is a significant departure.

It is nonetheless extremely important that we know how that target will be set. The details—which have been explained by the Minister for Transport, Infrastructure and Climate Change in committee and by the Cabinet Secretary for Finance and Sustainable Growth today—suggest a 34 per cent target with the option of rising to a 42 per cent target, which is an acceptable path.

If we are to achieve that, we need short-term targets, and I will continue to seek further clarification from ministers on how those short-term targets will be set and—more important—what they are likely to be. If we do not make early progress on annual targets, we will not make the progress that is necessary in the first 10 years.

Stewart Stevenson: Does the member agree that it is vital that we have expert advice to help us set the annual and interim targets and that the UK Climate Change Committee that was established under the UK legislation is a good starting point for such advice?

Alex Johnstone: I accept that. Indeed, on the question whether there should be a separate Scottish committee or whether we should rely on the UK Committee on Climate Change, I believe that the UK committee provides an appropriate starting point. The establishment of a separate Scottish committee might be appropriate at some point, but I believe that that time is still some way off. Moreover, given that our targets are broadly similar to UK targets and, more important, feed directly into the achievement of UK targets, I think that we have a great deal to gain by having a common source of advice.

I am still concerned about one or two key areas. First, given that the bill is two years behind the UK legislation, one might question its relevance. However, that very fact gives us the opportunity to pass more advanced legislation that takes into account figures that were not available when the UK legislation was introduced—the Government...
Patrick Harvie is convener of the lead committee for the bill and will make some points on behalf of the Rural Affairs and Environment Committee, which considered parts of the bill. He stresses that he joined the Rural Affairs and Environment Committee just as it was finishing its report, so I will highlight the committee's work on certain sections of the bill. I am sure that other members of the committee and the Minister for Environment will go into much more detail than I will.

The Rural Affairs and Environment Committee specifically requested that it be appointed as a secondary committee to scrutinise the provisions that fall within its remit—the forestry, waste reduction and recycling, and muirburn provisions. On behalf of the committee, I thank all those who provided oral and written evidence and the clerks for their hard work.

I will start with muirburn, which was the least contentious issue. Muirburn is important in regenerating hill and moorland habitats, but the issue did not evoke a great number of responses, except on the dates and lengths of periods allowed for burning. I welcome the cabinet secretary's undertaking to consult stakeholders fully on the issue, and we will keep a close eye on the amendments that the Government lodges on the matter at stage 2.

On waste, the committee is aware that the bill's provisions on waste reduction and recycling are enabling in nature because the Government does not propose to introduce secondary legislation to enforce them if the same ends can be achieved through voluntary measures. The committee appreciated the logic of that approach but, given the importance of the provisions, we think that any such secondary legislation should be subject to the super-affirmative procedure, which would allow additional time for scrutiny of its contents, including in draft form.

Other issues stemmed from the evidence that the committee heard and need to be addressed to progress the central aim of reducing, reusing and recycling waste. They include the urgent need to focus on reducing commercial and industrial waste that is sent to landfill; the need to address the lack of infrastructure that is currently available to implement the policy intentions in the bill; and the need to consider matters that the Environment and Rural Development Committee raised in session 2 to do with the impact, including the environmental impact, of sellers of goods charging for the supply of carrier bags.

The Rural Affairs and Environment Committee also considered the opportunities that the current international market conditions could present for Scotland to develop waste recycling industries; the need to ensure that measures are undertaken in accordance with both the Government's definition of recycling and the waste hierarchy that is set out.
in the waste framework directive; and, in order to inform public decision making, the need for the Government to endorse one method of measuring carbon footprints and to establish criteria that are based on it that reflect which waste reuse and recycling practice is the most sustainable.

On the more contentious issue of forestry, we all know—the Minister for Environment in particular—that the submissions that were received on the proposal to lease a percentage of Forestry Commission land either opposed that proposal or raised substantial issues with it. On the basis of the weight of the opposition to the proposal and issues with the adequacy of the consultation process, the committee recommended that the Government should not progress the proposal. As members might appreciate, the committee therefore welcomes the Government’s announcement that it will not progress the proposal. Assuming that this is still the Government’s intention, the bill will be amended at stage 2 so that the provisions in section 47 are restricted to purely enabling joint ventures.

All the written submissions supported the idea of the Forestry Commission entering into joint ventures with private companies for the development of sustainable energy projects, such as wind farms and hydroelectric infrastructure projects. Evidence to the committee suggested that such joint ventures have the potential to generate considerable income, although members are aware that there are practical barriers to generating income quickly because of the time taken to receive planning permission and clearance from environmental regulators for proposals such as wind farm projects. Given the notable support for the joint venture proposal from stakeholders, the committee recommended that the Government should explore the full potential of joint ventures, including whether support should be provided for their establishment.

The committee’s report notes that, in the response to the Government’s consultation on the proposals, there was widespread support for the idea of community leasing. Although provisions on that would not sit easily in the bill, as community leasing would have social benefits that are unrelated to mitigating climate change, the committee recommended

“that the Scottish Government incorporates provisions to allow for community leasing in future legislation.”

That would meet the call from members that we must encourage members of the public to buy into the climate change debate.

The Deputy Presiding Officer (Trish Godman): You should finish now, Ms Watt.

Maureen Watt: Finally, as usual, many organisations have sent in briefings on the issue, which have highlighted Scotland’s position at the forefront of tackling climate change. However, caution should be—

The Deputy Presiding Officer: You must finish now, Ms Watt.

16:16

Cathy Peattie (Falkirk East) (Lab): Climate change is everyone’s responsibility, and people who accept the responsibility will want strong climate change legislation. Building on the UK Climate Change Act 2008, the Climate Change (Scotland) Bill will be world leading and we must get it right. Those who want to make a contribution to the future of our planet have nothing to fear from the bill, as it sets targets that we must meet to avert disaster, facilitates and encourages public participation and engagement in climate change policy and action, and ensures that all public authorities are on board and do what they can to work with central Government and the public to achieve the targets. What we are asking will not always be easy to achieve, but we would not ask it if we did not think that it was essential. If we act slowly, it will be harder to meet the challenges.

Those who constantly seek to innovate and reduce their impact on the climate should not find complying with the legislation any harder than complying with targets that they would set for themselves. Indeed, quite the reverse is true, as the bill should make that easier. On the other hand, those who are in denial—those who think that the bill does not affect them and that climate change is simply not a problem and nothing to do with them—might have a bit more difficulty. For those who want to be part of the solution, the bill is not part of a problem.

All of us have something to contribute—not only those who work on renewable energy, the more efficient use of resources, insulation programmes and carbon capture or in other jobs that immediately spring to mind as green jobs—and we must do all that we can to green our jobs. Central and local government and other public authorities have an important role in taking measures to limit climate change and adapt to the changing climate.

The issue is not only about flood defences and greener energy, reducing congestion and improving public transport, and reducing the number of flights that we take and being more thoughtful about using local produce, important though those actions are; it is about becoming more conscious of the impact of everything that we do. We need to take a joined-up approach and must always consider whether there is a better way in which to do things so that we reduce our carbon footprint. We must combine renewable energy and heat schemes with power schemes,
and we should combine climate change adaptations with improvements to schools and hospitals. We can get jobs done more effectively while allowing people more flexibility in order to reduce commuting. The issue is about developments in a sustainable and low-carbon economy.

A general duty on public bodies to ask about such issues must be written into the bill. We have to see that action is making a difference. I am talking about not just local authorities but all public authorities—organisations such as Scottish Enterprise, the health service, further and higher education bodies, Scottish Water, the Scottish Environment Protection Agency, Scottish Natural Heritage and sportscotland. All public authorities have a role to play.

Stewart Stevenson: I wonder whether the member makes a distinction between the bodies that are part of the Scottish Government—on which duties placed on the Government will also apply—and local authorities, in which there should be independent decision making. The duties imposed on local authorities should be imposed in a different way and should be of a different character.

Cathy Peattie: Each public authority will consider what it needs to do, and I will come on to that very issue in a few moments.

Each public authority has a role to play through training, procurement, planning, environmental management, land use, public engagement, employment policies and the use of new technology and research—to name but a few issues. We need to know that bodies are doing everything that they can with regard to both their own activities and the impact of their planning and procurement policies. This is not about being prescriptive. Each organisation or public authority will have to define what it must do in order to meet the public duty. I believe that the duty must be embodied in this legislation.

The public duty relating to equal opportunities is a good example to consider. For years, it was expected that public bodies would have policies on equal opportunities, but many public authorities adhered to such policies only in relation to recruitment. Local authorities were much better but, even then, the reality was that only one person or a small team of people was responsible for equalities throughout the local authority.

The existence of a public duty on equalities now means that equal opportunities are mainstreamed throughout organisations—and that can now be audited. It took more than 20 years for that to happen, but we cannot allow that length of time for a duty on climate change. We do not have the time.

We need transparency and effective monitoring and reporting. Target setting should clearly be the role of the UK Committee on Climate Change, but I believe that complementary activity is also required at Scottish level. Scotland has devolved government, Scottish law, and Scottish bodies. There are distinctly Scottish dimensions, and we therefore need to address the issues at Scottish level—through either existing Scottish bodies such as SEPA or a newly set-up organisation.

I ask the minister to look again at the issues that I have raised this afternoon. We in the Scottish Parliament have a duty to ensure that this legislation is strong. I urge all members to consider their duty to future generations.

16:23

Shirley-Anne Somerville (Lothians) (SNP): There is now no doubt that climate change is the biggest challenge that humanity has faced. Ironically, it is of our own making. Efforts so far to tackle climate change have not been encouraging.

The first international climate change regime has been put in place, but it has had barely any effect on the global greenhouse gas trajectory. The bill is our opportunity, in our country, to change that.

The cabinet secretary has rightly detailed the positive work that the Government has undertaken to date. I believe that the bill is a world-leading piece of legislation, but we must always strive to better the original proposals. I shall concentrate on two issues—the measurement of consumption emissions, and the limits on international carbon credit.

New research by the Stockholm Environment Institute has found that, although production emissions from Scotland fell by 13 per cent between 1995 and 2004, Scotland’s consumption emissions rose by 11 per cent. Further on in the briefing that members received, the example of Ravenscraig was used. Scotland did not stop using steel when Ravenscraig closed; we simply started importing it, and the resultant emissions, from elsewhere. Consumption-based reporting will allow us to see whether we are driving down our emissions, or whether we are responsible for exporting them to outside our own borders.

We have a global responsibility. I cannot be the only member who has spoken to people who are not quite convinced by the arguments on climate change—people who say, “Well, China’s building a new power station every week, and they’re exporting all these goods, so it’s really their fault.” A report from the Tyndall centre for climate change research has shown that, in 2004, net exports from China accounted for 23 per cent of its total CO2 emissions. The responsibility is not China’s; it is that of everyone who is importing and
using its products. There is a bigger picture that we need to take account of.

Passing the bill will be good for Scotland, on two levels. It is good for our policy makers, who will have a better understanding of the drivers behind the changes to Scotland’s emissions. It is also good for Scotland’s jobs, because it incentivises us towards maintaining green work at home, rather than outsourcing it abroad. The bill also has an important role in individual empowerment. It can be a powerful communication tool, engendering a big appreciation of the impact of individuals, organisations and Government on the global environment.

It has been found that, the more we earn, the more we pollute. Consumption reporting will focus the minds of those of us who consume more than the people who are directly affected by our emissions.

Carbon credits is an area in which the bill can be strengthened, and I welcome the minister’s announcements on that so far. There can be no doubt that emissions reductions must be domestic if we are to play our part in reducing climate change. A tough limit on credits is necessary. We should ensure that we are reducing our emissions, not exporting them. We can buy our way out of trouble one year by buying some carbon credits, but that does nothing to achieve the long-term targets that we all claim to hold dear.

I believe that the bill will incentivise investment. We can invest in the technologies that will reduce our domestic emissions, while creating green jobs. Mitigating climate change might have its challenges, but it also has its opportunities. Scotland has the opportunity to become a green powerhouse of Europe. I do not want projects just to be in place here; I want them to be researched, designed and piloted here—and then taken round the world to build a low-carbon economy. Domestic effort is the best way to achieve that.

Alex Johnstone: Does the member agree that that is doubly critical given that many low-carbon technologies, particularly in renewable power generation, are very efficient in the production phase in terms of manning, and that, consequently, we must have the design and production jobs here? Otherwise, the green jobs revolution might simply not happen for us.

Shirley-Anne Somerville: I very much agree with the member’s comments. Scotland has already lost out with onshore wind power; notwithstanding the recent good-news announcements concerning Campbeltown, we do not want the same problems to arise for wave or tidal energy.

Many members have discussed the significance of the 10-year anniversary of the first Scottish parliamentary elections, and of the bill. I was listening to comments about that on the radio this morning. There have been some lows in the Parliament, but there have also been many highs. The Climate Change (Scotland) Bill has the potential to be this session’s defining moment. I agree with Sarah Boyack: arguably, the legislation will be the most important that the Parliament has passed to date.

I am proud that the SNP Government has produced and introduced the bill. More important, by the end of the process, the Parliament must feel ownership of it. We will disagree on some points on the way. We all want improvements to be made so that the bill becomes the best that it can be. By the end of stage 3, the bill might not include everything that we want it to include; however, it must have become the Parliament’s bill. We all have a responsibility to turn the framework into reality. We will fail unless we practise the new politics that people wanted from the Parliament. It is imperative that we take what is a framework document and use it to enthuse and energise the public. The framework will mean nothing if it does not lead to real change, not just for politicians but for the public sector, businesses and individuals.

We have an opportunity for world leadership in energising and enthusing not just the Scottish public, but those who will gather in Copenhagen. I ask everyone in the chamber to get behind the bill and to make it the best that it can be. We will see what we can do to show that world leadership.

Malcolm Chisholm (Edinburgh North and Leith) (Lab): The Climate Change (Scotland) Bill is the most important bill of the parliamentary session and climate change is the most urgent issue of the age. Climate change not only threatens the future of our children and grandchildren, but is already affecting millions of people throughout the world. For example, the UN tells us that in the first five years of this century, 262 million people—of whom 98 per cent were in the developing world—were adversely affected by climate change.

So urgent, challenging and potentially unpopular is the issue that we must come together across the political divide to lead together in a new-politics approach, as advocated by Shirley-Anne Somerville. She and I are the co-conveners of the cross-party group on climate change, which is showing how we can act together on the issue across the political divide.

Equally crucial is community involvement and action. I am sure that all members have many groups in their constituencies that are acting on
climate change. When we debated eco-congregations on 17 December 2008, I mentioned churches in my constituency, so I will not repeat their names. However, perhaps I can be forgiven for mentioning groups that have won awards from the climate challenge fund—Greener Leith, the North Edinburgh Trust, the Out of the Blue Arts and Education Trust and the Pilmney Development Project. Those groups illustrate the importance of local people coming together to take action at the grass roots. In due course, the bill should be amended to promote public awareness and engagement in meeting the climate change targets.

Of course, the 80 per cent headline target is an excellent start. It is one of the main reasons why the bill was widely welcomed when it was published. However, I was given pause for thought when I read the Royal Society of Edinburgh’s submission on the bill, which begins by saying:

“The endpoint target of an 80% reduction by 2050 is an irrelevance unless there are appropriate intervening milestones.”

That encapsulates a main point that has been made by several members, including Sarah Boyack. The key issue for climate change is cumulative emissions. That is why emissions reductions must as far as possible be front-loaded rather than end-loaded, as the bill proposes.

In all the submissions that I read, two of the most interesting pages were the last two in the Royal Society of Edinburgh’s submission, which incorporate a table—I know that the minister, as a mathematician, will have studied it—that indicates that even with 3 per cent annual reductions starting next year, we would not reach the 80 per cent reduction by 2050. When I read that, I concluded that we certainly need 3 per cent annual reductions without delay. The only good effect of a recession is that it allows an easy start, to recognise the greater climate change damage that emissions at altitude cause.

Stewart Stevenson: Like me, does the member wish to have appropriate expert advice that reflects the different aviation sectors, so that we encourage moves to the more sustainable forms of aviation that will increasingly be available?

Malcolm Chisholm: We certainly need expert advice, but we also need radical action on aviation and other forms of transport. Transport is a big concern. Those who read the editorial in The Herald this morning will have seen the quotation from Maf Smith of the Sustainable Development Commission, who said:

“Travel is the policy area where there is least alignment between current action and long-term sustainability”.

At the beginning of my speech, I referred to unpopular action, which we need. Aviation issues will not be solved just by using the planes to which the minister referred. We also need action on car travel, as well as the promotion of public transport. We must quantify emissions reductions in the transport sector, as in other major sectors, such as energy generation and energy efficiency.

I welcome the limits on international credits. It is right that at least 80 per cent of emissions reductions should be achieved by domestic effort. I hope that that will be put in the bill.

Finally and crucially, part of the acting together that I emphasised at the outset must be action by other public bodies. An enforceable duty must be placed on such bodies to reduce emissions in line with national targets.

I hope that the minister will look seriously at Oxfam Scotland and Friends of the Earth Scotland’s proposals for a public sector budgetary regime that involves incentives and disincentives.

16:35

Nanette Milne (North East Scotland) (Con): I am pleased to have been given the opportunity to speak in this stage 1 debate in support of the general principles of the Climate Change (Scotland) Bill.

If we believe that climate change is real—which we do—and that it poses a long-term threat to political stability and economic growth, we must all work together as nations, Governments, businesses and individuals to do our bit to combat climate change by doing our utmost to reduce our carbon footprint. If we are to achieve that, tough but meaningful targets need to be set and attained. That is why my party has given support to a climate change bill for Scotland that sets out the targets and policies by which such change will
be achieved and by which progress towards our goal will be carefully monitored.

I did not have the opportunity that was afforded to the members of the three parliamentary committees that scrutinised the bill of hearing evidence from the many groups of people with an interest in the issue. However, although the bill focuses on long-term targets, it contains little practical detail on how those targets will be achieved. The detail has been left to subsequent policy and regulation. That is particularly the case in section 5, in which many enabling provisions—for example, in the area of waste management and recycling—are set out. Our concern is that the provisions could result in a raft of future subordinate legislation that could have significant financial implications for local authorities, businesses and consumers. That provoked much disquiet during the scrutiny of the bill at stage 1. I will elaborate on the issues later in my speech.

I will confine most of my brief remarks to section 5. Before I do so, I too align myself with the Church of Scotland eco-congregations, the Energy Saving Trust, the Confederation of British Industry and many other organisations on the need for public co-operation and involvement in fighting climate change. If people around Scotland are not aware of the bill or how it might affect them—indeed, it would appear that few of them are—they will press on with their lives regardless of climate change and what they can do to fight it.

If the bill is to achieve its intended results, individuals and communities must become involved in trying to meet its set targets. To that end, I am pleased to note the recommendation in the lead committee’s stage 1 report that ministers should produce proposals for an engagement strategy as part of their implementation plan for the bill. I was pleased to hear the cabinet secretary’s positive response to that recommendation in his opening speech.

Section 5 addresses a number of important issues, not least of which is the requirement for a programme of action on how Scotland will adapt to the impacts of climate change to be placed before Parliament. Given that agriculture produces a significant proportion of our greenhouse gas emissions, land management techniques have a key role to play in mitigating climate change. Habitat conservation and agricultural and forestry activities can help by way of reducing losses from soils and sequestering carbon in vegetation.

There is increasing competition for land use in rural areas. Much land has been—and continues to be—developed for housing and industry. In addition, biofuels are increasingly displacing food production and conflict can arise where woodland replaces heather moorland. Of course, there can also be complementarities, one example of which can be seen when the restoration of peatlands improves water quality in addition to reducing greenhouse gas emissions and improving habitats. If we are to get the greatest benefit from the use of our rural land, we need to develop a sustainable land use strategy. The Parliament gave cross-party support to that in the forestry debate on 19 March.

RSPB Scotland pressed the Government to include a commitment in the Climate Change (Scotland) Bill to introduce a sustainable land use strategy. I have a deal of sympathy for that approach. We are pleased that the Government decided to drop its forestry leasing proposals following widespread opposition during the consultation process. That said, we are supportive of other roles that the forestry sector can play in reducing carbon emissions; joint ventures such as renewable energy projects are one example of that.

We welcome the Government’s intention to review muirburn provisions. The minister’s stated intention is to lodge an amendment to ensure that the power to vary muirburn dates will maintain the current number of days when burning is allowed, thus protecting carbon storage and reducing the risk of wildfire, as well as protecting our natural heritage.

We are supportive of measures to encourage energy efficiency, as explained by my colleague, Alex Johnstone. Nevertheless, as I said earlier, we remain to be convinced by many of the provisions that are included in section 5 and the level of subordinate legislation that it provides for regarding waste management, recycling and packaging, deposit-and-return schemes and charges for plastic carrier bags. The British Soft Drinks Association, for example, is concerned that the sections on waste, recycling and deposits contain some potentially far-reaching provisions that have not yet been fully analysed. It fears that those sections might impose additional cost burdens on both industry and consumers that will run into many millions of pounds and might weaken existing measures to ensure the recycling of packaging waste.

Patrick Harvie: Will the member give way?

Nanette Milne: I do not have time. I am just finishing.

We should listen carefully to such concerns and give consideration to the BSDA’s suggestion that the proposals should be introduced as primary legislation, if and when necessary, to ensure full legislative scrutiny, rather than being bundled into the present bill.

We are dealing with a significant and complex piece of legislation, and I have no doubt that the bill will be amended significantly during the next
stages of its progress through Parliament. However, like my colleagues, I am content at this stage with the general principles of the bill and will be happy to support it when the vote is taken tomorrow afternoon.

16:41

Liam McArthur (Orkney) (LD): Limbering up for this afternoon’s debate, I sat through last night’s champions league semi-final between Arsenal and Manchester United. Admittedly, as a piece of research into climate change it proved next to useless. However, given all the pre-match hype, it was a bit of an anticlimax, in which sense I spotted certain similarities between ITV’s coverage of the big match and some of the SNP’s more outlandish claims about the Climate Change (Scotland) Bill. That is not to say that the bill’s central objective of reducing greenhouse gas emissions in Scotland by 80 per cent by 2050 is not bold or ambitious, because it is, and it commands broad support throughout the Parliament and beyond—all the more so given the cabinet secretary’s welcome commitment today to ensuring that the bulk of the reduction is achieved in Scotland.

Rob Gibson (Highlands and Islands) (SNP): Can the member tell us what climate change targets the Liberals proposed in their manifesto for the most recent election?

Liam McArthur: I am happy to accept that the bill is bold, but, as I will discuss, it is rather lacking in detail, as many members have suggested.

Setting targets—particularly long-term targets—does not, of itself, achieve anything, as I am sure Rob Gibson accepts. It can provide a valuable steer to business, the public sector and individuals as to the direction of travel, and inform decisions about where to invest and how to act, but the targets will be met only if they are backed by a credible action plan—a road map to achieving the goals that have been set. Sadly, despite its many laudable features, the bill is still wanting in that respect. Fortunately, there is time for Parliament to rectify that, and perhaps this afternoon we are seeing evidence that ministers are waking up to our concerns.

Rightly, the bill covers a wide range of issues. I will concentrate on the contribution that energy can and must make in addressing the challenges that we face. In his excellent book “Sustainable Energy—without the hot air”, David MacKay, professor of natural philosophy at the physics department of the University of Cambridge, points out that the energy debate is “inundated with a flood of crazy innumerate codswallop.”

It could be that, when Professor MacKay wrote that, he had just attended a mind-mapping session with our very own Minister for Enterprise, Energy and Tourism. However, to be fair to Mr Mather, I am fairly sure that that opinion was formed some time ago.

Like the climate change debate as a whole, Professor MacKay bemoans the fact that discussions about future energy policy involve the use of language and numbers that are intended to impress rather than inform. He concludes that, however we stack up the numbers, there is no getting around the fact that the “climate problem is mostly an energy problem.”

It is, therefore, entirely appropriate that both the Economy, Energy and Tourism Committee and the Transport, Infrastructure and Climate Change Committee have drawn attention to the fact that renewable energy and energy efficiency have a key role to play in delivering carbon emissions cuts.

In its briefing for the debate, the microgeneration and energy efficiency bill steering group makes it clear that “significant commitments are still required in the Bill that promote micro generation and energy efficiency as a vehicle to achieve early and significant reductions in greenhouse gas emissions.”

I acknowledge and welcome Mr Swinney’s clarification that he intends to introduce a new interim target for 2020. However, as Patrick Harvie and others have mentioned, that still does not address the point that has been made by the steering group, the Royal Society of Edinburgh, Friends of the Earth Scotland, Scottish Renewables, the Association for the Conservation of Energy and others that ministers’ failure to commit to making immediate, meaningful and quantifiable cuts in emissions effectively risks chucking in the towel on achieving the interim and 2050 targets.

Stewart Stevenson: Will the member give way?

Liam McArthur: I am sorry, I do not have time.

On quick wins, the obvious place to start is energy efficiency. Inexplicably, the Government continues to treat energy efficiency as the Cinderella of the energy debate. After the consultation that was carried out by the previous Executive, Jim Mather felt confident enough in May 2007 to promise that he would make publication of an energy efficiency action plan an “early priority”. A year later, he had another stab at guessing the date of the publication, saying this time that it would be published by the end of 2008. Now we are told that the action plan cannot be published until 12 months after the provisions in the Climate Change (Scotland) Bill come into force. Two years after the SNP came into office, this continued delay is simply not acceptable. That
is why the Liberal Democrat amendment calls for an energy efficiency action plan to be published within six months. Unless the Government takes the issue more seriously, its credibility on climate change and, indeed, on fuel poverty will be compromised. On microgeneration, too, ministers must use the opportunity that the bill presents to make progress with the proposals that are set out in Sarah Boyack’s proposed energy efficiency and microgeneration bill, which commands widespread support.

Having dumped local income tax, ministers now have no excuse for opposing local tax incentives to boost the uptake of microrenewables and energy efficiency measures. The Energy Saving Trust argues that council tax rebates are more visible than any other fiscal incentives, and I understand that Ian Marchant of Scottish and Southern Energy has told Mr Swinney that the bill is the obvious vehicle for delivering such an incentive. I hope that ministers will respond positively to that.

On permitted development rights, the Government must show more ambition, not least in extending those rights to the non-domestic sector. The steps that have been taken by ministers today, while helpful in relation to solar panels and ground-source heat pumps, still do not go far enough. As ACE points out, with regard to micro wind and air-source heat pumps, guidelines threaten to “stunt development”. Action on that point could be part of a concerted attempt to enhance the contribution that is made by renewable heat. Scottish Renewables proposes a target of generating at least 14 per cent of heat from renewables by 2020. It would be useful to hear the minister’s views on how that might be achieved.

It would also be useful to hear what specific steps are being taken to further empower local communities to address the climate challenge. As the debates in this chamber on Community Energy Scotland and eco-congregations have demonstrated, the necessary desire, capacity and innovation are present in many of our communities and congregations, but a more decentralised, bottom-up approach is required to allow them to flourish.

The Government is right to remind us of the potential of the bill to be world leading and a fitting tribute to this Parliament as it enters its second decade. However, that potential will be realised only if ministers are more specific about how they intend to achieve their objectives between now and 2020.

Like others, I look forward to Parliament helping to deliver legislation of which we can all rightly be proud, and I have pleasure in supporting the general principles of the bill and the amendments in the names of Alison McInnes and Sarah Boyack.

16:48

Charlie Gordon (Glasgow Cathcart) (Lab):
This is a major bill by any standard, and it has been scrutinised to varying degrees by five parliamentary committees, including the Transport, Infrastructure and Climate Change Committee, of which I am a member. I do not know about the other committees, but I know that the evidence-taking sessions that my committee held were numerous, comprehensive and very, very long. It is fair to say that there is a significant level of support for the general principles of the Climate Change (Scotland) Bill in the chamber and among those who submitted evidence to the committees, despite—or perhaps because of—the fact that the bill is lacking in detail.

It is because of that lack of detail that the Transport, Infrastructure and Climate Change Committee calls on the Scottish Government to put before the Parliament at the earliest possible date a comprehensive strategy document outlining how it intends to achieve the targets that are set out in the bill. It is all very well having targets but, having launched a few in my time, I know that there is always a wee wumman who comes up and says, “Aye, son, but what are you actually gonnae dae?”

The Government has said that it has a strategic overview project, which will spawn an indicative delivery plan this summer, and that a report on policies and proposals, which will set out measures to deliver annual targets, will be published next summer. All of that is fine—that is what the Scottish Government is saying it is actually gonnae dae.

The Transport, Infrastructure and Climate Change Committee said that particular sectors must be prioritised. It identified four key sectors: land use, energy generation, energy efficiency and transport. The Government indicated that its indicative delivery plan—the one that is intended for the summer—will touch on heat supply and demand, electricity supply and demand, transport, rural land use and waste. Although the Government’s language is slightly different from the language in the committee’s report, it appears that the Government intends to respond to our concerns.

The Finance Committee, which considered the bill’s financial implications, opined:

“the Financial Memorandum would have been stronger if modelling work had been carried out on the potential financial impact of the measures on businesses and public bodies.”
In its response to the Finance Committee’s report, the Scottish Government said that it would publish a revised financial memorandum to the bill at stage 2.

The Finance Committee gave formal notice that it might "track the subsequent statutory instruments and seek to scrutinise the financial implications."

That is an important point, not just for the committee but for the Parliament. The bill is quite general. It is not vague, but it lacks detail, and in the years to come many of its consequences will be manifested through secondary legislation. We must therefore continue our scrutiny role for a long time.

Stewart Stevenson: We agree that work will not be finished when the bill passes into law. Scrutiny must continue all the way to 2050.

Charlie Gordon: The minister makes a fair point, but that aspect of the bill makes it rather unusual.

The Transport, Infrastructure and Climate Change Committee recommended that "the Scottish Government provides, as a matter of urgency, details on how it intends fully to assess and present the job implications of plans it brings forward under this Bill."

The committee meant not just new job opportunities but threats to existing jobs and how such threats might be avoided. It is fair to say that the Scottish Government responded in suitably emollient terms.

Those and many other concerns, in particular the concern about targets that members have expressed, will merit more scrutiny, not just during the next stages of the bill but in the context of future secondary legislation. We will consider the issues in future parliamentary debates.

Outside the Parliament, individuals and businesses are helping to address the climate change agenda through innovation, as Cathy Peattie said. Two innovations have caught my eye. The new class 380 trains from Siemens for the Scottish rail network are efficient in their own right and will help towards modal shift from car to public transport. In my final 10 seconds I will mention the new website that has been launched to enable everyone to track the ambitious and exciting carbon capture and storage project that is proposed for Longannet power station.

That is my six minutes.

The Deputy Presiding Officer: It is indeed.
role in action on climate change, which is why we consulted on leasing to help fund forest-related mitigation measures. However, we have listened to what the public consultation told us, have withdrawn the proposals and will now consider the wider suggestions that various consultees made.

I am glad that everybody is glad that we did that, but the fundamental requirement remains the same and has to be addressed. Forestry Commission Scotland will continue to develop arrangements for renewable energy projects using joint ventures, but the five-year gap before realistic income streams can come from joint ventures means that we have to take shorter-term measures. As indicated previously, that means an acceleration of the pre-existing sales programme in the interim. The income from renewables is expected to rise from its current level of £6 million per year to about £10 million per year by 2012 and £30 million per year by 2020.

I hope that that answers some of Maureen Watt's comments. I listened to her speech with a certain degree of poignancy. We have shared committee scrutiny of the bill, even though I was surprised mid-scrutiny to turn into the object of scrutiny instead of the person doing the scrutinising.

A couple of members mentioned waste management, which is a notable success. Emissions have been cut since the early 1990s as less waste has been sent to landfill, but we need to keep making progress. The bill's various enabling provisions on waste management provide back-up powers should the voluntary measures not succeed. I assume that the lack of major comment on them suggests that they have a degree of general support. I remind the Parliament that they would be introduced—if at all—by affirmative procedure, so there would be plenty opportunity for debate.

Maureen Watt and Nanette Milne mentioned muirburn. They should be aware that, although it is included in the bill, other aspects of muirburn are likely to be addressed in separate legislation later in the Government's term in office.

Adapting to climate change is a new and important area of work. Last week, Stewart Stevenson launched a consultation on a climate change adaptation framework, which addresses some of the points that Patricia Ferguson raised in her intervention. We want to share anything that we learn with others.

The bill strikes the right balance. There has been a lot of discussion about the detail that members say should be in it. However, if it was all in the bill, the bill would be unfeasibly large and, more to the point, the bill's passage through the Parliament would be delayed.

It is acknowledged that adaptation matters and that Parliament should see regular and rigorous progress reports on how the Government is dealing with it. The Government is up for that. There are also powers to allow ministers to impose adaptation duties on organisations at a later date, if that is required.

I commend the bill to members. There will be a full closing speech on it in tomorrow's debate. Points raised in this debate but not answered by me will be answered then. The bill is our chance, as legislators in 2009, to leave a huge legacy for not only the immediate but the long-term future of Scotland. I hope that we do not allow that legacy to be sunk by petty squabbling, which will not help anybody in the long run.

The Presiding Officer (Alex Fergusson): That concludes this afternoon's debate on the general principles of the Climate Change (Scotland) Bill. The debate will conclude tomorrow afternoon. I remind members who were not here earlier that I am using my discretion under rule 11.3.3 of the standing orders to allow the questions on motion S3M-3963, in the name of Stewart Stevenson, and on the two amendments to be put at decision time tomorrow night.
Climate Change (Scotland) Bill: The Parliament continued debating the general principles of the Climate Change (Scotland) Bill.

After debate, amendment 3963.2 in the name of Sarah Boyack was agreed to (DT).

After debate, amendment 3963.1 in the name of Alison McInnes was disagreed to (DT) by division: For 57, Against 62, Abstentions 0).

After debate, the motion as amended was agreed to (DT).

Accordingly the Parliament resolved—That the Parliament agrees to the general principles of the Climate Change (Scotland) Bill and, in so doing, further agrees that unambiguous quantified targets for the reduction of greenhouse gas emissions for the period between 2010 and 2019 are needed so that the current government and governments elected in 2011 and 2015 can be held to account for delivering early action on tackling climate change.

Climate Change (Scotland) Bill: Financial Resolution: The Minister for Transport, Infrastructure and Climate Change (Stewart Stevenson) moved S3M-3923—That the Parliament, for the purposes of any Act of the Scottish Parliament resulting from the Climate Change (Scotland) Bill, agrees to any expenditure or increase in expenditure of a kind referred to in Rule 9.12.3(b)(ii) or (iii) of the Parliament's Standing Orders arising in consequence of the Act.

The motion was agreed to (DT).
Climate Change (Scotland) Bill: Stage 1

Resumed debate.

The Presiding Officer (Alex Fergusson): For the sake of people in the public gallery, I should explain that the next item of business is a continuation of yesterday’s debate on motion S3M-3963, in the name of Stewart Stevenson, on the general principles of the Climate Change (Scotland) Bill. Speeches should be no longer than six minutes. I will allow a couple of seconds for the ministers to change places.

If he is ready, I call Jim Mather. You have six minutes.

14:57

The Minister for Enterprise, Energy and Tourism (Jim Mather): Thank you very much, Presiding Officer. I have just passed the manual dexterity test.

I am delighted to have the opportunity to speak on day 2 of the stage 1 debate on the Climate Change (Scotland) Bill. Clearly, the bill is a flagship piece of legislation for the Scottish Government, the Scottish Parliament and Scotland itself. Therefore, I welcome Labour’s absolute support for our strengthening of the interim 2020 target. I am also encouraged by the evident consensus in Parliament that our emissions reduction target of 80 per cent is right. Liam McArthur acknowledged that the bill’s central objective is “bold” and “ambitious” and Alex Johnstone recognised that the target is “appropriate and ambitious”.

Our aim is to deliver world-leading legislation on climate change—which is of global importance—at a crucial time as we all work towards what we hope will be an ambitious new international agreement on climate change in Copenhagen in December this year. All along, our intention has been that Scotland should act as a model of international good practice in order to influence decisive world action. We are committed to acting in cooperation with the United Kingdom Government, with which we are already working on the delivery of European Union commitments.

With Scotland’s wide and material array of natural resources, we are well placed to respond to climate change. As a result, we can deliver a solid and persuasive plan of action to follow on from the self-evident political commitment. In so doing, the foundation of our response to climate change and to the challenge that it presents is our energy policy. As I have said, Scotland has vast potential in renewable energy. Onshore wind power is an established green energy technology, and offshore wind is rapidly opening up huge new opportunities. The emerging wave and tidal marine power technologies are also attracting great new interest. That is being augmented by the saltire prize, which we are working on with the National Geographic Society.

Marine energy obviously presents many technical engineering challenges, but Scotland’s history of North Sea exploration puts us in a good position to develop the required expertise to meet those challenges. We have comprehensively done that in North Sea exploration, which is proven by our exporting of those skills around the globe. Our blend of track record, natural resources, expertise and commitment reinforces the belief that Scotland can be the green energy capital of Europe. Given that we have a quarter of Europe’s renewable energy potential, there is no doubt that Scotland will always be on the global energy map. We already enjoy that status, as we are well on the way to achieving our target of meeting 50 per cent of our electricity demand from renewable sources by 2020.

Patrick Harvie (Glasgow) (Green): Given what the minister has said about renewable energy, does he agree with the Transport, Infrastructure and Climate Change Committees recommendation that the Government should provide us with more detail on the emissions cuts that are expected in electricity generation and three other key sectors? What can he say in response to that recommendation?

Jim Mather: The delivery plan will provide that additional detail. I expect it to evolve along the lines that Patrick Harvie suggests.

Our status and standing will be further established and enhanced as we do more, for example by encouraging the development of renewable heat. As the First Minister announced last week, Scotland is uniquely positioned in terms of geography, technology and ambition to become Europe’s leader in carbon capture and storage, which is the key technology for decarbonisation of emissions from fossil-fuel power generation and heavy industry. It is obvious that Scotland can be a world leader in the generation of clean, green energy.

Gavin Brown (Lothians) (Con): The minister mentioned renewable heat. Does he think that section 51 of the bill, which deals with renewable heat, goes far enough to make Scotland lead the world in that area, or could the Government go a bit further?

Jim Mather: There is always scope to improve, but I think that section 51 contributes to our being allowed to make the claim that we are world leading.
In addition to our work on carbon capture and storage, I am well aware that we must carry out work at the other end of the spectrum if we want to have the maximum impact and to continue to be a net exporter of low-carbon power. We need to tackle our domestic energy use, which we are doing through a range of actions on energy efficiency, including use of building standards and energy performance certificates, our support for the work of the Carbon Trust and the Energy Saving Trust, and our funding for a new area-based approach to energy efficiency.

All that emphasises that the climate change agenda is not just an issue of moral responsibility or just an environmental issue. The actions that we in Scotland take on climate change are inextricably linked to our economic aim of effectively managing the move to a low-carbon economy. We must ensure that that generates the economic impetus that we expect from a low-carbon future, and that it creates the green jobs that it is evident will be part of Scotland’s national economic recovery. I look forward to further progress on that and other fronts as the bill progresses into law.

15:02

Lewis Macdonald (Aberdeen Central) (Lab): Yesterday, Sarah Boyack said that the Climate Change (Scotland) Bill is potentially the most important legislation that we will pass in the current session. The challenge is in how we will ensure that the bills outcomes are as significant in practice as its words will be on paper. That was the spirit in which I and other members of the Economy, Energy and Tourism Committee approached our consideration of the sections of the bill that deal with energy efficiency and renewable heat. I am glad that we did so but, in my view, the bill falls short of expectations in a number of areas.

The first surprise comes in the opening provision on energy efficiency, which states:

“The Scottish Ministers must prepare and publish a plan for the promotion of energy efficiency in Scotland”,

and stipulates that that plan

“must include provision about the promotion of the energy efficiency of living accommodation.”

The surprise was that that form of words highlighted the promotion of energy efficiency, when ministers proposed to repeal section 179 of the Housing (Scotland) Act 2006, which committed them to preparing

“a strategy for improving the energy efficiency of living accommodation.”

On 4 March, we asked the minister why he proposed such a dilution of the existing provision. We did so in vain, although I am pleased to say that ministers have since then accepted the point and have indicated that they will support amendments at stage 2 to restore and, perhaps, to extend the existing provision, whereby they will have to produce an energy efficiency plan that is focused on outcomes as well as aspirations.

I hope that the minister will be able to tell us that the discussions between his officials and their Westminster counterparts, which he mentioned to the committee on 4 March, have not thrown up any fresh anxieties about what the Scottish ministers can and cannot do in respect of energy efficiency.

The Minister for Transport, Infrastructure and Climate Change (Stewart Stevenson): I welcome that statement of intent, although it is not quite a response to my question about the discussions that the ministers officials have had; perhaps we will hear that in the winding-up speech.

The Economy, Energy and Tourism Committee also recommended that ministers should include in the bill the setting of targets for energy efficiency. Unfortunately, that recommendation has not yet received a positive response. Of course, setting targets on its own does not deliver outcomes, but it stimulates activity, shows seriousness of intent and allows progress to be measured. The committee heard yesterday from Jeremy Sainsbury of Natural Power, who has been a member of the forum for renewable energy development in Scotland since its inception some five years ago. His evidence was very clear, and I suspect that it would be echoed throughout the renewable energy sector. Scotland’s devolved Government, by setting ambitious targets from the beginning, sent a clear message that we wanted to see the renewable energy sector grow. The raft of proposed developments that are now coming through the system is a direct consequence of that proactive approach.

I hope that ministers will think again about taking the same approach to energy efficiency. A positive signal now, which other parties could support and industry could rely on, would stimulate confidence in the sector and help to maximise the contribution of energy efficiency to cutting carbon emissions.

The committee called on ministers to publish a full draft of their proposed energy efficiency action plan before stage 2 of the bill. Thus far, they have chosen not to do so, but have offered one of those circular arguments that are well suited to not doing
Ministers could publish an action plan before the Climate Change Bill becomes an Act but this would not fulfil our requirements under the Act—Scottish Ministers would still have to produce and publish another action plan within 12 months.”

That would be true, unless ministers were so bold as to amend the bill to allow themselves to introduce their energy efficiency action plan early. It seems that that is what committee members from all parties were calling on ministers to do.

The committee would like ministers to be ambitious in the promotion of renewable heat. Again, the first sight of section 51 was disappointing. It will require ministers to “take such steps as they consider appropriate”, which is not a clear or demanding statutory obligation. It does not give great confidence that detailed plans are already in place.

However, ministers have now said that they will publish a renewable heat action plan this summer, following action at Westminster. That is welcome. They have set a target of 11 per cent of demand for heat in Scotland to come from renewable sources by 2020, which is less than the 14 per cent target elsewhere, but it is a start. I hope that there will be amendments to put more substance and more detailed targets in the bill.

The committee called for combined heat and power schemes to be part of the Governments plans on both energy efficiency and renewable heat. I am pleased to say that that has been agreed to and I look forward to seeing the substance of it. It is important that lessons that have been learned to date from the experience of CHP and district heating lead to action. The Climate Change (Scotland) Bill provides that opportunity.

When the committee visited Aberdeen Heat and Power Company in March, we heard about an important difference between Scotland and England in the assessment for rates liability of CHP schemes. In Scotland, the mains distribution pipes, the risers and the CHP building itself are charged business rates, but in England, they are not. The difference for a scheme such as the one at Stockethill in my constituency is some £18,000 a year, which is added to the cost of heat and power to the consumer. As, I am sure, we will hear this afternoon, local tax discounts to stimulate energy efficiency measures have huge potential but so, too, do business rates exemptions for stimulating CHP. I hope that ministers will consider that.

Overall, the recommendations of the range of committees, with cross-party support, provide a solid base for further improvements to the bill. I hope that more of those proposed changes are accepted at stage 2 and taken forward by ministers.

15:09

Jim Hume (South of Scotland) (LD): It is easy for us to ask what difference a small country like ours can make, but there is no doubt that we can make a difference. Climate change is complex, and there are natural cycles at work, too, but no one can doubt that we are polluting. That point was illustrated by the recent Stop Climate Chaos Coalition rally.

Green issues have always been at the heart of Liberal Democrat policy. In coalition, we made great strides on renewable energy. We invested about £100 million in renewables and support for energy efficiency—ahead of any other part of Britain or Ireland—and we have provided support for more than 600 small renewables and microrenewables projects. Lib Dems have delivered record recycling rates, which have trebled under our governance, and we have a proven track record in delivering green policies. We know what is achievable.

As a continuation of the good work, we support the bills headline target of an 80 per cent reduction in emissions by 2050. However, two important points arise. First, the Government has so far offered no precise details on how it will achieve that reduction. Work to tackle climate change must begin now. Many members have spoken about the Stern report, which emphasises the importance of speedy action. That important point is also made in the report of the Transport, Infrastructure and Climate Change Committee. It is a point that my party has been making for many months.

Stewart Stevenson: I absolutely accept that the previous Administration worked on tackling climate change. It will be important that we build on that work, rather than start anew, and that we keep going until 2050.

Jim Hume: Yes. As I said, this is “a continuation of the good work”.

The second point to arise is that, as my colleagues have said repeatedly, what we need to see from the Scottish Government now are clearly defined and detailed plans on how it will tackle climate change—plans that will take forward the targets that are set in the bill. We believe that the interim target could be brought forward from 2030 to 2020.

I welcome todays debate—and, of course, yesterdays—and the committee report, which echoes much of what my party has been saying for some time. However, I could not take part in
the debate without talking a little bit about forestry and land use. First, the leasing proposal threatened the Climate Change (Scotland) Bill. Those are not my words—they were the words of RSPB Scotland and the like. The proposal has been dropped after there was overpowering opposition to it, but the powers that will enable ministers to change the functions of forestry commissioners remain in section 47. I will lodge an amendment at a later stage if the Government does not address that issue.

Secondly, according to the then minister, we are now left with the prospect of a huge funding gap for climate change measures such as tree planting. The lease option was supposed to raise a one-off £200 million. We were told by the minister that “by dropping the leasing proposal, we face a short-term funding problem for woodland creation for up to five years.”

However, the Scotland rural development programme figures that were released last week—and with which Mr Lochhead agreed, just about 20 minutes ago—directly contradict that statement. We can now see that there is “ample headroom” for forestry under rural priorities funding. I hope that it was a miscalculation on the ministers part, rather than a misrepresentation. Clarification would be welcome.

We know that tree planting has a role to play in acting as a carbon sink, although there is still debate about how significant a role it can play. Tree planting has to be done in a balanced way, taking other land uses into consideration and not displacing existing and commercially viable activities. Tree planting can be only a part of the solution. There is no point in planting up hundreds of acres of land if nothing is done to address renewable energies or our energy consumption; and there is no point in planting without considering other land use and without considering soil types. Planting in peat-based soils releases a large amount of carbon, and it can take 30 years of tree growth to negate that release.

We need an integrated land use strategy that will take into account all types of land use—from commercial and agricultural, through to leisure and environmental. The recent forestry debates have highlighted the fact that forestry is a lot more than just wood production or a carbon sink.

My concern with the bill as it stands is the lack of detail on management of Scotlands land. The forestry sector has been acknowledged in the bill, but ministers have so far failed to provide direction for Scotlands major land user, which is agriculture—of course, I declare an interest in that respect. If the Scottish Government is determined to tackle climate change, it can ill afford to mismanage one of our most important resources.

We all await the results of the rural land use study towards the end of this year, but what will come of the study, and will the Government be in a position to formulate a proper strategy on its conclusion?

This bill is welcome. I hope that ministers will heed the committees recommendations, and I also hope that a sensible land use strategy will be produced sooner rather than later. It would, of course, go hand in hand with the Climate Change (Scotland) Bill.

15:14

Bill Wilson (West of Scotland) (SNP): The Scottish Governments proposed actions to tackle climate change are both bold and essential—and rather more clear-throated than I am. The urgency of the situation hardly needs to be stressed. We were presented with a graphic example of that urgency last month, when the ice bridge that pinned the Wilkins ice shelf to the land shattered, threatening the shelf itself. That shelf, which is almost half the size of Wales, is the 10th to break away or shrink to a fraction of its original size in the past 50 years.

Climate change has already wreaked havoc in Africa. A 2007 report states:

“The climate change threat is greater in Africa than many parts of the world. The changing weather patterns are already creating new complex emergencies where areas are simultaneously hit by droughts and floods, often accompanied by outbreaks of infectious diseases. Many communities are living through almost permanent disaster conditions.”

It is a relief, therefore, that the new United States Administration is taking climate change seriously. Unfortunately, the previous US Administration, and far too many people in general, swallowed the myths of professional climate change deniers—people who were funded by the likes of ExxonMobil to lie and obfuscate. Only a year ago, according to The Guardian, ExxonMobil admitted that its support for lobby groups that question the science of climate change may have hindered action to tackle global warming. In its “2007 Corporate Citizenship Report”, ExxonMobil said that it intended to cut funds to several groups that “divert attention” from the need to find new sources of clean energy. So, ExxonMobil has publicly recanted; however, many of the myths that it has paid for live on, such as the one that volcanoes are a major cause of climate change. All such myths are easily debunked. I refer members to a handy website—www.grist.org/article/series/skeptics/—in which they may be interested.

Far from being in thrall to the short-term vested interests of climate change deniers, the Scottish Government is, with its ambitious proposals, leading the world in tackling climate change.
Scotland was ahead of the field in pushing for an 80 per cent reduction in greenhouse gas emissions by 2050 and has dragged the UK behind it. I welcome the commitment to a minimum annual reduction in emissions of 3 per cent from 2020, and I am pleased by the move from a 34 per cent reduction to a 42 per cent reduction by 2020 if the EU agrees to a 30 per cent reduction by that year.

Aviation is responsible for at least 3 per cent of the total man-made contribution to climate change, and shipping is responsible for 3.5 to 4 per cent. Both threaten to be increasingly important. Therefore, I am particularly pleased that the Scottish Government is including Scotlands share of emissions from international aviation and shipping in its greenhouse gas targets.

I will make a slight digression: shipping also contributes 18 to 30 per cent of the worlds nitrogen oxide pollution, 9 per cent of global sulphur oxide pollution and a significant amount of particulate matter, which are major contributors to asthma, heart disease and cancer. It is estimated that pollution from shipping causes 60,000 deaths a year in the US and 1,000 deaths a year in Denmark. The UK figure lies somewhere between the two.

There is talk of setting up low-emissions shipping zones. I encourage the Scottish Government to take an active interest in that and in the use of novel ship-propulsion methods such as solar power, fuel cells and high-tech kites, which could significantly reduce the consumption of fossil fuels. I am confident that the country that instituted the £10 million saltire prize could also innovate in shipping propulsion.

As far as aviation goes, I congratulate the Transport, Infrastructure and Climate Change Committee on its suggestion that the Scottish Government should examine how to account for additional damage to the atmosphere that occurs when emissions take place at high altitude. I note the proposed measurement of fuel intake at our airports as an initial step in monitoring the impact of aviation. That has the advantage of being relatively straightforward but the disadvantage that flights with stopovers will count only the fuel that is used to fly to the stopover points and not the total fuel that is used in the flight from Scotland.

With regard not just to aviation but to other causes of climate change, I am of the opinion that there is great merit in individual carbon budgets—or, as discussed in the March/April issue of Resurgence magazine, “Tradable Energy Quotas”. Time does not permit me to discuss TEQs in detail, but one of their many advantages is that they are redistributive: people who could afford air travel would have to buy TEQs from those who could not. Not only would such a scheme tackle climate change, with a reduced quota of TEQs being issued every year; it would also tackle local, regional and global inequality, which in themselves are major threats to health and wellbeing.

The Climate Change (Scotland) Bill is leading the way. I applaud those who have contributed to it: environmental groups, the Transport, Infrastructure and Climate Change Committee and the Scottish Government, which is a responsible and responsive Government that has sought, listened to and acted on the best available advice. Let this be the start of Scotlands resurgence as a global leader. Let the words of Voltaire ring true once more:

“We look to Scotland for all our ideas of civilisation.”

Climate change could be an opportunity for Scotland rather than a malign threat; it could be a driver for truly sustainable development. We will be a greener country, of course, but we should also use climate change to become a fairer, healthier and wealthier, smarter, safer and stronger country. We could, and should, show other countries how to do that. Margaret Mead said:

“Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has.”

Why not the citizens of Scotland?

15:20

Marilyn Livingstone (Kirkcaldy) (Lab): Like my colleagues on the Economy, Energy and Tourism Committee, I welcome the Scottish Governments interim targets towards reducing greenhouse gas emissions by 2020. Achievement of the targets that are outlined in the Climate Change (Scotland) Bill for investing in energy efficiency and renewable heat initiatives will depend on the Scottish Government being able to maintain a sustainable and highly skilled workforce in the environmental sector.

In February 2009, the Cabinet Secretary for Finance and Sustainable Growth outlined his plans to create up to 16,000 green jobs over the next decade and claimed to be engaging with industry, skills providers and potential employers to deliver those opportunities. However, the Economy, Energy and Tourism Committee has heard evidence from Northern Energy Developments and the Carbon Trust that there remain considerable skills shortages in renewable energy and in the basic energy efficiency sector. That has implications for potential employees, from those with level 2 Scottish vocational qualifications to those with degrees and postgraduate qualifications.
In my constituency of Kirkcaldy, the Adam Smith College has reported an anticipated shortfall in its ability to meet bursary commitments to its existing body of full-time students, which currently exceed £500,000. If the situation is not tackled, the Adam Smith College will have to make up for the shortfall from within its already strained budget, which will result in inevitable cuts.

I have used the example of my local college, but across Scotland the shortfall in bursary funding in the college sector is £4.1 million, which will impact on bridging the skills shortages in the renewable energy field. We have also heard that college applications have risen by between 30 and 40 per cent, and that some of those courses are already filled, which leaves no provision for school leavers who are awaiting their exam results. Addressing those skills gaps is a key part of realising renewable heat and energy efficiency targets. The Scottish Government must assess the employment implications of the plans that are outlined in the bill and work with employers and trade unions to maximise job opportunities and take a joined-up approach to the Governments skills agenda.

Further to the failings on skills, the target of reducing emissions from new buildings by 30 per cent is inconsistent with the ambitious target that was set by the Scottish Government to reduce greenhouse gas emissions by at least 80 per cent by 2050. Section 179 of the Housing (Scotland) Act 2006 requires a strategy to improve energy efficiency, while the bill only outlines a plan to promote it, which makes the bill weaker than existing provisions for the domestic sector.

My constituency starts at Burntisland and finishes at Buckhaven. It is bounded along its length by the Firth of Forth, so I know only too well the impact that climate change is having on seawall structures. At the well-reported Adam Smith lecture in Kirkcaldy the other week, Kofi Annan made strong points about the impact of climate change on the poorest people in Africa, which other members have spoken about.

Buildings make up the single largest component of our carbon footprint, so if emissions from new buildings are not reduced effectively, the Government will not tackle climate change. The Government must explain the inconsistencies in the bill and say why it does not include requirements that would improve on Scottish planning policy 6. Evidence that was given to the Economy, Energy and Tourism Committee indicates that low-carbon and zero-carbon technologies will be essential to meet the revised energy targets.

Although the bill includes provisions on assessing the energy performance of existing non-domestic buildings in order to raise awareness of their contribution to greenhouse gases, the Scottish Government has failed to outline its intentions on the energy performance certification of domestic buildings.

The provisions in the bill will enable the Scottish ministers to create regulations to oblige building owners, responsible authorities and other bodies to improve the energy performance of non-domestic buildings. However, through the Economy, Energy and Tourism Committee, the Energy Saving Trust has called for the bill to include such provisions for the domestic building sector. That was also recommended by the committee but the Government has failed to take it into account.

Stewart Stevenson: It might be useful if I say that, through building regulations, we have a three-yearly programme of upgrading standards. To use that method is more appropriate than relying on a provision in a bill, which applies at a single point in time.

Marilyn Livingstone: I take that point on board but, as a committee member, I am presenting to Parliament evidence that we heard from experts.

A programme is urgently needed to improve energy efficiency in the domestic sector by providing households with advice on, and financial support for, energy-saving measures and introducing a stricter standard for new housing. The Scottish Government must outline how it intends to proceed with energy performance certification of domestic buildings, in order to make a serious attempt to tackle climate change.

I support all the committees recommendations, which would, among other things, ensure a commitment to drive forward improvements in insulation and provide the opportunity to install small-scale renewables in houses and businesses throughout Scotland. That would be achieved if the Government were to accept the committees recommendations and the measures that are outlined in Sarah Boyack’s members bill. I present those recommendations seriously and on the basis of the evidence that the committee took.

15:26

John Scott (Ayr) (Con): As ever, I begin by declaring an interest as a farmer in this important debate on climate change. I will quote Robert Burns, rather than Voltaire, who said:

“Facts are chielis that winna ding”.

Today—and not before time—we must face the facts of climate change. Temperatures are rising, sea levels are rising, Arctic summer ice is disappearing and summer heat waves are increasing, as is the intensity of localised tropical storms. Essentially, that is being brought about by
the greenhouse effect and the emission of greenhouse gases. We will all—individually and collectively—have to start to address the problem. That is why Conservatives welcome the bill.

However, the Royal Society of Edinburgh and the Transport, Infrastructure and Climate Change Committee have expressed concern that the bill creates only a framework when we should be producing a strategy with details of solutions and costings. The challenge is to produce such a budgeted strategy as soon as possible, to pull together into a coherent policy the diverse and competing demands of energy production, food production and economic and social development in the face of fast-moving climate change.

The Rural Affairs and Environment Committee dealt with part 5 of the bill, on which my colleague Nanette Milne spoke yesterday. It is fair to say that Conservatives believe that that part could be stronger and that its introduction could have been better managed. When she was the committees convener, the Minister for Environment condemned the fact that the consultation on forestry was not undertaken timeously. Perhaps that contributed to the Governments eventual withdrawal of its poorly thought-through leasing proposal. However, that is in the past, and lessons will be learned, but we must find out soon what further forestry proposals—if any—the Government will produce.

It is unquestionable that increased afforestation—perhaps funded by joint ventures—will reduce our carbon footprint, but only if trees are planted on land that is capable of food production. That is a key point. Planting on peat soils appears no longer to be good practice for carbon reduction, so planting on mineral soils is the alternative. In the face of climate change, a growing world population and crop substitution, a strategic decision needs to be taken about our food-producing capability here in the UK and in Scotland. From a UK perspective, it is unwise to reduce still further our strategic ability to feed ourselves and to increase daily—as we are doing—our dependence on importing food from elsewhere in the world, so I say to the minister that we need an integrated land use policy soon, as that will have a huge impact on climate change.

Waste reduction and recycling have been mentioned. Scottish Conservatives fully understand and support the Governments intention and measures to drive towards a zero-waste position and reduce our dependence on landfill. However, the Federation of Small Businesses and other respected witnesses expressed serious concern to the Rural Affairs and Environment Committee about the lack of infrastructure to achieve a zero-waste position or anything approaching it, or even to comply with existing European obligations. Dirk Hazell of the Scottish Environmental Services Association noted that

> “we need to accelerate our transition from a disposal to a recycling society, but to do so requires more infrastructure.”—[Official Report, Rural Affairs and Environment Committee, 28 January 2009; c 1361.]

and John Ferguson of the Scottish Environment Protection Agency said that the required infrastructure development would be

> “a challenge to the planning system.”—[Official Report, Rural Affairs and Environment Committee, 4 February 2009; c 1389.]

None of those statements takes account of the costs to already cash-strapped local authorities.

Stewart Stevenson: Is the member aware that, in my parliamentary constituency, there is an excellent facility that is recycling food waste? In fact, the private sector is in many ways stepping up to the mark and providing considerable useful infrastructure to complement and supplement what comes from elsewhere.

John Scott: The minister should forgive me for not being aware of what is going on in his constituency, but I am sure that the facility to which he refers is of enormous value.

We need to know how these laudable objectives will be met. In addition, we need to know how food waste will contribute to recycling and composting targets—indeed, the excellent example that the minister highlighted from his own constituency might provide a model for us all—and whether energy from food waste will be counted as contributing towards the cap on energy from waste.

We support the Governments position on carrier bags. As long as the voluntary approach is working, there is no need for legislation.

I welcome the Governments view that the length of the muirburning season should at least stay the same. In fact, given the predicted increase in rainfall, I go further and suggest that the start of the season be brought forward to earlier in the autumn. After all, it is often difficult—and, due to increasing rainfall, becoming more so with every year—to get the right weather conditions to carry out this skilled and essential work in the spring.

Notwithstanding the bills lack of detail and its dependence on secondary legislation being laid at a later date, we welcome its general principles. We also welcome the fact that the Government has revised the 2020 targets—with a 34 per cent reduction in CO2 rising to 42 per cent if Europe plays ball—and acknowledge that they are ambitious.

We need to learn from what has happened in other countries that are further down the legislative
route and use their experiences and ideas in developing the bill—putting flesh on its bones, one might say—with constructive amendments at stages 2 and 3. We desperately need to focus on reducing commercial and industrial waste—in fact, we need to make a start on that soon.

We will work constructively with the Government to develop and improve the bill at stages 2 and 3, and we look forward to meeting our commitment—indeed, our duty—to the next generation to leave things better than we found them.

15:32

Angela Constance (Livingston) (SNP): I am grateful for the opportunity to speak in this debate, as I truly believe that the Climate Change (Scotland) Bill will be part of this Governments and, indeed, the Parliaments—lasting legacy. Like many members, I have received a sizeable number of representations in support of the bill. Eco-congregations, eco-schools, fair trade groups and the many community councils in my constituency are actively engaged in combating climate change by changing behaviour at every level of society.

I have lost count of the number of times that I have visited a primary school, only to be blown away by finding that very young children know exactly what we need to do to save our planet. That is very uplifting and it gives me great hope for the future. However, the responsibility of parliamentarians is to bequeath to our children the right building blocks. As John Swinney said in the debate yesterday, the challenge is to create “enduring” legislation. With that in mind, we must bore down into the detail of this substantial bill. I have no hesitation in proffering my support for this world-leading and ambitious bill, and although I take exception to small parts of some of the detail, I do not want that to detract from my overall support for it.

That said, I seriously question the inclusion of section 59, which enables the current or any future Government to introduce, if it so wishes, charges for supplying carrier bags. I am grateful to my constituent Mr Bill MacDonald for bringing to my attention the problems in principle with that proposal.

The merits of charging for carrier bags were fully debated and tested by the Environment and Rural Development Committee in the previous parliamentary session during consideration of Mike Pringles Environmental Levy on Plastic Bags (Scotland) Bill. The committee did not recommend Mr Pringles bill to Parliament and it was withdrawn—for good reasons. More recently, when scrutinising the Climate Change (Scotland) Bill, the Rural Affairs and Environment Committee clearly pointed the Government back to the work of the Environment and Rural Development Committee and the issues that it highlighted. On pages 67 and 68 of its stage 1 report, the Transport, Infrastructure and Climate Change Committee states:

“In relation to the specific issue of charging for the supply of carrier bags, the RAE Committee noted that it had received numerous written submissions opposing the policy behind this section of the Bill. This opposition was based on evidence which suggested that proceeding with this policy is unlikely to deliver the intended environmental benefits and instead lead to increased emissions.”

Alex Johnstone (North East Scotland) (Con): Does the member agree that on this issue—uniquely to date—the largest retail businesses and their customers are doing great work to reduce the number of carrier bags, by using renewable bags and, in some cases, not using bags at all?

Angela Constance: I accept that the voluntary agreement is resulting in reduced use of plastic carrier bags, but I am concerned that that may be counterproductive and that we will merely replace the lightweight carrier bags with which we are all familiar with heavier plastic, paper, cotton or jute bags, which are often coated in plastic. Such products have a carbon footprint, are often bulkier and can lead to increased transportation costs. Evidence was presented to the Rural Affairs and Environment Committee that waste could increase by 13,700 tonnes per annum. The Irish experience has demonstrated clearly the unintended consequences of replacing plastic bags with so-called environmentally friendly bags for life, which has resulted in an increase in food packaging for loose items for health and hygiene reasons. That is an example of a counterproductive policy.

It is regrettable that the focus has been on lightweight plastic carrier bags, because—as I know—they are reusable as nappy bags, sandwich bags, freezer bags, pedal-bin liners and dog-poo bags; they can also be recycled. Surely the issue should be to improve plastics recycling. With that in mind, I welcome the cabinet secretaries announcement earlier this year that £5 million from the zero waste fund will be used to develop a home market for reprocessing plastics.

I am well aware that the Governments stated intention is not to introduce charging at this point but to retain the option to do so. Matthew Farrow of the Confederation of British Industry hit the nail on the head when he said in evidence to the Transport, Infrastructure and Climate Change Committee:

“The carrier bag issue is endlessly rehearsed and is a symbolic issue, and to be honest I would say that the proposal for carrier bag charges is probably not the best way to increase diversion from landfill. The effort that would be put into that policy could be better expended
If we are to create what Mr Swinney calls “enduring” legislation, we should not make symbolic proposals; instead, our proposals should be robust, rigorous and evidence based. In my view, section 59 is ill conceived. The merits of the case have already been rejected twice. Plastic bags account for 0.2 per cent of our waste, so our energy should be focused elsewhere. I urge ministers to put the issue to bed once and for all and delete section 59 from this otherwise ambitious and world-leading bill.

15:39

Peter Peacock (Highlands and Islands) (Lab): As members know, I have been pottering about as an elected politician for more than a quarter of a century. I have seldom seen an issue rise up the political agenda as fast as climate change has. The Parliament is reflecting that development in its consideration of the bill. It is right that we should do so, because, without question, climate change is one of the biggest challenges facing the entire population of the world.

We all know about changes in the environment from personal experience and going out and about: there is much more intense rainfall; winters are much milder; there is more flooding in winter, because of the increased rainfall; we get less snow and frost than we used to; we get more squally wind; and the wind is much stronger during certain periods. The seasons are starting to change, too. Birds are nesting earlier, to mention just one illustration of that. Farmers and people involved in forestry, fishing, ornithology and climbing can reflect their personal experiences of the climate changing around them.

I pay tribute to Al Gore’s part in the process of raising worldwide awareness of climate change with his film, his lecture work and his book “An Inconvenient Truth”. I went to hear him speak in Glasgow a couple of years ago. His was an impressive exposition of the challenges that we face. Unquestionably, Al Gore has been partly responsible for the shift in American public opinion that allows the Obama Government to do the things that it will now do. That is an important point in a world context.

Controversial though Al Gore’s thesis is in many quarters—people take issue with some of the detail of what he says—he has unquestionably focused the minds of people around the globe on the issues. Even for those who do not accept the fine detail of some of his points and arguments, it surely cannot be right to keep pumping out into the environment the amount of carbon dioxide that we do, needlessly and wastefully.

Stewart Stevenson: I very much agree with that. When Barack Obama said, “We will harness the sun and the wind and the soil”, he left the tides to Scotland. Is that not a key opportunity?

Peter Peacock: I am glad to see that the SNP has bought into the claims that the Pentland Firth will be the Saudi Arabia of renewables. I support what will be going on there, and I hope that more renewable energy generation will take place there, and more widely.

Along with changes in public opinion, public awareness of climate change issues has become much more acute, sensitive and alert. Individual citizens want to do the right thing by the environment, although they are often not clear what the right thing is. That brings me to the theme of considering the issue from the individual citizens perspective and thinking about what we can do individually to contribute to the aggregate change that we want to take place. Central to that is empowering citizens. Information, in turn, is central to empowering individuals to make changes in their lives. That can be information on, for example, insulating their homes, public transport choices or buying a certain type of car. It might also be information on the type of housing that they construct, or on recycling, composting or a whole range of other things that they can individually take part in or do.

In my experience, it is not easy for people to access good, comprehensive, independent, impartial advice about what they should do. What is the optimal depth of insulation for lofts? How should people treat their windows to make them more energy efficient? Is triple glazing definitely better than double glazing? In my circumstances, I might ask whether an air-source heat pump or a ground-source heat pump would be better. What about solar panels and photovoltaic cells? What is the right thing for my household to do to help combat the changes in the climate? What about converting cars to run on liquefied petroleum gas? What about the question of an electric car versus a modern diesel engine? Individuals have 101 questions—even 1,001 questions—that they want to ask, but getting ready access to the answers is not straightforward. In moving the debate forward, it is important that more information is made available. Might we wish to place a duty on local authorities to help ensure that information is supplied throughout the country?

I will move on to my own experience of building a house, and I will develop the argument about information, advice and consultancy. I built my own house about five to six years ago. The design stage started about eight years ago. I can tell members that it was not a thing to do when I was...
a busy minister, as it took up a lot of time. My house was built to the proper standards, but it contains no renewable devices. That is a matter of great regret. I accept a large part of the blame for that, but not once during the process was I ever advised by my architect, by the planners or by the building warrant people about what was the right thing to do or about the range of options that were open to me.

Retrofitting my house would be expensive. I can find all sorts of commercial products in the marketplace, and all sorts of people advancing why I should buy one product over another, but it is virtually impossible to find a single point of contact for advice on what I can do to make a difference in my home. That brings me back to the role of advice and consultancy. During our consideration of the bill, we might consider whether there is a way of placing a duty on architects, planners and people who are involved in building control to give such advice, to help individuals contribute to change.

Robin Harper (Lothians) (Green): The new Acharacle primary school will need hardly any extra heat put into it. Does the member agree that it is best to build houses that will need no energy in the first place?

Peter Peacock: I completely agree. That intervention brings me neatly to my next point, which is about regulation—

The Deputy Presiding Officer (Alasdair Morgan): It is your last point, Mr Peacock.

Peter Peacock: It is my last point and I will make it quickly. If the individual citizen cannot act, we must act collectively, for example through regulation. The need to improve building standards to encourage projects like the one that Robin Harper mentioned is central. I could go on for ever, Presiding Officer, but you are scowling at me, so I will sit down.

15:45

Iain Smith (North East Fife) (LD): I did not believe that we would ever see the Deputy Presiding Officer scowl.

I welcome the opportunity to speak in a debate on perhaps the most important bill ever to come before the Parliament. I am convener of the Economy, Energy and Tourism Committee, so I will speak mainly about the recommendations in our report on the sections of the bill that cover energy efficiency and renewable heat. I stress that I am not speaking on behalf of the committee. Although the committee was not formally designated a secondary committee—I guess that that makes us a tertiary committee—it was agreed with the lead committee that we would deal with chapter 3 of part 5, which falls within our energy remit.

It is fair to say that the committee was surprised and disappointed by the lack of substance behind the very general provisions in chapter 3. Moreover, I am very disappointed by the Governments poor response to our report. Indeed, it would be wrong to say that the Government has responded to our report, because the response that was published on Tuesday appears to address only the recommendations from our committees report that were referred to in the lead committees report. Of the 17 recommendations that were unanimously agreed by the Economy, Energy and Tourism Committee, the Government has ignored six completely, failed to address three, rejected three outright and rejected one in part. However, it has generously accepted the points that we made in the remaining four. That inadequate response leaves unanswered the fundamental question about exactly what the bill will achieve.

The Governments excuse that the bill is a framework bill does not wash. It is simply not good enough to ask the Parliament and the Scottish people to take so much on trust. When the Economy, Energy and Tourism Committee tried to probe Government officials on the policy intent behind the framework, I was shocked by the paucity of substance in the responses. Indeed, the committee was so shocked that we had to ask the Minister for Transport, Infrastructure and Climate Change, Stewart Stevenson, to come before the committee to try to put policy flesh on the bones—it was that bad.

Stewart Stevenson: Thank you.

Iain Smith: It is unfortunate that even after hearing from the minister and receiving the Governments response to the report, many of the committees questions remain unanswered.

I turn to issues of substance. I think that members of all parties would agree that it is crucial that we address Scotlands appalling record on energy inefficiency if we are to meet our climate change objectives. Half our energy use is on heating, and much of that is wasted, due to poor insulation standards in many of our domestic and non-domestic buildings—let alone the wasted heat from power generation. We need not just a plan to promote energy efficiency but positive action to improve energy efficiency. We need such a plan today, not within 12 months of the bill being enacted. We have waited too long for the publication of an energy efficiency action plan, and it appears that the Government is using the bill as an excuse to delay the plan further.
Lewis Macdonald mentioned the Government's response to our comments on the energy action plan. The Government said:

"Ministers could publish an action plan before the Climate Change Bill becomes an Act but ... Ministers would still have to produce and publish another action plan within 12 months."

What utter nonsense. Sir Humphrey would be proud. It is surely not beyond the collective wit and wisdom of the entire Scottish Government to come up with wording that would allow the action plan to be published now. It is equally important that the Parliament knows what the Government intends to put into the action plan. What energy efficiencies are to be achieved through the plan? How will the approach be monitored? The Parliament needs to be certain that the provisions in the bill are sufficient to deliver what is needed.

On setting targets, the Government's response was:

"For energy efficiency we are keen to focus on outcomes rather than targets".

Ministers may call it what they like, but we need to know the target outcomes for energy efficiency. However, members should not worry; we have been promised another discussion document in the summer, which will cover that work. I say to the minister that that is not good enough. We do not want more discussion; let us have action.

It is also difficult to judge whether the bills provisions on energy performance certificates are adequate, because the policy intent is not clear. During the Economy, Energy and Tourism Committees inquiry, I sought clarity on what the proposed new regulations would seek to achieve, and specifically on how the Government would determine whether the approach that it opted for—out of the seven proposed options that it put before us—was delivering. One presumes that the intention is to drive up the energy efficiency of non-domestic buildings, but what level of improvement is being sought, over what period, and when will a judgment be made on whether the regulations are delivering? We look forward to seeing the mock regulations that have been promised. I hope that they will be published ahead of stage 2.

It is probably in the area of renewable heat that the bill needs most strengthening. I urge the Government to look beyond renewable heat to address the whole issue of heat, and wasted heat in particular. We must address issues such as the wasted heat from power generation, the promotion of waste to energy and the development of district heating schemes, as well as renewable heat sources such as biomass, air-source and ground-source heat pumps and solar. I therefore hope that the Government will strengthen section 51 at stage 2. It is important that we do so.

We asked the minister to set out the Government's intentions regarding Sarah Boyack's energy efficiency and microgeneration bill in the stage 1 debate. I do not think that any of the three ministers who have spoken so far have done so; I hope that the minister will do so in winding up.

Finally, in response to the committees recommendation that the Government should report on whether some form of rebate through local taxation systems to incentivise energy efficiency, renewable heat or microgeneration should be introduced, the Government said:

"councils in Scotland do not have the same level of discretionary powers to offer council tax discounts as councils in England. To give Scottish councils similar powers would require primary legislation."

The bill will be primary legislation. Surely it must be possible to put in this framework bill a provision to enable the introduction of a council tax discount scheme if the Government at some future date decides that such a scheme would be beneficial?

This is an important bill, but it needs to be substantially amended and strengthened at stage 2 if it is to meet the challenges of climate change.

15:51

Rob Gibson (Highlands and Islands) (SNP): The radical Scots academic Dr Malcolm Slesser died at the age of 80 only two months after the Scottish National Party Government was elected in 2007. He was twice an SNP candidate, a renowned mountaineer and a valued fellow of the Centre for Human Ecology. Before that, he lectured at the University of Strathclyde in the 1970s, where he wrote about his concerns for the planet.

In his groundbreaking book "The Politics of Environment: Including a Guide to Scottish Thought and Action", which was published in 1972, he examined how modern technology was being exploited by an irrational economy of "unlimited industrial expansion in limited space", which, as the blurb in his book states, "must inevitably destroy itself, the land, the community and very probably, hazard the future of mankind".

He was an inspiration to many of us in the SNP, an eco-hero who will not be forgotten. His message appeals across party lines, so it is most fitting that in addressing the challenges of climate change, the bill puts practical steps in place to reduce radically greenhouse gases, a science that was in its infancy and of which Malcolm Slesser was only beginning to be aware in the 1970s.
We need action plans to ensure that Scotland shows a lead to other nations by taking our full share of the fight against climate chaos in time for the Copenhagen conference in December. I want to focus on a couple of issues that can make a real difference via the bill. Scotland has many advantages in playing its carbon-busting part. We now know how blessed Scotland is with the largest proportion of high winds, big waves and strong tides in Europe. That gives us a huge economic opportunity to contribute to the UK contribution to the EU’s 2020 targets. Tidal and wave power in the Pentland Firth will follow on from the huge arrays of offshore wind turbines to provide secure and safe green power to ourselves and our neighbours to the south and across the North Sea.

Heat represents more than 50 per cent of our energy needs in Scotland, yet heat generated from renewable sources represents less than 1 per cent of demand. A massive increase in the delivery of renewable heat will be required in the domestic and commercial sectors in the years ahead if overall targets for greenhouse gas emission reduction are to be met alongside the targets for renewable energy. The further behind we get on delivering renewable heat, the steeper the targets will need to be in the electricity and transport sectors to meet overall energy targets, and the steeper the targets will need to be across the whole of society in order to meet climate change targets.

I therefore welcome the response from the Minister for Transport, Infrastructure and Climate Change to the Economy, Energy and Tourism Committees report, in which he pledged that the renewable heat action plan will contain a target to supply 11 per cent of heat demand from renewable heat by 2020 as part of the overall EU targets.

With regard to job opportunities from climate change mitigation, the Transport, Infrastructure and Climate Change Committees conclusion on the financial memorandum in its stage 1 report discusses the Governments estimate that 16,000 jobs will be created in the field of renewable energy. Members were “extremely concerned” about the veracity of that estimate, but I am glad to say that at the Economy, Energy and Tourism Committee yesterday we heard evidence that verifies that figure—indeed, we heard evidence from some who believe it to be a conservative estimate.

As a member who represents the Highlands and Islands and has a long-standing interest in land use and tenure, I agree with RSPB Scotland on the need for an holistic approach to rural land use. Scottish land plays a big part in our greenhouse gas emissions. Emissions are falling slightly, but they must fall faster. Scottish risk impacts reports must be prepared for our Government, to complement the advice from the UK Committee on Climate Change. Particular features, such as the huge blanket peat bogs in the flow country in my region and our precious native pine woods, would then be subject to technical scrutiny from dedicated Scotland-based scientists. Such reports would provide that scrutiny and an annual reporting mechanism. Annual reporting is already provided for in the UK Climate Change Act 2008, and it should appear in our bill. I hope to hear from the minister on that.

I was privileged to visit Eigg last weekend to see its self-sufficiency drive for renewable energy for all houses on the island. From four windmills, a solar voltaic array and a run-of-river hydro plant, each home gets 5kW of electricity. Few in the cities could cope with such low amounts of electricity, but Eigg folk are leading the fight in limiting demand and securing clean energy supplies.

Malcolm Slessor would be proud that we, as members of the Scottish Parliament, are finding our way to the best means to stop climate chaos. Some 37 years ago, in “The Politics of Environment”, he wrote:

“Modern technology need no longer be the servant of economics. It is now able to halt expansion-for-expansions sake without entailing unemployment and recession. There is now no excuse whatever for trying to impose this servant economics willy-nilly over the more biological, nourishing, attributes of human communities”.

The principles of the bill are world class, and the amendments at stage 2 must make it easier for Scots to adapt to climate change. I believe that members of the Parliament can empower the citizens by our scrutiny of the bill now and after it is passed, and I fully support it.

15:57

Elaine Murray (Dumfries) (Lab): I, too, am pleased to take part in the stage 1 debate on the bill, which is widely considered to be very important.

I will concentrate on waste strategy. Although the Minister for Environment stated yesterday that she assumed that the lack of major comment on the bills proposals suggests that they have a degree of general support, there are a number of points to be considered, as Angela Constance ably demonstrated in her contribution a few minutes ago.

Waste policy is important in tackling climate change. First, waste is, as a derivative of production and consumption, a strong indicator of inefficiencies at one or more points of a commoditys useful life. Secondly, waste itself may contain greenhouse gases or, more often, it may
contribute by producing greenhouse gases—frequently methane—as a product of anaerobic degradation, as happens in landfill sites.

Methane is 21 times more powerful as a greenhouse gas by weight than carbon dioxide. However, with an atmospheric lifetime of around 12 years, it is reasonably short lived, and controlling its production now can therefore make a real contribution to shorter-term targets.

Despite the Governments 25 per cent cap on energy from waste, waste processes such as the anaerobic digestion of agricultural or food waste, which produces methane that is used to produce power, should be encouraged, although wasting food should be discouraged as far as possible.

I commend Dumfries and Galloway Council—I do not always do so, but in this instance I will—for its capping of the Locharmoss landfill site, and the use of the methane that is produced there for the generation of electricity, which contributes to the national grid.

The bill does not transpose the European revised waste framework directive into Scots law, as is required by 12 December next year. In referring to recycling, the bill does not distinguish between reuse, recycling and recovery, as the directive requires. The directive also requires 50 per cent of household waste and 70 per cent of construction and demolition waste to be recycled or reused by 2020. Those may appear to be challenging targets but, back in 2005, Flanders, whose population of 6 million is only slightly higher than Scotlands, achieved 70 per cent recycling, reuse or composting of household waste.

The Rural Affairs and Environment Committee heard evidence on the need to subject commercial and industrial waste to the same requirements as domestic waste. The bill requires business and public bodies to provide information to SEPA on the waste that they produce, thereby identifying opportunities for a reduction in waste management costs and a means of comparison with businesses of a similar size and sector. The committee recognised the need for internationally agreed measures of carbon accounting across the life-cycle of a commodity. At times, it seems as if the evidence is counterintuitive: what one thinks of as low carbon can turn out to be high carbon, and vice versa.

Many small businesses want to recycle their waste, but find it hard to do so because of a lack of infrastructure. In evidence to the Rural Affairs and Environment Committee, Susan Love, of the Federation of Small Businesses, stated that

"It will not be remotely possible to implement many of the bills measures unless we make progress with facilities", and Dirk Hazell, of the Scottish Environment Services Association, advised that

“There is nowhere near enough waste infrastructure ... to comply with existing European obligations.”—[Official Report, Rural Affairs and Environment Committee, 28 January 2009; c 1362, 1361.]

However, it is highly unlikely that local authorities can fund the development of such infrastructure. They are already struggling, as their current funding regime allows them to address only their existing obligations. The duty must rest on producer responsibilities, coupled with increases in landfill cost and—in certain cases—a ban on certain materials going to landfill. A duty on producers would encourage them to decrease waste and its toxicity and promote recycling and reuse.

Both SEPA and WRAP suggested that some forms of industrial and commercial waste should be banned from being sent to landfill. Stop Climate Chaos Scotland is looking into the possibility of strengthening the waste provisions along the lines of the Flanders policy on selected landfill and incineration bans.

Friends of the Earth has suggested that penalties for sending waste to landfill could be differentiated between small and larger businesses, perhaps by way of a link to turnover. In its response to the consultation on the bill, SEPA expressed disappointment that the suggestion that it had made in 2006 that direct variable charging should be made the subject of further consultation appears to have been withdrawn.

The bill addresses the six greenhouse gases that are mentioned in the Kyoto treaty, which includes action on hydrofluorocarbons but not chlorofluorocarbons and hydrochlorofluorocarbons, both of which are often referred to as ozone-depleting substances—ODS—because of the damage that they can do to the ozone layer. They are used in refrigerators and require careful end-of-life-cycle disposal. Prior to 2004, those compounds were also widely used in plastic foam insulation as the blowing agents that formed the core of insulating sandwich panels in industrial steel-clad buildings.

As the law stands, when such buildings are demolished, those materials have to be disposed of as hazardous waste and only in hazardous waste landfill. However, those gases are also significant greenhouse gases. As such, their carbon footprint is some 300 million to 400 million times that of carbon dioxide. It is unfortunate that similar care is not required with ODS-containing materials in the construction industry. Albeit that they are put to hazardous landfill, those gases can leach into the atmosphere, wreaking damage on the ozone layer, adding to atmospheric
greenhouse gases and contributing to Scotland's carbon footprint. A strong case can be made for those compounds to be included in the list of greenhouse gases in section 9. On this subject, Scotland has the opportunity to lead the rest of the world.

The waste provisions in the bill are enabling provisions, but that does not mean that they are not controversial. I therefore support the Rural Affairs and Environment Committees suggestion of the use of the super-affirmative procedure.

16:04

Robin Harper (Lothians) (Green): I recommend that everyone should pay close attention to nearly every speech that I have heard over the past two days.

In her closing remarks yesterday, Roseanna Cunningham reminded us all that the bill is our chance to leave a legacy for the long-term future of Scotland. I agree with those remarks. The bill is perhaps the most important piece of legislation that the Scottish Parliament will ever pass. However, the minister went on to say that she hoped that “petty squabbling” would not sink the bill. Is she really happy for the bill to proceed, more or less in its current form, straight to stage 3?

Thankfully, as the Government would do well to remember, it is a Government without a majority. As so many members said yesterday, in the end, the bill will be Parliament's bill. We will not be harassed or made to feel that our attempts to strengthen and improve its provisions are simply “petty squabbling”. I am afraid that, as far as my party and I are concerned, the bill does not yet strike the right balance.

Over the course of stage 1, campaigners and experts—including, of course, the environmental movement but also social justice and international development groups—worked hard to build a case for a strong bill. I thank and commend them for their work, but I also urge them not to rest when the bill is passed. Their energy will be needed urgently if we are to see the radical policy shift that will turn targets into realities.

In large part because of the work of those experts and campaigners, many key arguments have already been won. One such is the argument for a cap on international credits. The Government has agreed to introduce such a limit at stage 2. That is thoroughly welcome, as transformation must begin at home. The whole world cannot pay someone else to solve the problem. Countries such as Scotland, with high current emissions, high historical emissions and huge renewable energy potential, must take the lead.

Stewart Stevenson: I echo what Robin Harper said and congratulate the environmental lobbyists on the work that they have done. I agree absolutely that they should remain engaged all the way to 2050 because we will probably be engaged but the wider community will always need encouragement to continue to move forward.

Robin Harper: I thank the minister for his intervention.

The argument to include aviation and shipping emissions has also been won. It is essential to include the emissions from those sources. We want to count them so that we can see them fall, not so that we can watch them rise inexorably as they have done for a decade. Even the Governments own adviser, the Sustainable Development Commission, says that we cannot commit to aviation expansion.

The argument for setting strong early cuts to put us on the right trajectory has been won too. It is good news that the Government will bring the 2030 target forward to 2020, but it follows logically and automatically that the annual targets should and must be strengthened to make it achievable.

We need to follow those arguments through and reflect those changes in the bill. Roseanna Cunningham should not be too nervous. We have in mind many straightforward and constructive amendments that will help the bill to deliver real, effective change without making it “unfeasibly large” and will give it some ambition, which is important.

Despite claims to the contrary, the bill lacks ambition. To be frank, it is disappointing in many respects and little better than a simple copy-and-paste job from the UK legislation. The most obvious example of that lack of ambition has been cited many times in the Parliament, but it is a fundamental part of the bill, so I feel no shame in going over it again. It relates to targets. We must have long-term and annual targets—the long-term targets to lock future ministers into the long-term task and the short-term targets to ensure that each serving minister is held accountable during their term in office.

The annual targets must be set in the bill at 3 per cent at the very least. The Green view, which is backed by the evidence of the Tyndall centre for climate change research and many others, is that we need a 4.5 per cent annual reduction, leading to a 30 per cent reduction by 2010, a 70 per cent reduction by 2030 and a 90 per cent reduction by 2050. Those figures are realistically closer to the cuts that are necessary according to more recent science.

The world is reaching a tipping point. Marine and terrestrial environments are under attack from levels of chemical pollution and overexploitation.
that are already causing one of the swiftest species extinctions in geological history. To overheat our fragile earth at this point would be catastrophic.

Ten years ago today—not yesterday—my election on an environmental ticket was announced. Over that time, it has caused me considerable content that many good Green policies have moved from being the preserve of our party into the mainstream. Some of those policies are embodied in the Climate Change (Scotland) Bill and I am sure that others will be written into it during the amendment stages. It may take more time for others still to be accepted, but the direction of travel is clear: a sustainable future in which Scotland lives within its ecological means. That is the only survival strategy open to us and I, for one, remain hopeful that people in and outside the Parliament will, ultimately, vote for our survival.

I have time to refer to some of the speeches that I heard during the debate. I commend Iain Smiths speech for its content, for being focused and for its reference to energy efficiency action plans. I commend, too, Rob Gibson for its references to what should be done and what should be offered to our communities. I commend other members speeches for referring to what we still need with regard to science and accurate figures and information on which to base the policies that we should follow in the future.

16:10

Stuart McMillan (West of Scotland) (SNP): I am pleased to take part in this important debate. I acknowledge the hard work and determination of the Scottish Government in introducing the Climate Change (Scotland) Bill and of members who have taken part in the debate.

Many aspects of the bill have been discussed, so I will not attempt to cover too much old ground. I will focus my contribution on how a recent visit to Berlin by a delegation from the Economy, Energy and Tourism Committee relates to the bill. The purpose of the visit was to learn more about energy policy and usage in Berlin and in Germany as a whole.

The Economy, Energy and Tourism Committee has been undertaking an energy inquiry for some months. It started formally last September, before I became a member of the committee. We are now at the inquirys tail-end, and a report is due to be completed by the summer. As a new member of the committee, I have found the debate extremely informative. It has got me thinking even more about my own energy usage and my contribution to CO2 emissions as well as those of the country as a whole. I was particularly interested to hear the contribution of Peter Peacock, who is unfortunately not here at the moment.

The trip to Berlin ties in well with the bill. I will highlight two meetings and their relevance to the bill, particularly to section 48, which is on the duty of ministers to promote energy efficiency. Our programme of events included a meeting with two members of the German Bundestag: Dr Axel Berg, the SPD spokesman on energy; and Herr Laurenz Meyer, the CDU/CSU spokesman on the economy. While discussing the effects of energy consumption and energy loss in domestic properties, both Bundestag members acknowledged that there are major problems with German buildings and that it is up to the state to provide solutions.

We were informed that approximately 60 per cent of the current housing stock in Germany is rented, which will facilitate a domestic property improvement programme. In Scotland, however, 76 per cent of the housing stock is privately owned and 24 per cent is rented. It will therefore be a bit more challenging to have such a programme in Scotland. I said to Dr Berg that it was refreshing that there was an acknowledgment of the housing problem and that it was being examined. However, Germany appears to have acknowledged the problem some years ago. It was obvious to me that Scotland and the UK are some years behind Germany. I stated to Dr Berg that very little had been done in Scotland or, indeed, the UK to tackle this domestic problem. Dr Berg replied with a most startling response, “Sir, you must be a very poor country.”

As everyone in the chamber knows, however, Scotland and the UK are not very poor countries—far from it. However, there appears to have been little drive to promote energy efficiency in the past. Many buildings throughout Scotland that are energy inefficient can and must be improved. Providing resources to deal with that is obviously vital, as is promoting energy efficiency plans, for which section 48 provides.

We had a meeting with the German energy agency and were informed that Germany plans to retrofit 50 per cent of buildings within the next 20 years. Given that 75 per cent of buildings in Germany were built before 1978, it is easy to understand that the retrofit will be a massive undertaking. Even if the 50 per cent retrofit is achieved, the target of a 2.5 per cent reduction in emissions will not be met, because it is currently calculated at 1.7 per cent. Even with retrofitting, there will therefore still be challenges for Germany, but at least it will be moving in the right direction.

Robin Harper: Is the member indicating that the SNP would like to look again at the Scottish Green
Ms Wendy Alexander (Paisley North) (Lab): Like others, I welcome the fact that the United Kingdom and, with the passage of the bill, Scotland are providing leadership in the strategic framework for tackling climate change.

As others have said, the bill is a vital start, but it still leaves us with a choice: either we can stop at setting ambitious targets for tomorrow’s policy makers or we can challenge ourselves now to start setting targets for the current generation and to put in place policies to deliver those cuts in emissions. As Angela Constance said, people all over Scotland and at every level will be disappointed if the height of our ambition is not to set any short-term statutory duties for the current parliamentary session, for the next parliamentary session, between 2011 and 2015, or for the subsequent session, from 2015 to 2019. That is not what the people of Scotland want from us. The important thing is that we work with the bill to ensure that we act now rather than later. As the Stern review concluded—and as others have alluded to—it is clear that

"the benefits of ... early action far outweigh the ... costs of not acting."

However, the bill as it stands manifestly lacks strong early action.

Our second challenge with the bill is that we need not simply to set the right targets but to put in place the hard policy measures to make things happen. As we have learned to our cost over the past decade—Robin Harper alluded to this in a very powerful speech—simply defining the problem does not necessarily lead to the solution. To make that happen, the bill must tackle the system failures that are slowing the rate of green transformation. That means that the bill must go further in addressing market failures, providing the right financial incentives and ensuring that we take brave decisions on regulation.

The need for us to do that can be demonstrated by looking no further than our near European neighbours. We might now have the most ambitious strategic framework for the next 40 or 50 years, but the size of the green economy in each of our European neighbours—including Denmark, Germany, the Netherlands and Spain—is significantly larger than that in Scotland. That is not because people in Scotland have a lesser wish to be green; it is about our responsibility to create the right policy framework. I hope that the Government will try to meet the environmental ambitions of the people of Scotland by giving serious consideration to the advice of the three parliamentary committees and by making some of the brave decisions required for actual delivery.

Stewart Stevenson: Does the member regret, as I do, the loss of the pre-combustion CO₂ sequestration opportunity at the Peterhead plant that is now being developed in the middle east?

Ms Alexander: I certainly welcome the fact that there are to be four CCS plants across the UK and a much larger number in Europe. CCS is an example of an area in which we need to work together and not try to score points if we want to secure the scale of investment that is required. I refrained from saying that we had been leapfrogged by the UK on targets, but I predict that we will be leapfrogged again unless we deal with the issue of short-term targets.

I return to the areas in which we need policy action. As has been mentioned, energy efficiency has been the Cinderella of the energy and climate change debate for decades, and it would be a shame if we allowed it to be a Cinderella in the bill, but that is the position as things stand. The provisions on energy efficiency, the energy performance of buildings and renewable heat lack...
the necessary policy bite. In the case of energy efficiency and renewable heat, there are no targets at all. The bill should include new financial incentives on energy efficiency and renewable heat. When that has been done, those new commitments must be reflected in a revised financial memorandum.

As the Economy, Energy and Tourism Committee suggested, we would like local tax rebates to be provided to incentivise the take-up of energy efficiency, renewable heat and microgeneration. In the case of microgeneration, one need look no further than the evidence of Ian Marchant, who chairs the Governments business advisory group, on the wisdom of the provision of financial incentives in that area. That has been requested by the coalition that supports Sarah Boyacks proposed members bill on energy efficiency and microgeneration, and it would be respectful to the member, the coalition and Parliament if the Government could set out its intentions with regard to that bill—and, in particular, the proposal that general permitted development rights should be extended in the ways that the committee described—as soon as possible.

I am aware that time is pressing. The state of our domestic housing stock should shame us all. We cannot achieve the climate change targets unless we make it fit for purpose. That is an area that the bill leaves behind, and it is one that should dominate our thinking at stage 2.

Scots do not want to be less green. We are less green because of an inadequate policy framework, for which we should all take responsibility. The bill represents the only opportunity that we have to pass primary legislation that will address that inadequate policy framework. The next generation will judge the bill not on the ambition of our targets but on whether it fixed the policy framework so that we could deliver. I hope that we will put in place the necessary policy framework by amending the bill as it goes through its parliamentary stages. If we fail, we will have failed the many Scots who look to us not simply for targets but for delivery.

The Deputy Presiding Officer: We move to the winding-up speeches.

16:23

Ross Finnie (West of Scotland) (LD): Since its introduction, ministers have described the bill as “world leading”. However, as Alison McInnes, who opened for the Liberal Democrats, and many others have said, both yesterday and today, that is not yet the case. Liberal Democrats will be extremely happy if the bill is world leading when it emerges from stage 2, but there is a lot of work to do before then.

Liberal Democrats totally support the overarching target of reducing emissions by 80 per cent by 2050. We support the adoption of a scientifically credible target for 2020 and the setting of more ambitious early years targets and broad sectoral targets. However, the setting of targets and the giving of undertakings to Parliament to report on those targets are not in themselves sufficient to qualify for the title “bill”.

I welcome the ministers acknowledgement that much of the content of the bill builds on “Changing Our Ways”, Scotas first climate change programme, which was published by the coalition Government and was a subset of the sustainable development programme. I believe that climate change must be set in the context of sustainable development.

I recall that, after the strategy was published and when the UK Government introduced proposals for a climate change bill, there were discussions on the difference between a strategy, which is a series of objectives and undertakings that a Government gives and for the delivery of which its ministers are accountable to Parliament, and an act of Parliament, whereby a public policy is brought within the mischief of the law by being given a statutory framework and is ultimately judiciable in the courts.

Yesterday, in response to a question from my colleague Mike Rumbles, the Cabinet Secretary for Finance and Sustainable Growth eschewed the notion of a Government imposing fines on itself. That is a fair point, but if the targets and undertakings are not enforceable in law, do the measures merit the status of an act of Parliament? Therefore, apart from the policy issues that still wait to be addressed, which Robin Harper and Wendy Alexander narrated, more work is necessary before the targets and undertakings better fit the test of qualifying as a bill.

The Cabinet Secretary for Finance and Sustainable Growth (John Swinney): I am sure that Ross Finnie will accept that not every requirement of policy intervention is stated in legislation that Parliament passes. With a bill that has to give effect to the creation of a framework and a responsibility for a 40 to 50-year period, stating every requirement is a particularly difficult challenge. Will he reflect on that?

Ross Finnie: I do not doubt that we cannot specify everything. However, my fundamental point is that I do not believe that Parliament will accede to a doctrine that undertakings that are given by a minister in the Parliament have force and effect only if they are enshrined in an act of Parliament. That is the distinction that we have to
draw. At present, there is very little to suggest that anything in the bill will be enforceable in law. That matter must be addressed at stage 2.

Liberal Democrats accept that the world and the science have moved on since we produced the climate change programme when we were in government. However, the case for more ambitious targets in the early years has not changed fundamentally. The Government will advance its 2020 target from 34 per cent to 42 per cent only if the EU agrees to such a target. I have two points on that. First, is there an inference to be drawn that, if the Copenhagen summit failed to adopt the target of 80 per cent by 2050, the Government would retreat from that figure? Surely not.

Secondly, and more important, what is the domestic arithmetic that shows that a more ambitious target cannot be set in the early years? The previous Governments strategy document showed that Scotlands share of meeting the then much lower short-term target of 20 per cent by 2010 was a reduction of 1.7 million tonnes of carbon, but the then Scottish Government set the target at 2.7 million tonnes of carbon. I put it to the ministers that the increase in renewable energy production alone suggests that a more ambitious early target is appropriate.

The need for broad sectoral targets is also essential to give credibility to the overarching target. The work of the previous Government showed the difficulties to which the cabinet secretary has referred—the variability of contribution between the elements and the different achievements by sectors. Unless we produce broad targets for the sectors and take account of the fact that some sectors can and should be pressed to perform above the average, there is a risk that we will fail to meet the overall target.

Public sector bodies must be brought within the ambit of the bill. Liberal Democrats are not, as the cabinet secretary said yesterday, suggesting that the Government should take a unilateral approach, but agreement must surely be reached with the health service and local government, for example, on targets that are consonant with the Governments overall targets. That must form part of the bill because, otherwise, vast tracts of public expenditure will not be subject to the necessary scrutiny of climate change policy.

My colleagues Liam McArthur, Iain Smith and Jim Hume set out the reasons why the introduction of an energy efficiency strategy is urgent, why we need to pay more attention to renewable heat and why a land use strategy is important. We are pleased that the Government has accepted the need to include aviation and shipping emissions in its targets and to limit the use of international carbon credits.

Liberal Democrats will therefore have pleasure in supporting the general principles of the bill, but our amendment is designed to ensure that the bill emerges from stage 2 fit to be passed as an act of Parliament and is not simply a strategy by another name. I commend to Parliament the amendment in the name of Alison McInnes.

16:30

Gavin Brown (Lothians) (Con): This bill is vital for Scotland and for the world, and it is vital in the short, medium and long term. For those reasons, Scottish Conservatives are happy to support the key principles of the bill. Of course, the bill is not perfect, and the Government has been gracious enough to accept that. There is work to be done today, tomorrow and thereafter.

I want to focus on some specific areas where I think that the bill ought to be strengthened. I will consider the rhetoric of Government ministers. Yesterday, we heard from Mr Swinney that the bill was groundbreaking, and we have heard today from Jim Mather that the bill is world leading. Groundbreaking and world leading are therefore the yardsticks by which each section of the bill ought to be measured.

The first issue that I want to consider is the green council tax rebate. Scottish Conservatives have been in favour of such a rebate for some time. South of the border, 40 of the 60 councils that have adopted such a policy are Conservative councils. My colleague Alex Johnstone said yesterday that he intends to lodge amendments on the issue.

The policy works: it is proven south of the border, and it is about to be put in place in Northern Ireland as well. It works because people get a rebate of somewhere between £50 and £125 per house for taking forward measures on energy efficiency, heat or microgeneration. There is no real reason why that cannot happen in Scotland, too. The Economy, Energy and Tourism Committee considered the policy, and made a clear recommendation—without division—that it ought to be taken further.

Sarah Boyack (Edinburgh Central) (Lab): I am very gratified to hear support for that strong policy. Will the member also comment on the proposal to incentivise businesses through business rates? Is there scope to pick up on the point that Stewart Milne made about new developments all being required to have an appropriate level of renewables development?

Gavin Brown: The short answer is yes—all such areas ought to be considered. If a measure...
works in relation to domestic households, there is no reason why it cannot be made to work in the commercial sector as well.

We should consider the evidence that was given by the Energy Saving Trust, which stated clearly in its submission that a rebate is a tax incentive that is most likely to work. We also had positive evidence from Scottish and Southern Energy and Northern Energy Developments, and in the Halcrow report. The British Gas research into the local authorities where measures had been implemented shows that 35 per cent of those interviewed said that they would not have taken energy efficiency measures without the council tax rebate, and that 60 per cent of those interviewed said that they would prefer a council tax rebate to other grants or incentives to take up measures.

The policy is strong. One of the reasons given by the Scottish Government for rejecting a rebate was that it was about to introduce a local income tax. That, of course, is not going to happen in the foreseeable future. Another reason given by the Government related to primary legislation, but that reason has been dealt with during the debate. There is no strong, tangible reason why the measure cannot be adopted. As I said, the committee agreed its recommendation without division. A rebate is popular with consumers, councils and energy companies, and it could provide a real step-change in the take-up of energy efficiency measures. Energy efficiency measures are critical because, in the hierarchy of measures to reduce carbon emissions, they are the simplest and most important.

I turn now to sections 48 and 49 of the bill. At the moment, the language that is used on energy efficiency is neither groundbreaking nor world leading. Section 48(1) says:

"The Scottish Ministers must take such steps as they consider appropriate to promote the use of energy efficiency in Scotland."

Ministers then have up to 12 months from the point at which the section comes into force to produce the plan.

Consultations on energy efficiency have taken place over a number of years. Some of the evidence that we heard suggested that the plan is ready to go now. It is extremely important that the Government shows leadership in this area. The timing is also critical. If the Government has 12 months from the date on which the section comes into force, we could be at the end of 2010 before a plan is in place. We have carbon emissions targets from the beginning of 2010, but if we do not get any benefit from the target that is at the top of the hierarchy in year one, that will not be a very good start to the process.

The same applies to renewable heat, which is dealt with in section 51. I asked Jim Mather whether he thought that the response in sections 48 and 49 is strong enough, but the response in section 51 is even weaker:

“Scottish Ministers must take such steps as they consider appropriate to promote the use of heat produced from renewable sources.”

It does not ask even for a plan, and there is no timeframe whatever. Such provisions are absolutely vital, as heat makes an enormous contribution to carbon dioxide emissions—more so than electricity and transport. We need to see stronger action from the Government on renewable heat.

We will support the general principles of the bill. It is a good bill, but there is much work still to be done on it. We hope that the Government can take that work forward, as we will get only one shot at it.

16:36

Des McNulty (Clydebank and Milngavie) (Lab): I agreed with John Swinney yesterday when he said that it is highly appropriate that, on the 10th anniversary of the first elections to the Scottish Parliament, we are debating arguably the most important and far-reaching legislation to have come before us. The decision of the parliamentary authorities to set aside two afternoons for the debate has proven to be correct, and we have had some very worthwhile contributions from all sides of the chamber. I highlight particularly Angela Constances speech, with which I agreed completely. I will return to the issues that she discussed later.

It is worth pointing out that the work that has been undertaken by the various committees that have examined the bill reflects the best practice that has evolved in the Parliament—comprehensive and inclusive evidence taking and rigorous scrutiny not just of the bill, but of the mass of evidence put forward in connection with it, culminating in clearly argued and constructive reports to the Parliament, which I hope will inform members consideration. This is legislating as it should be done.

However, we cannot afford to indulge in too much back slapping. People who are anxious to claim that the bill is groundbreaking or world leading should recognise that making the most ringing declarations of intent with regard to tackling climate change or, indeed, setting, but not meeting, higher targets than those set by any other jurisdiction will not slow down the melting of the polar ice cap, halt the inexorable rise in average temperatures that is being experienced in many parts of the world or stop the increasing pollution of the atmosphere. Only action will do, and I believe that only early action will succeed.
Declaratory legislation must be accompanied by a strategy and an implementation plan that people will sign up to—if not with the same enthusiasm with which they sign up to the principles of the bill, then with the same determination to carry those principles forward in actions, many of which will turn out to be difficult and unpopular with some constituents.

If the committees recommendations are accepted and if the current Scottish Government comes up with a programme of quantified targets for the reduction of emissions, the delivery of which it and future Governments that are elected in 2011 and 2015 will be held to account for, we can have an excellent bill. However, the test of the bill is not in the setting of targets but in the delivery of action that is linked to the targets. I am pleased that the cabinet secretary accepts the Labour amendment in the spirit in which it was lodged. Our priority is, and has been throughout the scrutiny process, early action. We welcome the Scottish Governments acceptance of the case for bringing forward the interim target date from 2030 to 2020. Like the Scottish Government, we believe that the percentage reduction target that is set for 2020 should be based on the best available scientific advice.

Our objective should be in line with the maximum achievable targets that have been identified by the UK Committee on Climate Change, within the band between the extended ambition target of 34 per cent and the stretch target of a 42 per cent reduction in emissions by 2020.

Our preference is to look towards the more ambitious 42 per cent target, recognising that changes initiated by Europe will be required to enable some of the measures to be brought in. If that does not happen, the 42 per cent target will be much more difficult to achieve. However, I still believe that we should frame our aspirations around the 42 per cent target, partly to make a statement of intent, but also to make it clear to those involved in the summit at Copenhagen that we have support in our Parliament for a truly radical approach to dealing with global climate change.

Having spoken to the minister, I do not think that we are at odds, in principle, and I believe that a way forward can be found that will bring together all our ambitions.

However, it is not enough to set a challenging target for 2020. As the Royal Society of Edinburgh and many other witnesses who appeared before the Transport, Infrastructure and Climate Change Committee told us, we need to have in place quantified targets that cover the period between now and 2020 and plot out the area under the curve of projected emissions reductions that we believe can be achieved through concerted short-term and medium-term action. I hope that the minister will be able to confirm that he shares our belief that quantified targets are needed for his Government and the next two Governments. We need targets that enable us to focus on short-term trends—a running mean over two or three years, or three or four years—so that we can ensure that the trajectory of change is in line with what is required to meet the challenging 2020 target that I hope we will agree on in the next few weeks.

Stewart Stevenson: I confirm that we have had helpful discussions and that we are very much travelling in the same direction. We believe that, if we can find an appropriate way of incorporating a target of 42 per cent, that will challenge others, which is important because joint action will lead to successful action.

Des McNulty: That is a positive statement, and I hope that we can proceed on that basis.

To make the required progress, we need quickly to implement the necessary steps to reduce emissions in the areas of land use, energy generation, energy efficiency and transport. Labour supports measures that will substantially increase low-carbon electricity generation capacity in Scotland and, in particular, the development of renewables. I hope that we can agree that renewables development should be accompanied by reducing emissions from existing coal-fired generation and that we can do more to develop local generation and distribution capacity through, for example, combined heat and power stations.

As members have pointed out, we need an urgent programme to improve energy efficiency in the residential sector, providing householders with advice on and financial support for energy saving measures and introducing tougher building standards for new houses. As Sarah Boyack has repeatedly argued, energy saving technologies such as ground-source heat pumps and microgeneration offer a way forward. Peter Peacock gave a much longer list of such technologies, and I am sure that a complete list would be extremely long. The introduction of incentives such as council tax rebates, a policy that now has the support of Alex Johnstone and Liam McArthur, would supply an additional impetus to the adoption of some of those measures by domestic consumers.

Money that is put into energy efficiency does not deal only with climate change issues; it can help to create local jobs in local authorities and the voluntary sector, which will take forward the green jobs agenda.

In transport, radical measures are needed to deliver significant modal shift. We need to make public transport more price competitive and
quicker from door to door than private transport so that people will shift from the car to the bus, the train or the tram for commuting and leisure travel.

We accept that statutory sectoral targets are not appropriate at this point, but we want the contribution that each of the sectors is expected to make to overall reductions to be quantified, so that there will be a benchmark and so that we can ensure transparency. Such information needs to be part of a detailed strategy and implementation plan that covers the period between now and 2020, spelling out how agreed targets are to be met. In line with what we have suggested about targets, the aim should be to hold whichever politicians are in charge in each electoral or budgetary cycle to account for their share of the responsibility for meeting Scotland’s climate change commitments. Scotland has to realise its full potential in reducing its carbon footprint. However, it is also necessary to ensure that we get the right balance between our climate change aspirations and our other aspirations, such as those around sustainable growth, developing better health and education services and so on. Doing that will not be easy and we will have a tough task. When we start to see the detail, we will deal with the toughness.

I highlight the importance of jobs when tackling climate change. We have argued that employers and trade unions need to be involved early in discussions about job impacts. We need a full risk assessment of the job implications of the climate change strategy and any implementation plan.

Our emissions levels have been driven by the transfer of manufacturing overseas—especially to China and other parts of the far east. We are now in a somewhat different situation as a result of the economic downturn, and the situation will move on again. Our strategy must be robust enough to take account of whatever circumstances we experience. We need to reduce the prospect of inaction or slow progress in the early years; to quantify the expected contribution to meeting our emissions targets from the key sectors; to increase transparency; to reduce the scope for evading political accountability, so that every Administration must shoulder its continuing responsibilities; to send a positive message from Scotland to the rest of the world; and to engage the people of Scotland in the process.

I will highlight one or two issues from the Transport, Infrastructure and Climate Change Committees stage 1 report. A substantial body of evidence shows that section 59 is ill conceived and inconsistent with the bills overall aims, and I ask the minister again to review the provision and to consider whether it is appropriate.

I do not want reporting arrangements to be overelaborate. We need to streamline arrangements so that the Parliament has a sensible route to scrutinise what this Government and successive Governments are doing. The danger is that we will become overelaborate at stage 2. We all have an interest in guarding against that.

I listened to the Cabinet Secretary for Finance and Sustainable Growth’s response to Brian Adam on the engagement strategy, which is a theme that I have pursued. I am happy to work with Brian Adam and any other member on an engagement strategy.

As for international credits, I think that we should seek domestic delivery of 80 per cent reductions. We should examine the argument in the committees report for establishing a Scottish panel to work alongside the UK Committee on Climate Change and add the Scottish dimension on what is required. A role exists for Audit Scotland and perhaps the Accounts Commission in technical monitoring of progress through government.

One of the most difficult issues will be duties on public bodies. The SNP has expressed its view on that, and I know that many people have a different view. However, I hope that we can reach a sensible resolution that suits all sides and is not seen to place a disproportionate burden on local government.

The debate has been positive. I expect us to go on from here to produce a very good bill. I return to the point that the difference that we make will be through action, and I hope that we are girded up for that.

16:48

The Minister for Transport, Infrastructure and Climate Change (Stewart Stevenson): I am fully girded for the occasion.

I welcome the scope of the debate over the past two days, which has been of good quality. At least part of every members speech has taken us forward and usefully informed the debate. I was particularly taken by Des McNulty’s concluding remark that one of his key aims is to ensure that we keep it simple at stage 2. As the minister who has the pleasant duty of taking the bill through stage 2 on the Governments behalf, I heartily subscribe to his view and hope that we can deliver on it.

The debate has been unusual as, at least in this parliamentary session, it is unique in that four ministers have contributed to it. That does not just indicate the day-to-day engagement of those four ministers, but generally reflects the fact that every minister—like every member and everyone in the wider community—must be their own climate change champion in their own circumstances. I
want to work with other members of the Parliament to put flesh on those bones and identify common ground and ways of taking things forward that sustain the very positive tone of today’s debate.

Although we find ourselves able to support the Labour amendment, we cannot support the Liberal Democrat amendment because of its reference to the public duties. We are prepared to continue to discuss the subject, but we must recognize the very real sensitivities of the Convention of Scottish Local Authorities and local councils on this matter. Although we might be able to find some convergence and strike the right balance, the Liberal Democrat amendment does not do so and, as I say, we cannot support it.

The support for the bills general principles that, unless I am very much mistaken, we will see at 5 o’clock this afternoon is but the first step in the process. Discussions will continue through stages 2 and 3, and we will have to do a great deal more work to justify what we all want: legislation and actions that will act as a beacon for others. I certainly think that challenging the EU to step up its ambition is one that we are looking seriously at that approach—-it is not yet a commitment, but we are doing the work to see whether it is possible.

As I turn to the points that have been raised during the two days of debate, I have to say that I expect that I will not deal with them all, but we will look very carefully at the Official Report and get back to members directly on any significant matters.

A discussion that I had with Mr McNulty and Ms Boyack after yesterday’s debate suggests that we might have a greater common understanding on the annual targets that we will put in place in secondary legislation next year and the need for those to form the core of what ministers will be accountable for over the coming period. Within a couple of years, we will have set targets that take us half way to 2050. That will certainly be a substantial set of commitments.

Ms Boyack described the provisions on public duties as vague commitments. We are looking at them again but, as I said earlier, we want to be very careful about how we progress in that respect.

Alison McInnes urged us to take early action. Earlier, I pointed out that we are building on action that has already been taken. This is a continuum of activity that transcends the transition from the previous Administration to this Administration and, indeed, will continue after many of us are no longer on this earth to see it in operation.

I sensed a suggestion that we might be able to disregard expert advice, but something that each and every one of us has to cling to is the need to use expert advice to determine the figures. The very moment politicians start to pluck figures out of the air, however well they might justify doing so by selecting what might have been stated elsewhere, they give future generations of politicians a hook for reneging on, moving back from or being less ambitious with commitments.

Alison McInnes (North East Scotland) (LD): Will the minister advise the Parliament on whose expert advice he has set the interim 2020 target?

Stewart Stevenson: The 34 per cent and 42 per cent figures came from the UK Committee on Climate Change. If things go to plan and we are able to set targets in June 2010, advice from that committee might give us a different answer. We will of course respect that. The fact is that, in this situation, information is evolving and understanding increasing.

With regard to the debate on how Parliament will scrutinise the Government’s efforts, Alison McInnes made the interesting suggestion that we consider the model that was adopted for the national planning framework in the Planning etc (Scotland) Act 2006. We are looking at the text of the 2006 act to find out whether we can lift it and put it into the bill. Should we conclude that we can simply incorporate the wording of the 2006 act in the bill, it is more likely that we will do so at stage 3, given the tight targets for stage 2. We are looking seriously at that approach—it is not yet a commitment, but we are doing the work to see whether it is possible.

Patrick Harvie and I had a wee exchange on the subject of the Maldives, which is seeking to go carbon neutral. That is extremely admirable but, having looked into the subject, I make the point that aviation is not included in the Maldives ambition. Given that tourism is the country’s main industry, its situation is not quite the same as Scotland’s; that illustrates the point that every country must find its own salvation. Patrick Harvie also referred to aviation and shipping; it is important that we continue to look at those issues.

Alex Johnstone commended the 34 to 42 per cent approach as one that would find favour with Conservative members.

Patrick Harvie: The minister will be aware that not everyone commended the 34 to 42 per cent approach that the Government has decided to take. Regardless of whether annual targets are included in the bill or in secondary legislation, how is a minister to set them after the bill has been passed if the Government has not yet decided—and will not decide for several years—whether it is aiming for a 34 per cent target or a 42 per cent target?

Stewart Stevenson: That is to misunderstand. Both the 34 per cent and the 42 per cent figure, together with the up-to-date advice that the
Committee on Climate Change will provide next year, will inform the annual targets that will be set—there is an absolute linkage.

I must make some fairly rapid progress. Charlie Gordon came up with the best question of the debate, as he often does, when he asked:

“what are you actually gonnae dae?”—[Official Report, 6 May 2009; c 17120.]

That is absolutely focused and on the money. Once we get the bill out of the way, we must focus on delivery and on ensuring that we get the outcomes that we want.

Liam McArthur advocated a bottom-up approach to developing initiatives, which is commendable. However, I suggest gently that that is a little at odds with the idea that we should direct centrally, through public duties, what happens.

The Presiding Officer (Alex Fergusson): Order. I am sorry to interrupt, minister. Members who have just come into the chamber should do others the common courtesy of allowing them to hear what is being said by members who have taken part in this two-day debate.

Stewart Stevenson: Thank you, Presiding Officer.

Lewis Macdonald spoke about the target of 11 per cent that has been set for heat from renewable energy. That is part of an overall 20 per cent that includes a range of other things—we are aiming to do a little better than the UK as a whole. That is reasonable.

I can tell John Scott that we are conducting a rural land use study, information on which we will provide shortly.

I am pleased to hear that Peter Peacock has the carpentry skills to build his own house. When I am building my next house, he can help me.

The community on Eigg that Rob Gibson mentioned was supported by the Scottish Government, under the excellent Scottish community and householder renewables initiative. We look with continuing interest at what is happening on Eigg.

This has been an interesting and engaging debate. It is the beginning of what will be a continuing engagement for years to come. Some years ago, John F Kennedy said that man can solve any problem that man creates. [Interuption.]

The Presiding Officer: Order. I have already asked members to be quiet. Would they please do that?

Stewart Stevenson: We must hope that John F Kennedy was correct, but there is no absolute certainty in that regard.

Yesterday, when we were discussing the electrification of the whole of Scotlands rail network, one of the senior Government directors said to me, “Surely we will have to have battery-powered trains to go to Kyle of Lochalsh and places like that.” The good news is that some battery-powered trains are already operating in England. We will copy a good idea, wherever it comes from.

I support the motion in my name.
Decision Time

17:01

The Presiding Officer (Alex Fergusson): There are 12 questions to be put as a result of todays business. Members should note that the question on motion S3M-3963, in the name of Stewart Stevenson, on the Climate Change (Scotland) Bill, and those on the two amendments to that motion, will be put before the questions on this mornings business.

Members should also be aware that, if motion S3M-4065.3, in the name of Fergus Ewing, on community courts, is agreed to, amendments S3M-4065.1 and S3M-4065.2, in the names of Richard Baker and Robert Brown respectively, will fall.

The first question is, that amendment S3M-3963.2, in the name of Sarah Boyack, which seeks to amend motion S3M-3963, in the name of Stewart Stevenson, on the Climate Change (Scotland) Bill, be agreed to.

Amendment agreed to.

The Presiding Officer: The second question is, that amendment S3M-3963.1, in the name of Alison McInnes, which seeks to amend motion S3M-3963, in the name of Stewart Stevenson, on the Climate Change (Scotland) Bill, be agreed to.

Are we all agreed?

Members: No.

The Presiding Officer: There will be a division.

FOR
Alexander, Ms Wendy (Paisley North) (Lab)
Bailie, Jackie (Dumbarton) (Lab)
Baker, Claire (Mid Scotland and Fife) (Lab)
Baker, Richard (North East Scotland) (Lab)
Boyack, Sarah (Edinburgh Central) (Lab)
Brankin, Rhona (Midlothian) (Lab)
Brown, Robert (Glasgow) (LD)
Butler, Bill (Glasgow Anniesland) (Lab)
Chisholm, Malcolm (Edinburgh North and Leith) (Lab)
Craigie, Cathie (Cumbernauld and Kilsyth) (Lab)
Curran, Margaret (Glasgow Baillieston) (Lab)
Eadie, Helen (Dunfermline East) (Lab)
Ferguson, Patricia (Glasgow Maryhill) (Lab)
Finnie, Ross (West of Scotland) (LD)
Foulkes, George (Lothians) (Lab)
Glen, Marilyn (North East Scotland) (Lab)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Grant, Rhoda (Highlands and Islands) (Lab)
Gray, Iain (East Lothian) (Lab)
Harper, Robin (Lothians) (Green)
Harvie, Patrick (Glasgow) (Green)
Hume, Jim (South of Scotland) (LD)
Jamieson, Cathy (Carrick, Cumnock and Doon Valley) (Lab)
Kelly, James (Glasgow Rutherglen) (Lab)
Kerr, Andy (East Kilbride) (Lab)
Lamont, Johann (Glasgow Pollok) (Lab)
Livingstone, Marilyn (Kirkcaldy) (Lab)

AGAINST
Macdonald, Lewis (Aberdeen Central) (Lab)
Macintosh, Ken (Eastwood) (Lab)
Martin, Paul (Glasgow Springburn) (Lab)
McArthur, Liam (Orkney) (LD)
McAveety, Mr Frank (Glasgow Shettleston) (Lab)
McCabe, Tom (Hamilton South) (Lab)
McConnell, Jack (Motherwell and Wishaw) (Lab)
McInnes, Alison (North East Scotland) (LD)
McMahon, Michael (Hamilton North and Bellshill) (Lab)
McNeil, Duncan (Greenock and Inverclyde) (Lab)
McNeill, Pauline (Glasgow Kelvin) (Lab)
McNulty, Des (Clydebank and Milngavie) (Lab)
Mulligan, Mary (Linlithgow) (Lab)
Munro, John Farquhar (Ross, Skye and Inverness West) (LD)
Murray, Elaine (Dumfries) (Lab)
ODonnell, Hugh (Central Scotland) (LD)
Park, John (Mid Scotland and Fife) (Lab)
Peacock, Peter (Highlands and Islands) (Lab)
Pringle, Mike (Edinburgh South) (LD)
Purvis, Jeremy (Tweeddale, Ettrick and Lauderdale) (LD)
Rumbles, Mike (West Aberdeenshire and Kincardine) (LD)
Scott, Tavish (Shetland) (LD)
Simpson, Dr Richard (Mid Scotland and Fife) (Lab)
Smith, Elaine (Coatbridge and Chryston) (Lab)
Smith, Iain (North East Fife) (LD)
Smith, Margaret (Edinburgh West) (LD)
Stewart, David (Highlands and Islands) (Lab)
Stone, Jamie (Caithness, Sutherland and Easter Ross) (LD)

Whitefield, Karen (Airdrie and Shotts) (Lab)
Whitton, David (Strathkelvin and Bearsden) (Lab)

ODonnell, Hugh (Central Scotland) (LD)

Whitton, David (Strathkelvin and Bearsden) (Lab)

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Whitton, David (Strathkelvin and Bearsden) (Lab)
McLaughlin, Anne (Glasgow) (SNP)
McLetchie, David (Edinburgh Pentlands) (Con)
McMillan, Stuart (West of Scotland) (SNP)
Milne, Nanette (North East Scotland) (Con)
Mitchell, Margaret (Central Scotland) (Con)
Morgan, Alasdair (South of Scotland) (SNP)
Neil, Alex (Central Scotland) (SNP)
Paterson, Gil (West of Scotland) (SNP)
Robison, Shona (Dundee East) (SNP)
Russell, Michael (South of Scotland) (SNP)
Salmond, Alex (Gordon) (SNP)
Scanlon, Mary (Highlands and Islands) (Con)
Scott, John (Ayr) (Con)
Smith, Elizabeth (Mid Scotland and Fife) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)
Stevenson, Stewart (Banff and Buchan) (SNP)
Sturgeon, Nicola (Glasgow Govan) (SNP)
Swinney, John (North Tayside) (SNP)
Thompson, Dave (Highlands and Islands) (SNP)
Watt, Maureen (North East Scotland) (SNP)
Welsh, Andrew (Angus) (SNP)
White, Sandra (Glasgow) (SNP)
Wilson, Bill (West of Scotland) (SNP)
Wilson, John (Central Scotland) (SNP)

The Presiding Officer: The result of the division is: For 57, Against 62, Abstentions 0.

Amendment disagreed to.

The Presiding Officer: The third question is, that motion S3M-3963, in the name of Stewart Stevenson, on the Climate Change (Scotland) Bill, as amended, be agreed to.

Motion, as amended, agreed to,

That the Parliament agrees to the general principles of the Climate Change (Scotland) Bill and, in so doing, further agrees that unambiguous quantified targets for the reduction of greenhouse gas emissions for the period between 2010 and 2019 are needed so that the current government and governments elected in 2011 and 2015 can be held to account for delivering early action on tackling climate change.
The Bill will be considered in the following order—

Sections 1 to 20  Schedule 1
Sections 21 to 66  Schedule 2
Section 67  Long Title

Amendments marked * are new (including manuscript amendments) or have been altered.

Amendment 77 was admitted in error (as it was identical to amendment 39) and so does not appear in this Marshalled List. Instead, Robin Harper now appears as a supporter of amendment 39.

Before section 1

Patrick Harvie

75 Before section 1, insert—

<PART
FOUNDING PRINCIPLE

Founding principle
The founding principle of this Act is to ensure that Scotland makes at least an equitable contribution, in accordance with its international responsibilities and capabilities, to the international goal of stabilising greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference in the climate system.>

Section 1

Robin Harper

76 In section 1, page 1, line 12, leave out <80%> and insert <90%>

Section 2

Alison McInnes

1 In section 2, page 1, line 17, leave out <2030> and insert <2020>

Stewart Stevenson

2 In section 2, page 1, line 17, leave out <50%> and insert <34%>

Alison McInnes

3 In section 2, page 1, line 17, leave out <50%> and insert <42%>
After section 2

Stewart Stevenson

4 After section 2, insert—

<Modifying the interim target>

(1) The Scottish Ministers may, by order, modify the percentage figure mentioned in section 2(1) so as to substitute a higher figure for the one for the time being mentioned there.

(2) If an appropriate Community instrument comes into force, the Scottish Ministers must, before the expiry of the appropriate period, lay a draft of a statutory instrument containing an appropriate order before the Scottish Parliament.

(3) An “appropriate order” means an order under subsection (1) modifying the percentage figure mentioned in section 2(1) so as to substitute a figure of at least 42%.

(4) An “appropriate Community instrument” means a Community instrument—

(a) which contains a commitment to reduce greenhouse gas emissions by at least 30% compared to 1990 levels by 2020; and

(b) which amends the Decision of 26 March 2009 of the European Parliament and of the Council on the effort of Member States to reduce their greenhouse gas emissions to meet the Community’s greenhouse gas emission reduction commitments up to 2020 in the manner envisaged in Article 8(2) of the Decision.

(5) The “appropriate period” means the period of 3 months beginning with the day on which the appropriate Community instrument comes into force.

(6) If a draft of an appropriate order is not laid before the expiry of the appropriate period, the Scottish Ministers must lay the draft as soon as reasonably practicable afterwards.>

Section 3

Alison McInnes

36 In section 3, page 2, line 1, after <is> insert <at least 3%>

Alison McInnes

Supported by: Robin Harper

37 In section 3, page 2, leave out lines 3 and 4

Des McNulty

38 In section 3, page 2, line 3, leave out from <less> to end of line 4 and insert <consistent with a reduction over time of the net Scottish emissions account which would allow the interim target to be met>

Alison McInnes

Supported by: Robin Harper

39 In section 3, page 2, line 5, leave out <2020> and insert <2011>
Robin Harper

78 In section 3, page 2, line 5, leave out <3%> and insert <4.5%>

Section 4

Patrick Harvie

79 In section 4, page 2, line 25, leave out subsection (3)

Stewart Stevenson

5 In section 4, page 2, line 26, leave out <2030> and insert <2020>

Stewart Stevenson

6 In section 4, page 2, line 28, leave out <2031> and insert <2021>

Alison McInnes

80 In section 4, page 2, line 29, at end insert—

<(  ) to the objective of not exceeding the fair and safe Scottish emissions budget;>

Patrick Harvie

81 In section 4, page 2, line 30, leave out <also>

Patrick Harvie

82 In section 4, page 2, line 30, after <the> insert <advice of the relevant body in relation to the>

Patrick Harvie

83 In section 4, page 2, line 31, at end insert—

<(  ) in relation to each year in the period 2010-2020, to the achievement of the interim target and the 2050 target;

(  ) in relation to each year in the period 2021-2050, to the achievement of the 2050 target;>

Patrick Harvie

84 In section 4, page 2, line 31, at end insert—

<(  ) the objective of not exceeding the fair and safe Scottish emissions budget;>

Patrick Harvie

85 In section 4, page 2, line 34, leave out <in particular> and insert <including>

Patrick Harvie

86 In section 4, page 2, leave out lines 36 and 37
Des McNulty

40 In section 4, page 2, line 37, at end insert—

  <(  ) jobs and employment opportunities;>

Des McNulty

41 In section 4, page 3, line 2, leave out <poverty> and insert <poorer or deprived communities>.

Patrick Harvie

87 In section 4, page 3, line 2, after <poverty> insert <, those discriminated against on grounds of gender and other disadvantaged or minority groups living in Scotland or elsewhere;>

Des McNulty

42 In section 4, page 3, line 3, leave out <and rural> and insert <rural communities and island>.

Patrick Harvie

88 In section 4, page 3, line 6, at end insert—

  <(  ) environmental considerations and, in particular, the likely impact of the targets on biodiversity;>

Stewart Stevenson

7 In section 4, page 3, line 7, at end insert—

  <(  ) If annual targets for a period are not set by the corresponding date mentioned in paragraphs (a) to (g) of subsection (2), the Scottish Ministers must set the annual targets as soon as reasonably practicable afterwards.>

Patrick Harvie

Supported by: Alison McInnes

89 In section 4, page 3, line 7, at end insert—

  <(  ) In this Act, the “fair and safe Scottish emissions budget” is the aggregate amount of net Scottish emissions for the period 2010-2050 recommended by the relevant body as being consistent with Scotland contributing appropriately to stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.>

Section 5

Patrick Harvie

90 In section 5, page 3, line 10, after <request> insert <and publish>

Patrick Harvie

91 In section 5, page 3, line 11, at end insert <in relation to the target-setting criteria>
Alison McInnes

92 In section 5, page 3, line 11, at end insert—

<( ) When providing advice under this section, the relevant body must—

(a) express a view as to whether the annual targets are appropriate; and

(b) explain that view by reference to the target-setting criteria.>

Patrick Harvie

Supported by: Alison McInnes

93 In section 5, page 3, line 11, at end insert—

<(1A) When providing advice under subsection (1), the relevant body must also express a view as to—

(a) the extent to which the annual targets should be met by—

(i) taking action to reduce net Scottish emissions;

(ii) the use of carbon units that in accordance with regulations under section 12(2) may be credited to the net Scottish emissions account;

(b) the respective contributions towards meeting the annual targets that should be made—

(i) by the traded sector of the Scottish economy;

(ii) by the other sectors of the Scottish economy;

(c) the sectors of the Scottish economy in which there are particular opportunities for contributions to be made towards meeting the targets through reductions in emissions of greenhouse gases.

(1B) In subsection (1A)(b)(i), “traded sector” means the sectors of the Scottish economy which are covered by trading schemes within the meaning of section 44 of the 2008 Act.>

Alison McInnes

94 In section 5, page 3, line 13, leave out <publish a statement> and insert <lay before the Scottish Parliament a report>

Alison McInnes

95 In section 5, page 3, line 17, leave out <publish a statement> and insert <lay before the Scottish Parliament a report>

Alison McInnes

96 In section 5, page 3, line 19, leave out subsection (4) and insert—

<(4) The Scottish Ministers must, as soon as reasonably practicable after laying a report before the Scottish Parliament under subsection (2) or (3), and in so far as reasonably practicable, make a statement to the Parliament relating to the report.>
Patrick Harvie
97 In section 5, page 3, line 19, at beginning insert <Advice requested under subsection (1) or>

Section 6

Patrick Harvie
43 In section 6, page 3, leave out line 30

Patrick Harvie
44 In section 6, page 3, line 31, at end insert <but only if the modification results in the revised
target being set at an amount that is less than the original target>

Alison McInnes
98 In section 6, page 3, line 33, at end insert—

<(<1A) The Scottish Ministers must, at the same time as laying a draft of a statutory instrument
containing an order under subsection (1)(a) before the Scottish Parliament, lay before
the Parliament a report explaining why the modification is being proposed.

(1B) The Scottish Ministers must, as soon as reasonably practicable after laying a report
before the Scottish Parliament under subsection (1A), and in so far as reasonably
practicable, make a statement to the Parliament relating to the report.>

Patrick Harvie
45 In section 6, page 3, line 34, leave out subsection (2)

Patrick Harvie
46 In section 6, page 3, line 37, leave out subsection (3)

Stewart Stevenson
8 In section 6, page 3, line 38, leave out <significant changes> and insert—

<(< ) a modification of the interim target; or
( ) another significant change>

Patrick Harvie
47 In section 6, page 4, line 1, leave out subsection (4)

Patrick Harvie
48 In section 6, page 4, line 3, leave out subsection (5)
Section 7

**Alison McInnes**

99 In section 7, page 4, line 14, leave out <publish a statement> and insert <lay before the Scottish Parliament a report>

**Alison McInnes**

100 In section 7, page 4, line 16, leave out subsection (3) and insert—

<(3) The Scottish Ministers must, as soon as reasonably practicable after laying a report before the Scottish Parliament under subsection (2), and in so far as reasonably practicable, make a statement to the Parliament relating to the report.>

**Patrick Harvie**

49 In section 7, page 4, line 17, at end insert—

<( ) must be laid before the Scottish Parliament>

**After section 7**

**Des McNulty**

50 After section 7, insert—

**Achievement of annual targets: domestic effort target**

(1) The Scottish Ministers must ensure that reductions in net Scottish emissions of greenhouse gases account for at least 80% of the reduction in the net Scottish emissions account in any target year.

(2) In this Act, the target set out in subsection (1) is known as the “domestic effort target”.

(3) The Scottish Ministers may, by order, modify the percentage figure mentioned in subsection (1) so as to substitute a higher figure for the one for the time being mentioned there.

(4) Before making an order under subsection (3) the Scottish Ministers must request advice from the relevant body.

(5) If the order under subsection (3) makes provision different from that recommended by the relevant body, the Scottish Ministers must publish a statement setting out the reasons why.

(6) A statement under subsection (5) may be published in such manner as the Scottish Ministers consider appropriate.>

**Robin Harper**

125 After section 7, insert—

**Achievement of annual targets: reduction in net Scottish emissions**

(1) The Scottish Ministers must ensure that reductions in net Scottish emissions of greenhouse gases account for—

(a) in the period 2010-2019, at least 80%;
of the reduction in the net Scottish emissions account in any target year.

(2) The Scottish Ministers may by order increase the percentage figures mentioned in subsection (1)(a) and (b).

(3) Before making an order under subsection (5) the Scottish Ministers must seek advice from the relevant body.

Section 8

Stewart Stevenson

9 In section 8, page 4, line 30, leave out <In> and insert <No later than the end of>

Alison McInnes

101 In section 8, page 4, line 30, leave out from beginning to <prepare> in line 31 and insert <The Scottish Ministers must in each year, beginning with the year 2011, request the relevant body to prepare, as soon as reasonably practicable after data relating to a year for which an annual target has been set (“a target year”) becomes available,>

Des McNulty

51 In section 8, page 4, line 33, at end insert—

<( ) whether the domestic effort target was met in that target year;>

Des McNulty

52 In section 8, page 4, line 34, leave out <way in which that target was or was> and insert <ways in which those targets were or were>

Section 9

Elaine Murray

53 In section 9, page 5, line 9, at end insert—

<( ) chlorofluorocarbons;
   ( ) hydrochlorofluorocarbons.>

Patrick Harvie

102 In section 9, page 5, line 9, at end insert—

<( ) The Scottish Ministers must monitor the impact on climate change of those gases in the atmosphere not listed in subsection (1), and report to the Scottish Parliament from time to time as to whether it would, in their view, be desirable for any such gas to be added to subsection (1) in the event that subsection (3) was satisfied in respect of such a gas.>
Section 10

Elaine Murray
54 In section 10, page 5, line 35, at end insert—

<( ) for chlorofluorocarbons, 2009;>

<( ) for hydrochlorofluorocarbons, 2009.>

Section 12

Robin Harper
126 In section 12, page 6, line 17, after <units> insert <purchased by the Scottish Ministers and>

Robin Harper
127 In section 12, page 6, leave out lines 19 and 20

Stewart Stevenson
10 In section 12, page 6, line 20, at end insert—

<(1A) The net amount of carbon units credited to the net Scottish emissions account for a year for which an annual target has been set (a “target year”) must not exceed the allowable amount.

(1B) The “allowable amount” is—

(a) the amount equal to the limit, set by virtue of section (Limits on use of carbon units)(1), on the net amount of carbon units that may be credited to net Scottish emissions accounts during the period which includes the target year; or

(b) where a net amount of carbon units has been credited to the net Scottish emissions account for any other target year in that period, the balance (if any) remaining of the amount referred to in paragraph (a).

(1C) In subsections (1A) and (1B), the “net amount of carbon units” has the meaning given by section (Limits on use of carbon units)(3).>

Robin Harper
128 In section 12, page 6, line 22, after <units> insert <purchased by the Scottish Ministers>

Robin Harper
129 In section 12, page 6, leave out lines 24 to 26

Des McNulty
55 In section 12, page 6, line 28, after <period> insert—

<(a)>
In section 12, page 6, line 29, at end insert <;

(b) deliver a reduction in greenhouse gas emissions (or a removal of greenhouse gas
from the atmosphere) that would not otherwise have occurred; and

(c) relate to projects which benefit, and promote sustainable development in, the
country in which the reduction in emissions referred to in paragraph (b) is taking
place (or in which the activities giving rise to the removal of greenhouse gases
referred to in that paragraph are taking place)>

After section 12

After section 12, insert—

<Restriction on use in 2010-2012 of carbon units purchased by Scottish Ministers>

(1) The Scottish Ministers may not, where subsection (2) applies, credit to the net Scottish
emissions account for a year in the period 2010-2012 any carbon units purchased by
them.

(2) This subsection applies provided the percentage figure mentioned in section 2(1) is
34%.

Section 14

In section 14, page 6, line 36, leave out <may> and insert <must>

In section 14, page 7, line 6, at end insert—

(2A) A draft of a statutory instrument containing the first order under subsection (1) must be
laid before the Scottish Parliament no later than 1 June 2010.

(2B) If a draft of the first order is not laid by the date mentioned in subsection (2A), the
Scottish Ministers must lay the draft as soon as reasonably practicable afterwards.

As an amendment to amendment 11, leave out lines 4 and 5

In making an order under subsection (1) the Scottish Ministers must have regard to the
extent to which the impact of emissions on climate change may vary according to the
altitude at which such emissions are made.
Section 18

Patrick Harvie
104 In section 18, page 8, line 22, at end insert—
<(  ) Regulations under subsection (1) may not include provision for any scheme whereby carbon units may be traded or offset to mitigate greenhouse gas emissions made in Scotland.>

Robin Harper
130 In section 18, page 8, line 23, after second <unit> insert <, purchased by the Scottish Ministers,>

After section 18

Stewart Stevenson
12 After section 18, insert—
<Limits on use of carbon units

(1) The Scottish Ministers must, by order, set a limit on the net amount of carbon units that may be credited to net Scottish emissions accounts during the periods mentioned in paragraphs (a) to (i) of subsection (2).

(2) The Scottish Ministers must set the limit—
(a) for the period 2010-2012, no later than 1 June 2010;
(b) for the period 2013-2017, no later than 31 December 2011;
(c) for the period 2018-2022, no later than 31 December 2016;
(d) for the period 2023-2027, no later than 31 December 2021;
(e) for the period 2028-2032, no later than 31 December 2026;
(f) for the period 2033-2037, no later than 31 December 2031;
(g) for the period 2038-2042, no later than 31 December 2036;
(h) for the period 2043-2047, no later than 31 December 2041;
(i) for the period 2048-2050, no later than 31 December 2046.

(3) The “net amount of carbon units” means C minus D, where—
“C” is the amount of carbon units credited to net Scottish emissions accounts during the period in accordance with regulations under section 12(2);
“D” is the amount of carbon units debited from net Scottish emissions accounts during the period in accordance with such regulations.

(4) An order under subsection (1) may provide that carbon units of a description specified in the order do not count towards the limit.

(5) If the limit for a period is not set by the corresponding date mentioned in paragraphs (a) to (i) of subsection (2), the Scottish Ministers must set the limit as soon as reasonably practicable afterwards.>
Des McNulty

12A As an amendment to amendment 12, line 2, at end insert—
<( ) The Scottish Ministers may only credit to the net Scottish emissions account for a year in the period 2013-2017 carbon units purchased by them up to a limit of 20% of the reduction in the amount of the net Scottish emissions account planned for that year.>

Alison McInnes

12AA As an amendment to amendment 12A, line 3, leave out <2013> and insert <2010>

Alison McInnes

12AB As an amendment to amendment 12A, line 3, leave out <2017> and insert <2020>

Alison McInnes

12C As an amendment to amendment 12, line 5, at end insert—
<( ) The limit set under subsection (1) for the period 2020-2022 and subsequent periods must be set with a view to ensuring that the net amount of carbon units credited to the net Scottish emissions account in any year is no greater than 20% of the reduction in the amount of the net Scottish emissions account planned for that year.>

Alison McInnes

12D As an amendment to amendment 12, leave out line 7

Des McNulty

12B As an amendment to amendment 12, leave out line 8

Alison McInnes

12E As an amendment to amendment 12, line 9, leave out <2018> and insert <2020>

Alison McInnes

12F As an amendment to amendment 12, line 25, at end insert—
<(6) The Scottish Ministers must, before laying a draft of a statutory instrument containing an order under subsection (1) before the Scottish Parliament, request advice from the relevant body.
(7) If the order under subsection (1) makes provision different from that recommended by the relevant body, the Scottish Ministers must lay before the Scottish Parliament a report explaining why.
(8) The Scottish Ministers must, as soon as reasonably practicable after laying a report before the Scottish Parliament under subsection (7), and in so far as reasonably practicable, make a statement to the Parliament relating to the report.>

Stewart Stevenson

13 After section 18, insert—
Modifying limits on use of carbon units etc.

1. The Scottish Ministers may, by order, modify—
   a) a limit on the use of carbon units set by virtue of section (Limits on use of carbon units)(1);  
   b) any date mentioned in paragraphs (a) to (i) of section (Limits on use of carbon units)(2).

2. The Scottish Ministers may make an order under subsection (1)(a) only if they consider that it is appropriate to do so as a result of—
   a) a modification of the interim target; or  
   b) another significant change to the basis on which the limit on the use of carbon units was set.

3. The Scottish Ministers may make an order under subsection (1)(b) only if they consider it appropriate to do so.

4. An order under subsection (1)(a) may provide that carbon units of a description specified in the order do not count towards the limit.

Stewart Stevenson

After section 18, insert—

Advice before setting or modifying limits on use of carbon units etc.

1. The Scottish Ministers must, before laying a draft of a statutory instrument containing an order under section (Limits on use of carbon units)(1) or (Modifying limits on use of carbon units etc.)(1) before the Scottish Parliament, request advice from the relevant body.

2. If the order under section (Limits on use of carbon units)(1) or (Modifying limits on use of carbon units etc.)(1) makes provision different from that recommended by the relevant body, the Scottish Ministers must publish a statement setting out the reasons why.

3. A statement under subsection (2) may be published in such manner as the Scottish Ministers consider appropriate.

Brian Adam

Supported by: Des McNulty

After section 18, insert—

Public engagement strategy

1. As soon as reasonably practicable after making an order under section 4(1) setting annual targets, the Scottish Ministers must prepare and publish a strategy (a “public engagement strategy”) setting out the proposals and policies which they intend to adopt in order to—
   a) inform individuals and communities about the targets specified in or by virtue of this Part;   
   b) encourage individuals and communities to make contributions towards the meeting of those targets.
(2) In particular, the strategy under subsection (1) must identify actions which may be taken by individuals and communities in order to contribute towards the meeting of the targets specified in or by virtue of this Part.

(3) The second and each subsequent strategy published under this section—

(a) must contain an assessment of the progress towards implementing proposals and policies set out in earlier strategies;

(b) may make such adjustments to those proposals and policies as the Scottish Ministers consider appropriate.

(4) A public engagement strategy may be published in such manner as the Scottish Ministers consider appropriate.

(5) As soon as reasonably practicably after publishing a public engagement strategy, the Scottish Ministers must lay the strategy before the Scottish Parliament.

Section 19

Patrick Harvie

105 In section 19, page 9, line 4, at end insert—

<( ) the function of providing advice, analysis, information and other assistance on climate change to any member of the Scottish Parliament;>

Section 20

Cathy Peattie

131 In section 20, page 9, line 36, at end insert—

<( ) Before making an order under subsection (1), the Scottish Ministers must consult the Scottish Parliament.>

Schedule 1

Cathy Peattie

132 In schedule 1, page 34, line 17, at end insert—

<( ) Before appointing members of the Committee, the Scottish Ministers must consult the Scottish Parliament.>

Stewart Stevenson

15 In schedule 1, page 36, line 19, after <payment> insert <of>

Stewart Stevenson

16 In schedule 1, page 36, line 20, after <provision> insert <of>

Stewart Stevenson

17 In schedule 1, page 36, line 21, after <payment> insert <of>
Stewart Stevenson
18 In schedule 1, page 36, line 22, leave out first <of>

Section 22

Patrick Harvie
106 In section 22, page 10, line 8, leave out subsection (1) and insert—

<(  ) The Scottish Ministers must, before laying an order under section 4(1), request and publish advice from the advisory body on the target-setting criteria set out under section 4(4).>

Patrick Harvie
107 In section 22, page 10, line 12, leave out <(1)(a)> and insert <(1)>

Patrick Harvie
108 In section 22, page 10, line 13, leave out <whether the> and insert <what>

Patrick Harvie
109 In section 22, page 10, line 14, at end insert—

<(  ) the objective of not exceeding the fair and safe Scottish emissions budget.>

Patrick Harvie
110 In section 22, page 10, line 15, leave out <(1)(a)> and insert <(1)>

Des McNulty
60 In section 22, page 10, leave out lines 17 to 20

Stewart Stevenson
19 In section 22, page 10, line 19, after <with> insert <section 12(1A) and>

Des McNulty
61 In section 22, page 10, line 21, after <targets> insert <and the domestic effort target>

Liam McArthur
133 In section 22, page 10, line 27, at end insert—

<(  ) the proportion of the fair and safe Scottish emissions budget available for electricity generation and in particular as to—

(i) an appropriate total lifetime greenhouse gas budget per megawatt hour of generating capacity;

(ii) appropriate initial levels of greenhouse gas emissions per megawatt hour.>
In section 23, page 10, line 33, leave out <prepare> and insert <lay before the Scottish Parliament>.

Alison McInnes

In section 23, page 11, line 7, leave out from beginning to <year”),> in line 8 and insert <The first report under this section prepared after data relating to a year for which an annual target has been set (a “target year”) becomes available>.

Stewart Stevenson

In section 23, page 11, line 7, leave out from <the> to <on> in line 8 and insert <a relevant year must also set out the advisory body’s views on the matters mentioned in subsection (3C).>

(3A) In subsection (3), the “relevant year” means such year as the Scottish Ministers may, by order, designate in accordance with subsection (3B).

(3B) The year which may be designated under subsection (3A) is the first year following a year for which an annual target has been set (a “target year”) or the second year following a target year.

(3C) The matters referred to in subsection (3) are>

Des McNulty

In section 23, page 11, line 9, at end insert—

<( ) whether the domestic effort target was met in that target year;>

Des McNulty

In section 23, page 11, line 10, leave out <way in which that target was or was> and insert <ways in which those targets were or were>

Alison McInnes

In section 23, page 11, line 13, leave out from <no> to end of line 16 and insert <as soon as reasonably practicable after the data relating to the target year becomes available and in any case no later than 31 January in the third year following the target year.>

Stewart Stevenson

In section 23, page 11, line 16, leave out <later>

Cathy Peattie

In section 23, page 11, line 16, at end insert—

<( ) Before specifying a year under subsection (2) or appointing a date under subsection (4)(b), the Scottish Ministers must consult the Scottish Parliament.>
Section 24

Alison McInnes
64 In section 24, page 11, leave out lines 22 to 24 and insert <2 months after the report was so laid.>

Stewart Stevenson
22 In section 24, page 11, line 24, leave out <later> and insert <other>

Section 27

Patrick Harvie
113 In section 27, page 12, line 2, leave out subsection (1)

Cathy Peattie
136 In section 27, page 12, line 3, at end insert—

<( ) Before giving any directions under subsection (1), the Scottish Ministers must consult the Scottish Parliament.>

Patrick Harvie
114 In section 27, page 12, line 6, leave out subsections (3) and (4)

Section 28

Des McNulty
65 In section 28, page 12, line 16, at end insert—

<( ) The report must also state whether the domestic effort target has been met in the target year to which the report relates.
( ) If the domestic effort target has not been met, the report must explain why.>

Alison McInnes
115 In section 28, page 12, line 18, leave out <31 October in the second> and insert <the first 31 October after the data relating to the target year becomes available and in any case no later than 31 January in the third>

Section 29

Patrick Harvie
116 In section 29, page 12, line 23, at end insert—

<(ba) state the cumulative amount of net Scottish emissions in the period from the baseline year to the target year;>
In section 29, page 12, line 31, at end insert—

<(  ) state the proportion of the reduction in the net Scottish emissions account which is accounted for by reductions in net Scottish emissions,>

In section 29, page 12, line 31, at end insert—

<(  ) state the cumulative amount of net Scottish emissions reported under subsection (1)(ba);>

In section 29, page 13, line 4, at end insert—

<(  ) state the average greenhouse gas emissions per megawatt hour of electricity generated in Scotland in the target year;
(  ) state the average greenhouse gas emissions per megawatt hour, and the estimated lifetime cumulative emissions, of any new electricity generation capacity greater than 50 megawatts approved in Scotland in the target year.>

In section 29, page 13, line 4, at end insert—

<(  ) in relation to any electricity generation permission granted in respect of a plant with average per megawatt greenhouse gas emissions which exceed—
(i) those achievable by a modern combined cycle gas turbine; or
(ii) any level specified in guidance issued in relation to consents granted under section 36 of the Electricity Act 1989 (c.29),
give reasons as to why such permission was granted and how such permission will be compatible over the plant’s lifetime with achievement of the targets set out in this Act.>

In section 29, page 13, line 4, at end insert—

<(  ) The report for each year in the period 2011-2050 must—
(a) state the amount of the net Scottish emissions account for each preceding target year;
(b) state the cumulative amount of the net Scottish emissions account for the target year and all preceding target years.>

In section 29, page 13, line 9, at end insert—

<(  ) If the amount of the net Scottish emissions account for an earlier target year requires to be adjusted, the report must—
(a) explain why the adjustment is required;
(b) specify the adjustment required; and
(c) state the adjusted amount.>

Section 30

Des McNulty

68 In section 30, page 13, line 20, leave out <and the 2050 target> and insert <, the 2050 target and, in each target year, the domestic effort target>

Alison McInnes

119 In section 30, page 13, line 23, at end insert—
< ( ) In particular, the report must define and quantify the contribution that the following areas within the Scottish economy are expected to make to the meeting of targets under the Act—
(a) energy efficiency;
(b) energy generation;
(c) land use;
(d) transport.>

Section 31

Des McNulty

69 In section 31, page 13, line 32, at end insert <or that the domestic effort target has not been met in the target year to which the report relates>

After section 31

Shirley-Anne Somerville

70 After section 31, insert—
<Reports on emissions attributable to Scottish consumption of goods and services
(1) The Scottish Ministers must lay before the Scottish Parliament a report in respect of each year in the period 2010-2050 containing the following information.
(2) The report must, in so far as reasonably practicable, set out the emissions of greenhouse gases (whether in Scotland or elsewhere) which are produced by or otherwise associated with the consumption and use of goods and services in Scotland during that year.
(3) The report may also contain such other information as the Scottish Ministers consider appropriate.>
Section 32

Stewart Stevenson
24 In section 32, page 13, line 39, leave out <2030> and insert <2020>

Stewart Stevenson
25 In section 32, page 14, line 4, leave out <2030> and insert <2020>

Stewart Stevenson
26 In section 32, page 14, line 6, leave out <2030> and insert <2020>

Cathy Peattie
120 In section 32, page 14, line 6, at end insert—

<(  ) state the cumulative amount of the net Scottish emissions account for the period 2010-2020;>

Stewart Stevenson
27 In section 32, page 14, line 9, leave out <2030> and insert <2020>

Stewart Stevenson
28 In section 32, page 14, line 10, leave out <2030> and insert <2020>

Stewart Stevenson
29 In section 32, page 14, line 11, leave out <2030> and insert <2020>

Stewart Stevenson
30 In section 32, page 14, line 13, leave out <2030> and insert <2020>

Stewart Stevenson
31 In section 32, page 14, line 18, leave out <2032> and insert <2022>

Section 33

Cathy Peattie
121 In section 33, page 14, line 27, at end insert—

<(  ) state the cumulative amount of the net Scottish emissions account for the period 2010-2050;>
Section 34

Des McNulty

71 In section 34, page 15, line 3, after <must> insert—

<( ) immediately send a copy of the report to the persons who convene and chair such committees of the Scottish Parliament as are for the time being appointed by virtue of standing orders; and

( )>

Patrick Harvie

122 In section 34, page 15, line 5, at end insert—

<( ) But a statement in relation to a report mentioned in subsection (2)(a) or (b) must not be made before the period for Parliamentary consideration has expired.

( ) In this section, the “period for Parliamentary consideration” means the period of 60 days beginning on the day on which the draft is so laid; and in reckoning that period no account is to be taken of any time during which the Scottish Parliament—

(a) is dissolved, or
(b) is in recess for more than 4 days.

( ) Before making a statement under subsection (1) in relation to a report mentioned in subsection (2)(a) or (b), the Scottish Ministers must have regard to any resolution or report of, or of any committee of, the Scottish Parliament made, during the period for Parliamentary consideration, as regards the report.>

Alison McInnes

122A* As an amendment to amendment 122, line 2, leave out from beginning to <not> and insert <; but no such statement may>.

Des McNulty

72 In section 34, page 15, line 15, leave out from <meet> to end of line 16 and insert <attend, if invited, the proceedings of any such committees of the Scottish Parliament as are for the time being appointed by virtue of standing orders, for the purposes of giving evidence on the report.>

Des McNulty

73 In section 34, page 15, line 16, at end insert—

<( ) The Scottish Ministers must have regard to any resolution or report of, or of any committee of, the Scottish Parliament made following the laying of a report mentioned in subsection (2) as regards the contents of the report and any future reports.>

Alison McInnes

123* In section 34, page 15, line 16, at end insert—

<(4) The Scottish Ministers must not implement the proposals and policies set out in a report mentioned in subsection (2)(c) unless the Scottish Parliament has, by resolution, approved the report.>
(5) Where the Scottish Parliament does not approve a report mentioned in subsection (2)(c), the Scottish Ministers must lay a further report under section 31(2), containing amended proposals and policies, before the Parliament; and subsection (4) and this subsection apply to such a further report as they applied to the report originally laid before the Parliament.

(6) Before submitting a further report by virtue of subsection (5), the Scottish Ministers must have regard to any resolution or report of, or any committee of, the Scottish Parliament in relation to the report previously laid before the Parliament.

After section 35

Patrick Harvie

124 After section 35, insert—

<Reporting on emissions associated with imports: consultation>

The Scottish Ministers must, no later than 1 June 2010, consult such persons as they consider appropriate about possible methodologies for recording and reporting on emissions generated outwith Scotland which are associated with the importation of goods and services into Scotland.

Section 59

Des McNulty

74 Leave out section 59

Section 65

Stewart Stevenson

32 In section 65, page 32, line 8, leave out <section 10(2)> and insert <subsection (2) of section 10>

Stewart Stevenson

33 In section 65, page 32, line 9, leave out <subsection (2)(a)> and insert <paragraph (a)>

Stewart Stevenson

34 In section 65, page 32, line 9, at end insert <of that subsection>

Long Title

Stewart Stevenson

35 In the long title, page 1, line 2, leave out <2030> and insert <2020>
Climate Change (Scotland) Bill

1st Groupings of Amendments for Stage 2

This document provides procedural information which will assist in preparing for and following proceedings on the above Bill. The information provided is as follows:

- the list of groupings (that is, the order in which amendments will be debated). Any procedural points relevant to each group are noted;
- the text of amendments to be debated on the first day of Stage 2 consideration, set out in the order in which they will be debated. THIS LIST DOES NOT REPLACE THE MARSHALLED LIST, WHICH SETS OUT THE AMENDMENTS IN THE ORDER IN WHICH THEY WILL BE DISPOSED OF.

Groupings of amendments

**Founding principle**
75

**2050 target**
76

**Interim target: modification**
1, 2, 3, 4, 5, 6, 8, 24, 25, 26, 27, 28, 29, 30, 31, 35

*Notes on amendments in this group*
Amendments 2 and 3 are direct alternatives
Amendments 5 and 6 are pre-empted by amendment 79 in the group “Setting annual targets: criteria”
Amendment 8 is pre-empted by amendment 46 in the group “Power to modify annual targets etc.”

**Setting annual targets: amounts**
36, 37, 38, 39, 78

*Notes on amendments in this group*
Amendment 37 pre-empts amendment 38

**Setting annual targets: criteria**
79, 80, 81, 83, 84, 85, 86, 40, 41, 87, 42, 88, 89, 109

*Notes on amendments in this group*
Amendment 79 pre-empts amendments 5 and 6 in the group “Interim target: notification” and amendment 80 in this group
Role of relevant body in relation to annual targets
82, 90, 91, 92, 93, 97, 49, 106, 107, 108, 110

Notes on amendments in this group
Amendment 97 is pre-empted by amendment 96 in the group “Cases where advice not followed etc.: giving of reasons”
Amendment 49 is pre-empted by amendment 100, also in that group

Deadline for setting annual targets
7

Cases where advice not followed etc.: giving of reasons
94, 95, 96, 98, 99, 100

Notes on amendments in this group
Amendment 96 pre-empts amendment 97 in the group “Role of relevant body in relation to annual targets”
Amendment 100 pre-empts amendment 49, also in that group

Power to modify annual targets etc.
43, 44, 45, 46, 47, 48

Notes on amendments in this group
Amendment 46 pre-empts amendment 8 in the group “Interim target: modification”

Achievement of annual targets: respective contributions of domestic reductions and crediting of carbon units
50, 125, 51, 52, 10, 57, 12, 12A, 12AA, 12AB, 12C, 12D, 12B, 12E, 12F, 13, 14, 60, 19, 61, 62, 63, 65, 68, 69

Notes on amendments in this group
Amendment 60 pre-empts amendment 19

Annual targets: progress towards achievement
9, 101, 111, 20, 112, 21, 64, 22, 115

Notes on amendments in this group
Amendment 9 pre-empts amendment 101
Amendment 111 pre-empts amendment 20
Amendment 112 pre-empts amendment 21
Amendment 64 pre-empts amendment 22

Greenhouse gases
53, 102, 54

Net Scottish emissions account: restriction on use of carbon units
126, 127, 128, 129, 130
Carbon units: source
55, 56

Scottish share of emissions from international aviation and international shipping
58, 11, 11A, 103

Carbon units: carbon offsetting and trading
104

Public engagement strategy
59

Functions of advisory body
105

Relationship between advisory body and Scottish Parliament
131, 132, 134, 135, 136

Minor amendments
15, 16, 17, 18, 32, 33, 34

Electricity generation: advice and reports
133, 137, 138

Power to give directions to advisory body
113, 114

Reports on targets etc.: content
116, 67, 117, 118, 23, 119, 120, 121

Reports on certain kinds of emissions
70, 124

Reports: provision of information to the Scottish Parliament
71, 122, 122A, 72, 73, 123

Charges for supply of carrier bags
74
Transport, Infrastructure and Climate Change Committee

Extract from the Minutes of Proceedings

14th Meeting, 2009 (Session 3)

Tuesday 26 May 2009

Present:

Rob Gibson
Patrick Harvie (Convener)
Alison McInnes
Cathy Peattie (Deputy Convener)

Charlie Gordon
Alex Johnstone
Des McNulty
Shirley-Anne Somerville

Also present: Brian Adam, Robin Harper and Elaine Murray.

Climate Change (Scotland) Bill: The Committee considered the Bill at Stage 2 (Day 1).

The following amendments were agreed to (without division): 1, 4, 38, 5, 6, 40, 41, 42, 88, 90, 97, 8, 10, 57, 11, 12, 13 and 14.

The following amendments were agreed to (by division)—

2 (For 6, Against 2, Abstentions 0)
7 (For 7, Against 1, Abstentions 0)
92 (For 5, Against 3, Abstentions 0)
98 (For 5, Against 3, Abstentions 0)
99 (For 5, Against 3, Abstentions 0)
100 (For 5, Against 3, Abstentions 0)
50 (For 5, Against 3, Abstentions 0)
9 (For 7, Against 1, Abstentions 0)
51 (For 5, Against 3, Abstentions 0)
52 (For 5, Against 3, Abstentions 0)
12A (For 5, Against 3, Abstentions 0)
12B (For 5, Against 3, Abstentions 0)

The following amendments were disagreed to (by division)—

75 (For 2, Against 6, Abstentions 0)
76 (For 1, Against 7, Abstentions 0)
3 (For 2, Against 6, Abstentions 0)
36 (For 2, Against 6, Abstentions 0)
37 (For 2, Against 6, Abstentions 0)
39 (For 2, Against 6, Abstentions 0)
80 (For 2, Against 6, Abstentions 0)
78 (For 1, Against 7, Abstentions 0)
79 (For 2, Against 6, Abstentions 0)
82 (For 2, Against 6, Abstentions 0)
84 (For 2, Against 6, Abstentions 0)
85 (For 1, Against 7, Abstentions 0)
86 (For 1, Against 7, Abstentions 0)
87 (For 1, Against 7, Abstentions 0)
89 (For 2, Against 6, Abstentions 0)
91 (For 2, Against 6, Abstentions 0)
43 (For 2, Against 6, Abstentions 0)
11A (For 2, Against 6, Abstentions 0)
12AB (For 2, Against 6, Abstentions 0)
12C (For 2, Against 6, Abstentions 0)
12D (For 2, Against 6, Abstentions 0)
12E (For 2, Against 6, Abstentions 0)
12F (For 2, Against 6, Abstentions 0)

Amendments 94, 53, 126, 55, 58 and 59 were moved and, with the agreement of the Committee, withdrawn.

Amendments 49 and 101, were pre-empted.

The following amendments were not moved: 81, 83, 93, 95, 96, 44, 45, 46, 47, 48, 125, 102, 54, 127, 128, 129, 56, 103, 104, 130 and 12AA.

Sections 1, 9, 10, 11, 13, 15, 16, 17 and 18 were agreed to without amendment.

Sections 2, 3, 4, 5, 6, 7, 8, 12 and 14 were agreed to as amended.

The Committee ended consideration of the Bill for the day amendment 59 having been disposed of.
Scottish Parliament

Transport, Infrastructure and Climate Change Committee

Tuesday 26 May 2009

[THE CONVENOR opened the meeting at 14:02]

Climate Change (Scotland) Bill: Stage 2

The Convener (Patrick Harvie): Good afternoon, everybody, and welcome to the 14th meeting this year of the Transport, Infrastructure and Climate Change Committee. I remind members, witnesses and everyone else present that all mobile phones and other devices should be switched off.

We have no apologies to record. I welcome to the meeting two MSPs—Sarah Boyack and Robin Harper—who are not members of the committee.

The only item on the agenda is the beginning of our stage 2 consideration of the Climate Change (Scotland) Bill, which is a substantial item and is perhaps enough to be going on with. I welcome the Minister for Transport, Infrastructure and Climate Change, Stewart Stevenson, and his colleagues: Philip Wright is deputy director of climate change in the Scottish Government, Fiona Page is the bill team leader, Frances Beck is a solicitor, and Max McGill is an assistant Scottish parliamentary counsel.

Before we begin our consideration of amendments, I put on record my appreciation of the great deal of hard work that the clerks have put into processing the amendments in difficult circumstances. Their late work is much appreciated.

I will say something about the process. In order to speed things along, if any member who is responsible for an amendment does not wish to move it, they should simply say, “Not moved.” At that point, I will not specifically call for another member to move the amendment, but any other member may move it simply by saying, “Moved.” However, I will not pause for long, so the member should get that in quickly. If no other member moves the amendment, we will simply proceed immediately to the next amendment on the marshalled list.

If a member wishes to withdraw an amendment after it has been moved, I will ask whether anyone objects to its being withdrawn. There is no scope for having a division on whether an amendment should be withdrawn. If any member objects to the amendment being withdrawn, we will immediately proceed to the question on it.

Although it will be possible to intervene when other members are speaking, all members will have the opportunity to contribute to the debate on each group of amendments, if that is possible within the time that is available. I do not expect a great number of interventions, except perhaps when the closing speaker is speaking.

Finally, on the use of the casting vote, which is a possibility, the normal process would be to vote for the status quo. Having looked at the amendments, I do not anticipate their being any reason for me to depart from the normal process. I expect to vote for the bill as it stands, if I am required to use a casting vote.

We might not cover all the amendments that are in front of us today, but we will make as much progress as we can. At the end of the meeting I will announce the deadline for amendments for the next stage 2 meeting.

Before section 1

The Convener: Amendment 75, which is in my name, is in a group on its own. We are considering amendment 75 first, but it relates to the final paragraph of our stage 1 report—paragraph 370—on the bill’s overall purpose. The purpose is perhaps self-evident to committee members who have studied the bill for so long, but I argue that there is a clear opportunity to bind legally future ministers not only to the targets and the framework but to the bill’s objective.

Amendment 75 was inspired by the Stop Climate Chaos Coalition, which argued that the aim and logic of the bill should be explicit in its text. The amendment takes its form of words from the United Nations Framework Convention on Climate Change, which states in article 2 that its objective is

“to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.”

I have used a similar form of words for amendment 75, arguing in it that we should “ensure that Scotland makes … an equitable contribution” to the UNFCCC’s purpose.

I move amendment 75.

I now ask whether any members wish to—I beg your pardon, I have also—forgive me, but this is my first stage 2 as a convener. I hope that you will bear with me for the many mistakes that I am sure I will make.
Do any other members wish to contribute to the debate on amendment 75? Does the minister want to comment?

The Minister for Transport, Infrastructure and Climate Change (Stewart Stevenson): Amendment 75 clearly aims to insert a founding principle into the bill, and we recognise the spirit in which the amendment was lodged. The proposing member referred to the UN convention from which the amendment’s words come. As a general point, of course, such statements do not necessarily have any particular legal effect. If a bill becomes law, it should determine the rights and responsibilities of individuals, companies, Government and public bodies such as local authorities. Laws should impose duties or convey powers. Every word in an act should have legal effect and actually do something.

I want to address a particular point in amendment 75—although the wording properly comes from the UN convention—which could unintentionally, I am certain, have a restricting effect on the bill in some circumstances. I refer to the use of the word “anthropogenic”, which could allow a challenge to actions that are taken in exercise of powers under the bill to address climate change effects that are not anthropogenic in their origins. Examples of that are the substantial emissions of CO₂ that can result from geological sources, such as volcanic activity, but the clear evidence from around the globe is that anthropogenic emissions—that is, human-induced emissions—are driving the problem. I am content with the term “anthropogenic” and will press the amendment.

The use of the word “anthropogenic” might appear to restrict the bill to addressing only climate change effects that are derived from human activity. That could restrict the application of the powers in the bill in other circumstances that, although not frequent, are far from improbable. On that basis, I ask Patrick Harvie to withdraw amendment 75.

The Convener: The term “anthropogenic climate change” is widely—in fact, globally—recognised and understood. I do not accept the argument that it would introduce ambiguity in relation to livestock or ruminants, which can be related to human land use policies and practices. The minister mentioned larger geological sources of emissions, such as volcanic activity, but the clear evidence from around the globe is that anthropogenic emissions—that is, human-induced emissions—are driving the problem. I am content with the term “anthropogenic” and will press the amendment.

The question is, that amendment 75 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

For
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)

Against
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peatlee, Cathy (Falkirk East) (Lab)

Amendment 75 disagreed to.

Section 1—The 2050 target

The Convener: Amendment 76, in the name of Robin Harper, is in a group on its own.

Robin Harper (Lothians) (Green): For the Climate Change (Scotland) Bill to be a success, it will need to do two things: first, it will need to set targets for reductions in emissions at the right levels, and secondly, it will have to set out how to achieve those targets. My first two amendments focus on the targets themselves and I will address them collectively.

The targets in the final bill must be at the levels that are demanded by science. They must also be at levels that allow Scotland to play the responsible role that we want it to play internationally—the bill has frequently been flagged up in that respect. Finally, they must be practical and achievable. Some people would like our economy to be decarbonised completely by 2020, but that is an impractical target and would be doomed to fail.

The best research to date on the issue is by the Tyndall Centre for Climate Change Research, whose staff are Britain’s leading experts on climate change. They calculate that a 90 per cent reduction in our emissions is needed by 2050 to give us even a 30 per cent chance of keeping temperature rises below 2°C. The fact is that the science is shifting, and the news gets worse and worse; it does not get better. Scientists who met in Copenhagen earlier this year ahead of the crunch talks that will take place in December confirmed that the 2007 Intergovernmental Panel on Climate Change data were conservative, that sea level rises will be worse than previously thought and that emissions reductions will need to be quicker than previously proposed. Much of our thinking has been based on the Stern report, which it is universally recognised is already largely out of
date. My amendment 76 therefore seeks to bring the existing long-term target of 80 per cent up to the 90 per cent that has been recommended by Tyndall, Al Gore and others. It is a target that even Epson, the printer company, is prepared to set for itself. Are we going to be less ambitious than Epson?

14:15

We have before us an interim target of a 50 per cent reduction by 2030. That would leave too much of the work to the later phases of the legislation’s life, and would therefore make the final target harder to reach. We can do the mathematics. Every tonne of carbon that we put into the atmosphere at the moment will stay there for 100 years, so it is important to begin reducing carbon now. I therefore urge the committee to back Alison McInnes’s amendment 1, which seeks to retain the 50 per cent interim target but to bring it forward to 2020. I was going to lodge a similar amendment myself, but Alison McInnes got there first.

We need annual targets from the start—targets that allow us to hold ministers accountable. The bill sets no minimum levels for reductions in emissions before 2020, which must be fixed. My second amendment in this area would therefore introduce an annual minimum target—

The Convener: I remind the member that we are debating amendment 76, which is the only amendment in this group. There will be opportunities to debate other amendments as we proceed.

Robin Harper: I see. I am sorry, convener. When I was preparing what I wanted to say, I presumed that the amendments that I have been discussing would be taken together.

I move amendment 76.

The Convener: As no other members want to contribute to the debate on amendment 76, I invite the minister to respond.

Stewart Stevenson: Members will know that I have emphasised the need to be driven by expert advice; we should not proceed before taking expert advice. The United Kingdom Government has sought advice and the figure at the moment is 80 per cent.

Mr Harper said that targets have to be practical and achievable. At this stage, we do not have the information that would help us to understand how 90 per cent could be achievable. However, Mr Harper quite properly made the point that the science is shifting. We will discover whether the 80 per cent target remained the target of successive Governments up until 2050 when we get to 2050. During that time, expert advice will advance.

At this stage, we feel that it would be premature to revise the target in the bill of “at least 80%”. I therefore ask the committee not to support amendment 76.

The Convener: I invite Robin Harper to wind up the discussion on amendment 76.

Robin Harper: I suppose that it all depends on our attitude. The minister would like us to prove that it is necessary to revise the target to 90 per cent and that we can achieve it, but I would like somebody to prove to me that we cannot achieve 90 per cent. If we consider the rapid progress of recent years—both in renewables and, more important, in the possibilities for energy conservation—we can see that 90 per cent is not an impossible target. One way of looking at it is that it is only 10 percentage points more than 80 per cent. It depends on which way you look through the telescope.

The trend of the news does not change, and things are already worse than was suggested in the Stern report. When we compare the presentation made by Jacqueline McGlade with the one made by Lord Adair Turner in the McEwan hall in Edinburgh recently, we see a remarkable contrast. On the one hand, there was a relatively content Government position from Lord Adair Turner, who said that we can do what is required; on the other hand, there was a remarkable series of figures that had been produced by the European Environment Agency. It was not put very strongly, but it was suggested that the situation was already much more severe than we had thought even a year ago.

I argue strongly that if we want the bill to mean something, even in the next five or 10 years, we should go for a target of 90 per cent.

The Convener: The question is, that amendment 76 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Harvie, Patrick (Glasgow) (Green)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 1, Against 7, Abstentions 0.

Amendment 76 disagreed to.

Section 1 agreed to.
Section 2—The interim target

The Convener: Amendment 1, in the name of Alison McInnes, is grouped with amendments 2 to 6, 8, 24 to 31 and 35. I refer members to the notes on pre-emptions in this group, which are provided on the list of groupings. Members should also note that amendments 2 and 3 are direct alternatives.

Alison McInnes (North East Scotland) (LD): Amendment would 1 bring the interim target date forward to 2020, putting the Scottish bill in line with UK and other international reporting and legislation. It reflects the recommendation in our stage 1 report, with which the minister has already said he agrees.

Amendment 3 would set the new 2020 interim target at 42 per cent. As you said, convener, amendment 3 is a direct alternative to the minister’s amendment 2, which proposes that the interim target be the less scientifically credible 34 per cent. In my view, 34 per cent would mean more or less business as usual. For Scotland to show real leadership on climate change, the interim target must be ambitious. That means setting it above the 34 per cent level that has already been established for the UK as a whole.

Science now indicates that a 42 per cent cut by 2020 is the minimum that must be achieved if our efforts are to have any real impact in limiting the damaging effects of climate change. The target is achievable in Scotland, and simply hitting the 3 per cent annual reduction, which was one of the Scottish National Party’s promises for the bill, would allow it to be reached. Long-term targets are all very well, but they are no substitute for short-term action. My amendment 3 would ensure the delivery of early, sustained action. There is overwhelming evidence, as we heard from witnesses at stage 1, that early, sustained action is necessary. Our stage 1 report stresses the need for a “more robust” target. In its evidence, the Royal Society of Edinburgh stated:

“It should be a challenging target that encourages early action, and one that, because of its imminence, perennially impinges on Government perspectives no matter which party is in power.”

Our natural resources give us the ability to deliver more than the UK Climate Change Act 2008 asks of us. As Robin Harper has already mentioned, new research by the Tyndall Centre for Climate Change Research shows that a target of at least 42 per cent is needed to give us the best chance of avoiding dangerous climate change.

The minister has said that the science should determine the targets. It would seem, however, that expedience is currently uppermost in his mind. A weak target means larger cumulative emissions, and it increases the risk of not meeting the overall target. The Government has claimed that it has “the most ambitious climate change legislation anywhere in the world”, but I do not believe that yet. I urge the committee to support the target of 42 per cent, which is driven by the necessity for urgent action. In so doing, the committee can set the tone for the rest of the bill.

I move amendment 1.

Stewart Stevenson: I will explain our position on Ms McInnes’s amendments. I am happy to support amendment 1—indeed, we submitted an identical amendment, albeit after Ms McInnes, so we are entirely happy to support it.

A challenging target will set the pace for the first decade of statutory annual targets, thereby helping to drive early emissions reductions. I am pleased that we share that ambition—I am sure that that is true of everyone here. However, I cannot support amendment 3. We need a suitably challenging interim target for 2020 that will ensure real, tangible action by the Scottish ministers, but I cannot support a target that cannot be delivered in the absence of appropriate action by the UK Government and the European Union.

Let me talk through some of the difficulties with that. We have a clear understanding of the level of challenge that is required to deliver emissions reductions of 34 per cent and 42 per cent in 2020, and we have considered carefully and in depth the information and recommendations in the UK Committee on Climate Change’s first report, which was issued in December 2008. We have also undertaken additional analysis to explore and clarify the details behind those recommendations as part of work to identify how to meet new Scottish climate change targets.

Reducing emissions is a complex business that involves different tiers of activity throughout Scotland, the UK and the European Union. Collectively, those tiers of activity influence the overall amount of Scottish emissions each year. Scotland’s emissions are split between the traded sector and the non-traded sector. That key distinction has significant implications for achieving the target. The traded sector is made up of power stations and other energy-intensive industrial installations, which are covered by the EU emission trading scheme. That scheme is one of our strongest policy levers to reduce emissions from large emitters, but it will deliver to our numbers emissions reductions to 2020 at levels that are predetermined by the European Union. Those emissions account for approximately 40 per cent of Scottish emissions. We do not directly have the power to influence the level of those reductions. The only factor that will increase the reductions that are planned through the ETS is the...
level of emissions reductions that the European Union commits to. That is why we are eagerly looking to a future decision by the EU to reduce greenhouse gas emissions by 30 per cent by 2020, which is not expected until we are successful in agreeing a new international agreement to replace the current Kyoto protocol.

It is also important to remember the UK Government’s influence on Scottish emissions. We cannot seek to reduce emissions at a higher rate than the UK rate in reserved areas such as energy generation. We can plan emissions reductions of 42 per cent in 2020 only if the UK Government is equally ambitious and the EU reduces its emissions by 30 per cent. I will give members some quantitative numbers. A 42 per cent target would mean that we had to deliver reductions of 30 per cent in 2020 only if the UK Government is equally ambitious and the EU reduces its emissions by 30 per cent. I will give members some quantitative numbers. A 42 per cent target would mean that we had to deliver reductions of around 17 million tonnes of CO₂ equivalent between 2006 and 2020. Even if the Scottish ministers delivered everything that is detailed in the UK Committee on Climate Change’s 500-page report, we would still have a 4 million tonne shortfall on the 42 per cent target. It is thus impossible for us to deliver by ourselves. We need matched action and commitment by the UK Government and the EU.

However, I share the committee’s ambition to reduce emissions as quickly as possible, which is why I have lodged amendments on behalf of the Scottish Government. Our amendment 2 requires a 2020 interim target to reduce emissions by at least 34 per cent. More significant, amendment 4 will require the Scottish ministers to lay an order before Parliament that seeks to increase the 2020 interim target to at least 42 per cent if the EU agrees to reduce its greenhouse gas emissions by at least 30 per cent by 2020.

In order to change the interim target year to 2020, a number of consequential amendments are required throughout the bill. My remaining amendments in the group seek to achieve that aim.

We are absolutely committed to increasing the interim target to 42 per cent at the earliest opportunity, which is why I propose to put that requirement on the Scottish ministers in the bill. There are no ifs and no buts. We will have to increase the target if the EU commits to emissions reductions of at least 30 per cent. Doing things in that way is our firm challenge to the EU to rise to the ambitions that we are setting. It will ensure that we increase the 2020 target at the earliest opportunity, and it signals our commitment to delivering the target to the international community.

14:30

**Des McNulty (Clydebank and Milngavie) (Lab):** We are talking about a complex and difficult area of the bill. People say that science is to the forefront and that we must make decisions on the most appropriate scientific basis, but I am not sure whether we have all the information that we require about the achievability of targets in Scotland to allow us to say with certainty that figure A or figure B is the maximum that is achievable. I seriously considered proposing an alternative percentage, as Alison McInnes did. My problem was that, with the evidence base that I have, it was difficult to say with certainty whether 42, 40 or 39 per cent is right.

An interim target of 34 per cent would be unambitious. A problem is that Governments in general—not just the Scottish Government—are almost taking an approach of saying, “We will if you will.” Everybody is waiting for somebody else to be the first person to move and I am not sure whether that is the best way to proceed.

I have difficulty with both the amendments that would change the interim target. I incline more towards the ball park in which Alison McInnes is operating, but I am not sure whether 42 per cent is the correct figure.

I would like the Scottish ministers to seek advice from the relevant body, which is defined in section 5, about the maximum contribution that is achievable through early action to reduce the net Scottish emissions account between 2010 and 2020.

**Stewart Stevenson:** It may be useful if I say that we plan to take precisely that approach. I hope that the member recognises that we, too, want to be ambitious and that we wish to obtain that advice at the earliest opportunity.

**Des McNulty:** If that advice were obtained, I would expect that body to stipulate a higher target than the minister proposes and I would want the Scottish Government to put that higher target in the legislation. I would like amendments to be lodged at stage 3 to facilitate that process.

The right place for us to be is at 38 to 40 per cent, but I want us to say absolutely robustly that the specified figure is the maximum that is achievable and is supported by a robust analysis of what is to be delivered.

My attitude to the Government’s amendments and those in Alison McInnes’s name is to ask whether they will take us to the right place, which is not that the committee should pick a percentage for Scotland but that we should pose to the relevant advisory body the right question—what is the most that we can do to make the bill as strong as it can be? We should make the figure that that
body provides our target. That is the approach that I would like us to take. I am interested in taking that approach on a cross-party basis and in hearing colleagues’ opinions about how we would best achieve it. The target is not a subject for political point scoring; our objective in the bill should be the highest level that is consistent with what is achievable. I hope that everybody will work together constructively to achieve that end.

We need to focus on what Scotland can do. I do not think that there has been a systematic analysis of what Scotland can achieve, given its unique opportunities and potential in the development of renewables. The target that emerges from the debate should be the one that corresponds to what Scotland can achieve; we should not pinch someone else’s target.

The Convener: Des McNulty was right to say that we should not pinch a target from other sources. We should be clear: the 34 per cent and 42 per cent targets are existing, not new, targets; the question is whether we should adopt one of them in Scotland’s bill. It has always struck me that there seems to be a lack of rationale for the lower interim target. To adopt the lower target on the assumption that we will try to reach wider agreement to work towards the higher target would still leave us with a question: whatever target we set, what will we do to get ourselves onto an ambitious emissions reduction trajectory? If our trajectory aims at the lower interim target, even just for the first year or two, it will be vastly more difficult to achieve the higher interim target if and when we adopt it.

The only basis for taking action on climate change is the assumption that the world will come to its senses and work together to achieve ambitious reductions. It seems bizarre to set a target on an assumption that the world will not do that. I am puzzled by the suggestion that although we know what is required we should set a target of 34 per cent in the meantime. I simply do not understand that position.

Sarah Boyack (Edinburgh Central) (Lab): I agree with bits of what members have said. I think that Labour would want to go further than 34 per cent. Our difficulty with setting another target is partly to do with what the minister said about the traded sector.

It is difficult for us to say that our bill will be more radical than everyone else’s and will push everyone at Copenhagen in the autumn if it is not more radical. I cut to the chase. Our problem with amendment 4 is that it assumes a target of 34 per cent but suggests that should Europe sign up to a tougher target we will increase our target to 42 per cent. Such an approach will cut across our attempts to produce a radical bill that will persuade everyone else to sign up to a tougher target.

We are not convinced that work is being done that can take us to 42 per cent, and there is a moot point about when we will be able to make the shift. We want the bill to set a tougher target and we do not think that the Scottish target should be predicated on what the rest of Europe is signing up to. That is the wrong approach.

The difficulty is that we are at stage 2, debating two targets. We want to come back to the issue. As Des McNulty said, the Labour Party wants to talk to colleagues about how much further we can go. We must ensure that we get the target right. This is a process. During consideration of previous bills in the Parliament we continued to discuss issues after stage 1 committee reports had been published. Our report on the Climate Change (Scotland) Bill at stage 1 was excellent, but the work does not stop at stage 2; stage 3 will be as important as the other stages have been. At stage 3 we will want the approach in the bill to go further than is proposed in amendment 4.

We welcome the minister’s willingness to bring forward from 2030 to 2020 the year by which the interim target must be achieved, which will help to push the pace, but we are not there yet. In the early days of the Parliament, civil servants told me in a “Yes Minister” way that the renewables targets that we were setting were very ambitious. We now have a target of 50 per cent of electricity generation to come from renewables by 2020, but it took us a while to get there.

We must ensure that the target in the bill is ambitious and credible. I hope that we can come back to the issue, because we should be discussing the matter in the committee and beyond it. What currently seems too difficult to achieve will, in time, have to be delivered. The issue is to do with what we put in the bill, and that—along with the evidence that we have heard from the minister on the traded sector—is why we are reluctant to vote today for the 42 per cent target that Alison McInnes has proposed.

We can go further than the 34 per cent target, so we want to push beyond it. Des McNulty is right to say that the issue is complex. We are not happy with setting a target that says to the rest of Europe, “We will do this only if you will.” We should consider what Scotland can do—we all know that it has greater renewables potential.

No one has yet mentioned the business community. We do not want to saddle businesses with a figure that is generally viewed as very difficult to achieve and that they would view as not credible, but it is clear from all the evidence that the committee has received that we should go further together. We should find some space to set a different target by the end of the bill process. I hope that committee members will not stick with
amendment 4 as it stands; it is not ambitious enough—we need to do better.

The Convener: Are there any brief additional remarks?

Stewart Stevenson: Yes—I will try not to push the boat too far on the length of time.

A key point is that the figures—34 per cent and 42 per cent—have come from expert advice. The 42 per cent target that appears in the amendment in my name would mean that our bill would be the only one in the world—as I understand it, subject to anyone telling me otherwise—with an ambition at that level, so we are setting the pace.

We can in no way control, through whatever we do in Scotland, the trajectory in relation to the 40 per cent of our carbon emissions that are within the European Union trading scheme’s purview. To set a figure that takes no account of what we know will come from that traded sector, knowing that we cannot close the 4 million tonne CO₂ equivalent gap, would simply be to sign up to failure.

We must go to Europe and say, “If you sign up for 30 per cent, we will sign up for the more ambitious 42 per cent target.” We will seek to be part of the team that is persuading Europe by saying we are up for that challenge and ready to accept it. Of course, it is likely, upon receiving the advice that we will seek after the bill has completed its passage, that the 34 per cent figure will be revisited. Ministers have the power to raise those percentages—although they have no power to lower them—and, based on expert advice, we will end up with the highest possible figure for the 2020 target. We would ask the committee to give us advice on a possible figure for that, based on what can be delivered. I urge members to support the amendments in my name, and I hope that we can continue our constructive dialogue on what is generally acknowledged to be a very complex area.

Alison McInnes: I stress that amendment 1 is not about point scoring, but is driven by what I believe is necessary rather than what might be comfortable for us. There are only two options on the table this afternoon.

The minister has not sought guidance directly from the UKCCC, but has relied instead on that committee’s report for the UK, thereby ignoring the specific issues in relation to Scotland that could help us to deliver on a higher target. We must send the right signal to Scottish business and investors, who have told us that they want certainty in relation to what is required of them.

There is no point in waiting for others to catch up because, as the convener has said, the longer we put off the 42 per cent target, the less achievable it will be. We should not be misled by the minister’s suggestion that it is conditional on others’ actions; Des McNulty’s point about the “We will if you will” approach was spot on. Someone needs to take the lead; it needs to be Scotland. I have real doubts that a tougher target will be proposed at stage 3 if we concede the 34 per cent target today.

Amendment 1 agreed to.

14:45

Amendment 2 moved—[Stewart Stevenson].

Des McNulty: Convener, may I seek clarification from the minister on an issue?

The Convener: I will allow one brief question.

Des McNulty: When I spoke earlier, I asked the minister whether he would be agreeable to publishing, before the end of 2009, advice from the relevant body on the maximum achievable contribution towards reducing the net Scottish emissions account through early action in the period 2010 to 2020. I also asked whether he would be agreeable to putting that higher target to the Parliament in short order. Is the minister prepared to commit to that today?

Stewart Stevenson: That is an approach that commends itself to the Government.

The Convener: The question is, that amendment 2 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR

Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

AGAINST

Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)

The Convener: The result of the division is: For 6, Against 2, Abstentions 0.

Amendment 2 agreed to.

The Convener: I ask members to ensure, if at all possible, that the debate is concluded before we begin voting on amendments.

Amendment 3 moved—[Alison McInnes].

The Convener: The question is, that amendment 3 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.
The Convener: The result of the division is: For 2, Against 6, Abstentions 0.

Amendment 3 disagreed to.

Section 2, as amended, agreed to.

After section 2

Amendment 4 moved—[Stewart Stevenson]—and agreed to.

Section 3—Annual targets

Amendment 36, in the name of Alison McInnes, is grouped with amendments 37 to 39 and 78. I refer members to the notes on pre-emption in the group, which are in the groupings list.

Amendments 36, 37 and 39 relate to the setting of annual targets. For the bill to have any real effect in fighting climate change, it is vital that the requirement for early action is built on. Delaying the introduction of 3 per cent annual targets until 2020 will mean that the required action will not be taken in the crucial first years. Every year ambitious targets are delayed, extra greenhouse gases are released into the atmosphere and preventing dangerous climate change becomes much harder.

The First Minister has said that his legislation will be more ambitious than the Labour Government’s legislation in every respect, but the bill backtracks on that. It also denies Scotland the economic advantage that it could have, as we run the risk of missing out on the green jobs revolution that would come from a speedy transition to a low-carbon economy. Amendments 36, 37 and 39, which are one of the Stop Climate Chaos Coalition’s big asks, reflect the wishes of a great many people throughout the country. All committee members were at the climate change rally last month, so I do not need to remind them of the strength of feeling on the issue.

I move amendment 36.

Des McNulty: Amendment 38 is an attempt to ensure that progress works out steadily, year by year, rather than starts slowly and ends with a rapid incline. There must be criteria in the bill that require ministers to ensure that they have a planned reduction of emissions over the full period, to allow the interim target to be reached. One of the concerns has been about a lack of early action; the amendment is intended to deliver that process.

Although we have not supported the introduction of an immediate 3 per cent year-by-year reduction and will not support amendment 36, we have consistently felt that the Government needs to bring forward from 2021 the date at which the 3 per cent annual reduction will be achieved. That is part of the thinking behind amendment 38.

Robin Harper: As the afternoon has progressed, it has become increasingly clear that amendment 78 might be even more necessary than we thought.

Amendment 78 proposes that the 3 per cent annual reduction in section 3(2)(c) be changed to 4.2 per cent in the period 2020 to 2050—by which time we will find that 3 per cent is not enough.

As other amendments that call for more effective targets to be set have so far failed, I argue that setting an ambitious target for the period 2020 to 2050 now is even more necessary than before.

Stewart Stevenson: I have often spoken to the committee and Parliament to affirm our commitment to deep and full meaningful emissions cuts being implemented as soon as possible, to enable us to meet our 80 per cent goal by 2050. The key words to keep in mind are “as soon as possible.” I agree that we have to build towards achieving that level of annual reduction as soon as possible. I note Des McNulty’s suggestion that we need to bring forward the date at which we move to 3 per cent annual targets. The important thing is that we do so based on the expert advice of the Committee on Climate Change. We consider that it is important that expert advice drives everything we do with regard to numbers.

Amendment 38 would increase the challenge that the Government faces, but it is nonetheless a proper amendment that we can accept. The other amendments, however, anticipate the expert advice and we cannot accept them.

We have, of course, brought forward our interim target from 2030 to 2020. We have always had the intention that targets for 2010 to 2019 will ensure that we deliver on the 2020 target. Des McNulty’s amendment is consistent with that goal and helps us clarify the actions that the Government needs to take.

The Convener: I call Alison McInnes to wind up the debate and indicate whether she wishes to press the amendment.

Alison McInnes: I will press amendment 36.

The Convener: The question is, that amendment 36 be agreed to. Are we agreed?
Members: No.

The Convener: There will be a division.

For
Patrick Harvie (Glasgow) (Green)
Alison McInnes (North East Scotland) (LD)

Against
Rob Gibson (Highlands and Islands) (SNP)
Charlie Gordon (Glasgow Cathcart) (Lab)
Alex Johnstone (North East Scotland) (Con)
Des McNulty (Clydebank and Milngavie) (Lab)
Cathy Peattie (Falkirk East) (Lab)
Shirley-Anne Somerville (Lothians) (SNP)

The Convener: The result of the division is: For 2, Against 6, Abstentions 0.

Amendment 36 disagreed to.

Amendment 37 moved—[Alison McInnes].

The Convener: The question is, that amendment 37 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

For
Patrick Harvie (Glasgow) (Green)
Alison McInnes (North East Scotland) (LD)

Against
Rob Gibson (Highlands and Islands) (SNP)
Charlie Gordon (Glasgow Cathcart) (Lab)
Alex Johnstone (North East Scotland) (Con)
Des McNulty (Clydebank and Milngavie) (Lab)
Cathy Peattie (Falkirk East) (Lab)
Shirley-Anne Somerville (Lothians) (SNP)

The Convener: The result of the division is: For 2, Against 6, Abstentions 0.

Amendment 37 disagreed to.

Amendment 38 moved—[Des McNulty]—and agreed to.

Amendment 39 moved—[Alison McInnes].

The Convener: The question is, that amendment 39 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

For
Patrick Harvie (Glasgow) (Green)
Alison McInnes (North East Scotland) (LD)

Against
Rob Gibson (Highlands and Islands) (SNP)
Charlie Gordon (Glasgow Cathcart) (Lab)
Alex Johnstone (North East Scotland) (Con)
Des McNulty (Clydebank and Milngavie) (Lab)
Cathy Peattie (Falkirk East) (Lab)
Shirley-Anne Somerville (Lothians) (SNP)

The Convener: The result of the division is: For 2, Against 6, Abstentions 0.

Amendment 39 disagreed to.

Amendment 78 moved—[Robin Harper].

The Convener: The question is, that amendment 78 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

For
Patrick Harvie (Glasgow) (Green)

Against
Rob Gibson (Highlands and Islands) (SNP)
Charlie Gordon (Glasgow Cathcart) (Lab)
Alex Johnstone (North East Scotland) (Con)
Alison McInnes (North East Scotland) (LD)
Des McNulty (Clydebank and Milngavie) (Lab)
Cathy Peattie (Falkirk East) (Lab)
Shirley-Anne Somerville (Lothians) (SNP)

The Convener: The result of the division is: For 1, Against 7, Abstentions 0.

Amendment 78 disagreed to.

Section 3, as amended, agreed to.

Section 4—Setting annual targets

The Convener: Amendment 79, in my name, is grouped with amendments 80, 81, 83 to 86, 40, 41, 87, 42, 88, 89 and 109. I refer members to the notes on pre-emption.

On amendment 79, I refer members to the evidence that has been given to us by the Stop Climate Chaos Coalition and the proposals that it has made with regard to the criteria that ministers must apply to the setting of annual targets.

The amendments in my name in this group have two broad aims, the first of which is to ensure that the criteria include the concept of a fair and safe cumulative emissions budget. There are several approaches to the issue of cumulative emissions, and I know that members have attempted to address the issue at various points in the bill. Considering those amendments will give us a useful opportunity to debate a number of approaches. My amendments would simply ensure that the issue of cumulative emissions would have to be considered as a criterion in the setting of annual targets. In addition to that, issues of social disadvantage and environmental considerations would be included in the target-setting criteria.

My second aim is to ensure that, as well as ministers having regard to the criteria, the relevant body would be required to report on the target-setting criteria. That is, perhaps, a secondary concern, but it is important for a Scottish cumulative emissions budget to be measured and reported on by the relevant advisory body, given the scientific basis of the work.
Amendments in this group also cover issues that relate to amendment 93 in the next group. Although the amendments are in separate groups, I hope that members will see them as achieving a coherent objective.

I move amendment 79.

15:00

Alison McInnes: Like you, convener, I am supportive of the idea of a cumulative emissions budget being enshrined in the bill. The effect of my amendment 80 would be similar to that of your amendments 79 and 84, and I would be comfortable with either outcome. The introduction of a cumulative emissions budget is vital for the success of the bill. It is not enough simply to report on emissions; we must set a proper limit on how much Scotland can safely emit in total during the period 2010 to 2050. It is important to remember that limiting the impact of climate change is a question not of percentage reductions, but of the total amount of greenhouse gases in the atmosphere.

From that limit, and knowing the concentration of greenhouse gases at present, it is possible to work out how much more can safely be emitted in the next 40 years. From that, it is possible to work out Scotland's share of emissions. We need the two things to run together.

Des McNulty: Amendment 40 would add "jobs and employment opportunities" to the other economic criteria that the bill identifies. That seemed to be an omission, as I hope the minister will be prepared to accept.

It struck me that there is an inconsistency in approach, in that there appears to be a focus on communities in some parts of the list of criteria in section 4(4), whereas in relation to poverty the focus seems to be on individuals. Climate change and the measures that we might take to tackle it could impact in a different way on poorer and deprived communities compared with their impact on other communities. Amendment 41 gives the minister an opportunity to reflect on that and, I hope, to acknowledge the possibility of including in the bill issues around poorer and deprived communities.

Amendment 42 is a testing amendment for the minister. As we have debated the matter in the committee more than once, the minister is aware of the problems of defining what is rural and not rural, as well as the intermediate degrees of rurality. All of rural Scotland should be highlighted, irrespective of whether the communities concerned are on the outskirts of Inverness or Aberdeen, or more than 60 minutes away from a town with a 10,000 population. The point is worth posing to the minister. In that context, I raise the possibility of defining the relevant criteria not so much in terms of degrees of rurality, but based on more concrete factors such as access to the gas grid, which might define the impact of adaptation measures on particular households.

We are supportive of amendment 88, lodged by Patrick Harvie, which introduces environmental considerations, in particular the likely impact of targets on biodiversity. Patrick Harvie has not yet spoken on that amendment, but I wanted to mention it.

On the issue of having a "fair and safe Scottish emissions budget", we would like to hear more about that proposal from the members behind it and to hear the minister's response.

Stewart Stevenson: We find ourselves comfortable supporting a number of amendments in the group. Amendments 40 to 42, from Des McNulty, somewhat improve the bill. They provide a certain clarity and consistency that we are happy to accept. In the same spirit, the convener's amendment 88 would add a requirement to consider "the likely impact of the targets on biodiversity", and we agree that that is worth pursuing.

Other amendments in the group present challenges. Amendments 79, 81 and 83 seek to update the criteria that ministers must take into account in setting the new interim target. We believe that that is covered by amendments 5 and 6, on which the committee will vote later, but which were debated in group 3. Amendments 79, 81 and 83 would move the bill's reference to the interim and 2050 targets from being contained in a standalone subsection to being included among the target-setting criteria in section 4(4). That is not necessary, because the duty on the Scottish ministers to meet the interim and 2050 targets is already contained in the bill and, as such, that must influence the level at which annual targets are set.

However, the target-setting criteria are less obvious matters, which are not detailed elsewhere in the bill. Section 4(4) is designed to ensure that the criteria are in fact taken into account when decisions are taken about setting annual targets. On the ground that they are not necessary, I cannot support amendments 79, 81 or 83.

Amendments 80, 84, 89 and 109 attempt to introduce a concept that is referred to as a "fair and safe Scottish emissions budget".

In essence, that is a cumulative emissions budget for the period 2010 to 2050. That approach does not commend itself—it might be unwise, and it is
certainly unnecessary. The bill’s annual target approach contains many of the key elements that a cumulative emissions budget seeks to cover. Trying to fix an overall emissions budget lasting over 40 years is unwise at this stage, and would provide unworkable flexibility. It is worth reminding ourselves that we will have set targets up to 2027, which is basically half the period concerned, by October 2011. The bill has a great deal to say on that subject already.

I draw the committee’s attention to group 23, which we will come to at a later stage, and in particular to amendment 118 in Cathy Peattie’s name, which addresses the issue in what we think is a more appropriate way and in a way that, depending on what happens before we come to that amendment, we expect to be able to support. We are in the hands of the convener as far as procedure is concerned, but it appears to us that, if the committee were to agree to the amendments in the group that is now before us, amendment 118 would have to fall. We therefore direct members’ attention towards amendment 118.

We will always be setting batches of annual targets for between 12 and 17 years, based on expert advice. That is how Scotland’s total permissible cumulative emissions are defined. It is worth reminding ourselves that when we publish our emissions we will do so by tonnes of CO₂, not by percentages. We believe that that is the appropriate approach. The bill provides flexibility to react to the many uncertainties that will arise in the four decades to 2050. I oppose—and recommend that the committee oppose—amendments 80, 84, 89 and 109.

Amendments 85 and 86 would shorten the list of economic circumstances to which ministers must have regard in setting annual targets. I cannot support that, given that particular sectors will play a crucial role in the achievement of those targets. The inclusion of the subparagraph on “small and medium-sized enterprises” was a genuine attempt to recognise the significant difference between Scotland and England. We have a far larger proportion of SMEs, and it is important that we recognise that in the bill. I do not want to give the impression that the bill’s list of target-setting criteria is untouchable, but I think that it provides the way forward.

We are not opposed to the spirit of amendment 87, but we believe it to be unnecessary as the broader theme of equalities is covered more conclusively in section 62.

In conclusion, we oppose amendments 79 to 81, 83 to 87, 89 and 109 but we would be happy for amendments 40 to 42 and 88 to be incorporated into the bill.

The Convener: I welcome the indication that the minister can be flexible and willing to accept amendments. However, I still believe that certain aspects of my proposed approach would simplify things rather than increase complexity. A clearer and simpler approach to the target-setting criteria would benefit not only ministerial decisions on targets, but parliamentary scrutiny. Moreover, on the economic aspects that the minister referred to, I think that the impact on SMEs would not cease to be a consideration and would still be a relevant wider economic issue. However, referring specifically to SMEs and therefore setting them apart from other economic factors seems to me to add an unnecessary level of complexity.

As a result, I press amendment 79 and remind members that, if it is agreed to, it will pre-empt amendments 5 and 6, which were debated earlier, and amendment 80.

The question is, that amendment 79 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McNulty, Des ( Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 2, Against 6, Abstentions 0.

Amendment 79 disagreed to.

Amendments 5 and 6 moved—[Stewart Stevenson]—and agreed to.

Amendment 80 moved—[Alison McInnes].

The Convener: The question is, that amendment 80 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McNulty, Des ( Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)
The Convener: The result of the division is: For 2, Against 6, Abstentions 0. We seem to be establishing a pattern.

Amendment 80 disagreed to.

Amendment 81 not moved.

The Convener: Amendment 82, in my name, is grouped with amendments 90 to 93, 97, 49, 106 to 108 and 110.

Amendment 82 deals with the advisory body’s role in relation to annual targets. As it stands, section 21 makes it clear that sections 22 to 27 will take effect only when the Scottish Government designates an advisory body under section 19, so my comments relate to a scenario in which the Government has already made that designation.

It has been suggested that when the Government sets up an advisory body, there will still be problems with the process of proposing, advising and drafting annual targets, and amendment 82 seeks to ensure that the advisory body will be the primary driver of the targets by giving it primacy in proposing them. That has been done by lifting some wording from section 5, which requires ministers to seek “advice of the relevant body” on meeting a “fair and safe” cumulative emissions budget.

I apologise to members for not having all the papers with me that I should have to speak to this amendment. I might make other points when I wind up.

I move amendment 82.

15:15

Alison McInnes: Amendment 92 seeks to specify certain requirements for a report issued by “the relevant body”, which might not necessarily be the advisory body. Once the annual targets are set, it is important that the appropriate body reviews them comprehensively and that the Parliament is able to reflect on them with as detailed a report as possible. The amendment seeks to correct what I think is an anomaly in which a report that is made by a subsequently appointed advisory body would have more detailed direction and requirements than would automatically fall on the relevant body.

Stewart Stevenson: At the outset, I should say that amendments 90, 97 and 49, in the name of the convener, are acceptable to us. I will say more about those and speak to amendment 108.

On amendments 82 and 91, the bill currently requires Scottish ministers to request the advice of the relevant body prior to laying a draft order in the Scottish Parliament to set annual targets. When setting targets, ministers must also have regard to the interim 2050 targets and the specific target-setting criteria that are listed in section 4(4). Amendments 82 and 91 seek to require Scottish ministers to seek the relevant body’s advice on the target-setting criteria instead of ensuring that Scottish ministers retain the duty to have regard to the criteria themselves. Ministers will and must be informed by expert advice, and when they consider it they will quite rightly need to take account of the target-setting criteria. The ultimate responsibility for making decisions on the annual targets lies with Scottish ministers, subject to Parliament’s approval of the order to bring them into law. The amendments change that emphasis in the bill and potentially reduce the independent nature of the advice. Moreover, by seeking to transfer responsibilities to the UK Committee on Climate Change, they also reduce the ministers’ responsibilities. I do not think that that strikes the right balance and therefore cannot support amendments 82 and 91.

On amendments 92 and 93, which seek to place duties directly on the relevant body, I point out that the relevant body will in the first instance be the UK Committee on Climate Change. The bill does not place duties on the relevant body because section 38 of the UK Climate Change Act 2008 requires that that committee must provide the Scottish ministers with advice and other assistance that they request regarding climate change targets. Instead, the bill places duties on Scottish ministers to seek that body’s advice.

There are further technical flaws with the amendments. For a start, they are unnecessary, as section 22 already sets out the duties that they seek to create for any Scottish advisory body that is established under the bill. I therefore cannot support amendments 92 and 93.

Amendments 90 and 97 seek to require Scottish ministers to publish the advice that they receive from the relevant body on the setting of annual targets. Given that, in practice, I have already committed to publishing that advice, I have no difficulty in accepting the amendments.

With regard to amendment 49, section 7 requires Scottish ministers to request the advice of the relevant body prior to laying a draft order to modify any aspect of the annual targets. If the provision made by ministers is different from the advice that they are given, they must publish a statement setting out their reasons. Amendment 49 seeks to require ministers to lay that statement before Parliament. Although there is a small flaw in the amendment’s drafting—the word “and” appears to be missing from the beginning of the text—I can appreciate why the provision might be useful and am content to accept the principle
behind it. If it is agreed to, we are willing to commit to rectifying the drafting flaw.

We consider that there is a flaw in amendment 106 that renders it unnecessary. The amendment creates a duty to request the advisory body’s advice on the target-setting criteria. However, if a Scottish advisory body was established, that duty would be unnecessary by virtue of section 22, which requires that the advisory body explain its views on the proposed annual targets by reference to the target-setting criteria. For that reason, I cannot support amendment 106 or the consequential amendments 107 and 110.

The effect of amendment 108, in the convener’s name, would be to require the advisory body to state what annual targets are appropriate rather than what it thinks of the targets that ministers propose. In practical terms, it is difficult to see how the body could comment on the appropriateness of proposed annual targets without giving a view on what targets are appropriate. Therefore, on balance, I would be relaxed were the committee to accept amendment 108, which may be considered to add some useful clarity to the bill.

We would be content to accept amendments 90, 97 and 49 with a caveat that we would correct the drafting later. We would also be quite relaxed if the committee wished to agree to amendment 108.

The Convener: I acknowledge the minister’s willingness to accept some amendments. I am willing to think again about some of the technical drafting issues, particularly on amendment 93. However, the general issues that are raised in this group show that further work needs to be done to ensure that the independent and scientifically based advisory body—the UK Committee on Climate Change or a future Scottish body—is in the driving seat. It is widely recognised that our approach to the setting of targets must be scientifically, rather than politically, determined. Empowering the advisory body and, perhaps, placing further duties on it would be more likely to achieve that.

The group has been reasonably well debated. I have indicated my willingness not to move amendment 93, but I will press amendment 82. I remind members to note the pre-emptions in the group.

The question is, that amendment 82 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

For
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)

Against
Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 2, Against 6, Abstentions 0.

Amendment 82 disagreed to.

Amendment 83 not moved.

Amendment 84 moved—[Patrick Harvie].

The Convener: The question is, that amendment 84 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

For
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)

Against
Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 2, Against 6, Abstentions 0.

Amendment 84 disagreed to.

Amendment 85 moved—[Patrick Harvie].

The Convener: The question is, that amendment 85 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

For
Harvie, Patrick (Glasgow) (Green)

Against
Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 1, Against 7, Abstentions 0. That was even worse than the previous amendments.

Amendment 85 disagreed to.

Amendment 86 moved—[Patrick Harvie].

The Convener: The question is, that amendment 86 be agreed to. Are we agreed?

Members: No.
The Convener: There will be a division.

FOR
Harvie, Patrick (Glasgow) (Green)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 1, Against 7, Abstentions 0.

Amendment 86 disagreed to.

Amendments 40 and 41 moved—[Des McNulty]—and agreed to.

Amendment 87 moved—[Patrick Harvie].

The Convener: The question is, that amendment 87 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR

Harvie, Patrick (Glasgow) (Green)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 1, Against 7, Abstentions 0.

Amendment 87 disagreed to.

Amendment 42 moved—[Des McNulty]—and agreed to.

Amendment 88 moved—[Patrick Harvie]—and agreed to.

The Convener: Well, there we are—that amendment is agreed to.

We move to the next group. Amendment 7, in the name of the minister, is the only amendment in the group.

Stewart Stevenson: Amendment 7 is designed to ensure that the Scottish ministers' duty to set annual targets for the periods that are specified in section 4(2) continues to apply if unforeseen circumstances cause any of the deadlines for setting targets to be missed. Without the amendment, the duty to set annual targets for a specified period could be considered to be lost if the relevant deadline were missed. That could leave ministers unable to fulfil one of the bill's principal objectives.

The Scottish ministers have no intention of failing to meet the deadlines in section 4; amendment 7 is simply a sensible precaution. It will not provide a licence to miss deadlines. The amendment includes the safeguard that, if a deadline is missed, ministers must set the relevant annual targets "as soon as reasonably practicable" thereafter.

I will give an example of circumstances that could be beyond ministers' control and which might cause one to miss a deadline. I have not worked out the exact years but, for argument's sake, if a Government fell halfway through a period at precisely the point when targets had to be set, laying the appropriate orders before Parliament might not be possible, because Parliament would not be in session. Without amendment 7, laying the appropriate orders would not be possible when Parliament resumed. That is one example of the technical reason why the amendment is important.

I move amendment 7.

The Convener: The question is, that amendment 7 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR

Harvie, Patrick (Glasgow) (Green)
Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

AGAINST
McInnes, Alison (North East Scotland) (LD)

The Convener: The result of the division is: For 7, Against 1, Abstentions 0.

Amendment 7 agreed to.

Amendment 89 moved—[Patrick Harvie].

The Convener: The question is, that amendment 89 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR

Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)

AGAINST

Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)  
Somerville, Shirley-Anne (Lothians) (SNP)

**The Convener:** The result of the division is: For 2, Against 6, Abstentions 0.

**Amendment 89 disagreed to.**

**Section 4, as amended, agreed to.**

**The Convener:** As we are an hour and a half into the meeting, we will have a short comfort break. If members aim to be back here about five minutes from now, that will help.

15:29
Meeting suspended.

15:35
On resuming—

**The Convener:** I thank everybody for getting back in their seats promptly.

**Section 5—Advice before setting annual targets**

**Amendment 90 moved—[Patrick Harvie]—and agreed to.**

**Amendment 91 moved—[Patrick Harvie].**

**The Convener:** The question is, that amendment 91 be agreed to. Are we agreed?

**Members:** No.

**The Convener:** There will be a division.

**FOR**

Harvie, Patrick (Glasgow) (Green)  
McInnes, Alison (North East Scotland) (LD)  
McNulty, Des (Clydebank and Milngavie) (Lab)  
Peattie, Cathy (Falkirk East) (Lab)

**AGAINST**

Gibson, Rob (Highlands and Islands) (SNP)  
Gordon, Charlie (Glasgow Cathcart) (Lab)  
Johnstone, Alex (North East Scotland) (Con)  
Peattie, Cathy (Falkirk East) (Lab)  
Somerville, Shirley-Anne (Lothians) (SNP)

**The Convener:** The result of the division is: For 2, Against 6, Abstentions 0.

**Amendment 91 disagreed to.**

**Amendment 92 moved—[Alison McInnes].**

**The Convener:** The question is, that amendment 92 be agreed to. Are we agreed?

**Members:** No.

**The Convener:** There will be a division.

**FOR**

Harvie, Patrick (Glasgow) (Green)  
McInnes, Alison (North East Scotland) (LD)  
McNulty, Des (Clydebank and Milngavie) (Lab)

**AGAINST**

Gibson, Rob (Highlands and Islands) (SNP)  
Gordon, Charlie (Glasgow Cathcart) (Lab)  
Johnstone, Alex (North East Scotland) (Con)  
Peattie, Cathy (Falkirk East) (Lab)  
Somerville, Shirley-Anne (Lothians) (SNP)

**The Convener:** The result of the division is: For 5, Against 3, Abstentions 0.

**Amendment 92 agreed to.**

**Amendment 93 not moved.**

**The Convener:** Amendment 94, in the name of Alison McInnes, is grouped with amendments 95, 96 and 98 to 100. Again, members should refer to the notes on pre-emption in the groupings list.

**Alison McInnes:** Amendments 94 to 96 and 98 to 100 will strengthen the bill by giving Parliament a proper role in the scrutiny of its implementation. Under amendment 94, the Scottish ministers would have to lay before the Parliament a report setting out information in respect of the annual targets, which will be set by order. The power to set annual targets is probably one of the most important powers that the bill will confer on ministers, so it is hugely important that the Parliament has the opportunity to question ministers on that.

Amendments 95, 96 and 98 to 100 relate to situations in which ministers disregard the advice of the relevant body or choose to amend or modify targets with disregard to the advice of the relevant body. The amendments are worth while, so I hope that members will support them.

I move amendment 94.

**The Convener:** Do other members want to speak?

**Des McNulty:** Convener, is it possible to hear the minister’s response and reserve the right to comment after that?

**The Convener:** We will hear from the minister, and I will allow brief comments from members after that.

**Stewart Stevenson:** The key reason that Ms McInnes gives in support of her amendments is the need for a power to question ministers. I am not at all clear why any of the amendments would make the slightest difference in that regard, as committees and the Parliament have the power to question ministers in any event. Having a report laid before Parliament creates no additional powers in that regard.

I said during the stage 1 debate that I am willing to consider additional scrutiny and reporting duties, such as providing Parliament with an opportunity to consider proposals and policies that is similar to the 60-day scrutiny period for the
national planning framework under the Planning etc (Scotland) Act 2006. Alison McInnes’s amendments would not provide anything similar to that 60-day scrutiny period. I therefore ask her to seek leave to withdraw amendment 94, to allow ministers to produce proposals at stage 3 that more closely reflect the arrangements in the 2006 act.

The Convener: Does Des McNulty want to comment at this stage?

Des McNulty: The danger with a bill of this nature is that we end up with a series of mechanisms, all of which are intended to do the same thing. Members should consider how committees scrutinise what ministers provide for them. The focus must be on ensuring that ministers keep committee conveners and clerks properly informed about matters that come under their jurisdiction.

I lodged a couple of amendments that are designed to secure just that—we will consider them later in the meeting. Like the minister, I am not entirely sure whether publishing a statement or laying a report is precisely the right mechanism. If the minister is prepared to reflect on the matter and on the need to streamline the process as far as possible, I am inclined to support his view at this stage.

Stewart Stevenson: It may be useful for me to give the assurance that the member is seeking.

The Convener: Thank you.

Alison McInnes: I thank the minister for his commitment to reconsider the issue. The process must not be streamlined to the point that it is meaningless, and the Parliament must have the opportunity to scrutinise decisions that are taken, specifically when a minister departs from advice. I hope that the minister will stick to his commitment.

I seek leave to withdraw amendment 94.

Amendment 94, by agreement, withdrawn.

Amendments 95 and 96 not moved.

Amendment 97 moved—[Patrick Harvie]—and agreed to.

Section 5, as amended, agreed to.

Section 6—Modifying annual targets etc

The Convener: Amendment 43 is grouped with amendments 44 to 48. Again, I refer members to the note on pre-emption.

Although the group contains six amendments, the outcome that they seek to achieve is fairly straightforward. Essentially, the aim is to ensure that, consistent with members’ earlier comments, we recognise that the latest climate science increasingly suggests the need to move to earlier and more ambitious action.

Amendment 43 will ensure that ministers cannot weaken targets arbitrarily in future. It allows for targets to be made more ambitious but not for them to be weakened. That is the simple purpose of the group of amendments.

I move amendment 43.

Stewart Stevenson: Amendment 43 removes the ability for the Scottish ministers to modify the figure in the bill—it is set at 3 per cent—that provides the minimum annual reduction that must apply to annual targets in the period from 2020 to 2050. Amendments 45 and 48 are consequential amendments.

Essentially, the measure would restrict all annual targets in a manner that does not provide any flexibility for ministers to react to unforeseen circumstances between now and 2030. What would happen if, for example, Scotland managed to exceed its emissions reduction trajectory by a large amount and no longer required to reduce emissions by 3 per cent in order to meet its 80 per cent target by 2050? Annual reductions might still be required, but setting them at 3 per cent might be unnecessarily expensive or difficult, given the remaining scope for emissions abatement at the time.

Indeed, amendment 43 could provide a perverse incentive. There could be a severe inhibition to making a very large step-change emissions reduction of the order of, for the sake of argument, 12 per cent any sooner than is necessary—perhaps such a reduction would be associated with the closure of a power generation plant—because it would be likely that that 12 per cent reduction in one year would be followed by fallow years thereafter. The amendment could therefore create a perverse incentive not to close that plant. Having the ability to modify the annual percentage reduction requirement by affirmative order coupled with the requirement to consult the relevant body provides a sensible degree of flexibility for any eventuality.

Amendment 44 would add a new condition to the end of section 6(1)(b) to restrict ministers to being able to modify annual targets only so that the modified amount is lower than the original target. The bill already deals with that issue in section 6(6)(b), which prevents ministers from modifying annual targets in a manner that permits their increase in comparison with that of the previous year. Although amendment 44 goes further, it is unnecessarily restrictive for the same reasons that I have outlined with respect to amendment 43. Principally, it does not allow for
any degree of flexibility to react to the unforeseen circumstances that are bound to occur between now and 2050.

Amendment 46 appears to be consequential on amendment 44. However, section 6(3), which Patrick Harvie seeks to delete, applies the test that ministers must meet before they exercise the power to modify annual targets, whether or not it is amended by amendment 44. That test is that ministers may make an order under section 6(1)(b) only if they consider that it is appropriate to do so as a result of significant changes that have occurred to the basis on which the annual target that will be modified was set. Amendment 46 would remove that important safeguard, so I cannot support it.

Amendment 47 would delete another safeguard that is built into the bill. It would remove the restriction that ministers may introduce orders to modify the date ranges for batches of annual targets or the target-setting criteria only if they consider it appropriate. That restriction requires due consideration to be given before those powers are exercised. No amendments have been proposed to the relevant parts of section 4, so removing that test would simply allow ministers to exercise those powers unfettered, which would make their lives easier but is not justifiable in this case. Therefore, I oppose amendments 43 to 48.

The Convener: It might be overly cynical to suggest that, if ministers think that they would be freed up by a group of amendments but that does not justify their supporting them, perhaps something else is going on underneath the argument.

I do not accept the fundamental argument that has been put against the group of amendments as a whole. That argument is that it may be proved through events that reductions in one year are more achievable or more rapidly achievable than had been anticipated and that that could give an incentive not to take further action. It is clear that the bill and all Government policies that are related to reducing emissions to tackle climate change are a response to a global phenomenon. If Scotland reduces its emissions by more than expected in a particular year, that global phenomenon and the global responsibility to continue to act to reduce emissions at an ambitious pace will still exist. Just as I do not entirely approve of offsetting in its broadest sense, I do not think that we should allow the trading off of one year against another in the manner that is envisaged. I press amendment 43.

The question is, that amendment 43 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 2, Against 6, Abstentions 0.

Amendment 43 disagreed to.
Amendment 44 not moved.
Amendment 98 moved—[Alison McInnes].

The Convener: The question is, that amendment 98 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 98 agreed to.
Amendments 45 and 46 not moved.
Amendment 8 moved—[Stewart Stevenson]—and agreed to.
Amendments 47 and 48 not moved.
Section 6, as amended, agreed to.

Section 7—Advice before modifying annual targets etc
Amendment 99 moved—[Alison McInnes].

The Convener: The question is, that amendment 99 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 99 agreed to.

Amendment 100 moved—[Alison McInnes].

The Convener: I point out that, if amendment 100 is agreed to, amendment 49 will be pre-empted.

The question is that amendment 100 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 100 agreed to.

Section 7, as amended, agreed to.

After section 7

The Convener: Amendment 50, in the name of Des McNulty, is grouped with amendments 125, 51, 52, 10, 57, 12, 12A, 12AA, 12AB, 12C, 12D, 12B, 12E, 12F—I am looking forward to that bit—13, 14, 60, 19, 61 to 63, 65, 68 and 69. I refer members to the note on pre-emptions that has been provided.

Des McNulty: The number of amendments in the group perhaps attests to the degree of concern among people in Scotland about the need to ensure that we reduce our climate contribution predominantly from domestic sources and do not rely on international credits beyond what is strictly necessary.

Amendment 50 would set the parameters for putting a limit on the use of international credits. Amendment 125, in Robin Harper's name, addresses the same issue, although I do not necessarily accept it because it would be very difficult for the Parliament to specify so far in advance what the circumstances for the use of international credits might be. However, it is important that the Parliament sets out a clear ceiling for their use, in line with UK legislation. The Parliament should establish its intent.

Amendment 57 is intended to ensure that international credits will not be used in the initial period between now and 2012. I do not believe that it should be necessary for international credits to be used during that period.

Amendments 12A and 12B are amendments to amendment 12, in the name of the minister, and they carry on the argument about a limit on the net amount of carbon units. Amendment 12A suggests a tightening of the minister's position.

I accept the intention behind the further modifications that Alison McInnes proposes in her amendments in this group, but there is a problem that relates to varying the period of the cycles that the minister has set out in amendment 12. The minister has set out a basket of five-year cycles. I have sought to work within the minister's framework for 2010 to 2012 and for 2013 to 2017. It will be for members of future sessions of Parliament to work out what should be done after 2017. Amendment 12 indicates that limits will have to be set by 31 December 2016, but the Parliament can return to that issue. However, we should set out our intentions for the period up to that time and we should put in place a mechanism for putting a ceiling on the use of international credits. I hope that members will be able to support that idea.

I move amendment 50.

The Convener: I welcome Brian Adam to the meeting.

I call Robin Harper to speak to amendment 125 and the other amendments in the group.

Robin Harper: I was glad to see Des McNulty's amendment 50 among the amendments in this group, but it does not go far enough. In his book "Kyoto2", Oliver Tickell sets out his concerns about whether carbon credit schemes are working as well as they should be.

As we have discussed, if the bill is to be a success it must set emissions targets at the right level and set out a framework for how best to achieve those targets. Amendment 125 addresses that point.

As introduced, the bill allows for an unlimited number of carbon credits to be purchased and credited to the net Scottish emissions account. In effect, that could mean—although I am sure it would not happen—that the targets in the bill could be met entirely through purchasing credits from overseas, which would mean that there was absolutely no incentive for emissions reductions in Scotland.
We have consistently argued that countries such as ours, which have high current emissions, high historical emissions and huge potential for the use of renewables, must take the lead. We have clearly won that argument, as colleagues in the Government and the Labour Party have lodged amendments to include some form of restriction, but neither of their approaches is anywhere near strong enough.

Amendment 125 seeks to ensure that, during the period 2010 to 2019, the proportion of carbon units bought in should be no more than 20 per cent of the net Scottish emissions account, that that figure should reduce to 10 per cent in the period from 2020 to 2039, and that during the period from 2040 to 2050 all reductions in the net Scottish emissions account should be made within Scotland—without any use of carbon units bought from elsewhere. I will be happy to address any concerns that there may be about that. Amendment 125 would also allow the percentages to be revised—but only to ensure that fewer credits are used to meet our reduction targets.

The transformation to a low-carbon economy must begin at home, and preferably now. That is a fundamental factor in how we choose to meet our current targets.

16:00

By fixing such a limit on the use of carbon units, we would not only be taking responsibility for our own actions but providing an incentive for business and industry in Scotland to adopt and develop the groundbreaking technologies that will be fundamental to the future of the world.

Businesses in Scotland that are already engaging in carbon reduction believe that it has benefited them, but there is still a feeling among businesses in general that it is a problem. It is not a problem, however, but an opportunity for them. Scotland has the potential to be a world leader in tackling climate change—but only if we commit to solving our own problems by making reductions here instead of relying on the rest of the world to do it for us. The whole world cannot pay someone else to solve the problem: someone will have to take a lead. We should stand up and ensure that Scotland lives up to the minister’s rhetoric with real action.

Stewart Stevenson: I should say at the outset that we are minded to accept amendment 57, in the name of Des McNulty. I congratulate the committee, as I think I am correct in saying that this is the first time—certainly in the eight years that I have been in the Parliament—that we have had amendments to amendments to amendments. It is groundbreaking stuff, in the bill and in the committee.

I agree that the bill must focus on reducing greenhouse gas emissions in Scotland and completely understand why members of the committee are keen to have in it a mechanism to control the use of carbon credits in meeting the targets that are set in it.

The Government has lodged amendment 12 to ensure that the bill has a robust, flexible and future-proof mechanism by which each Administration can set a limit for the use of carbon credits, based on expert advice, prior to each set of annual targets coming into force. We believe that emissions reduction policy should be based on the best possible expert advice and that we must use expert advice on when and whether carbon credits should be considered.

I observe, as a small parenthetical comment, that we do not have the power to forbid the use of carbon credits in Scotland—we have it only in relation to those areas for which we have devolved responsibility. If we put in a general requirement, it could well be ruled ultra vires. That is particularly the case with regard to the power stations, which are covered by European legislation.

The issue is, as is the case with a range of other matters, too important for us politicians to deal with the numbers—we need the expert advisory body. Setting a fixed limit for carbon credits would be to second-guess the expert advice that we have yet to receive; who is to say what the limit should be in 2020 or on what basis we should plan to reduce emissions in 2030?

We continue to aspire to deliver the targets by reducing emissions in Scotland. As we approach the 80 per cent target, the scope for doing anything other than making our own efforts will certainly become extremely limited, but I do not have a crystal ball to enable me to be certain that the domestic targets that various members have proposed will be appropriate in decades to come. I respect the well-intentioned nature of the amendments, but we must use the expert advice that reflects Scotland’s particular circumstances.

The amendments—with the exception of amendment 57—could tie the hands of successive Scottish ministers. We cannot be sure that members’ alternative proposals will not lead to difficulties and incompatibilities for Scottish companies that are participating in schemes that are controlled outside Scotland, especially as 40 per cent of our emissions fall in the traded sector, the control of which is outwith the hands of the Scottish Parliament.

The point of the trading scheme is that it is a world-leading scheme that we know will lead to a downward curve of CO₂ emissions from our major industries. We cannot afford to do anything that would even tangentially put at risk that huge
reduction because, if we fail in that regard, we can be certain that we will not meet our targets.

A domestic effort target could create indirect interference with the European trading scheme because of its inflexibility, and it might force the Scottish ministers to pursue policies that require greater emissions from the traded sector than are necessary in the trading scheme. In any event, our overall emissions as recorded in our accounts are determined by what happens in the trading scheme.

Our ambitions to lead the world are important, and the trading scheme in Europe is a world-leading emissions trading scheme that will evolve over the period. I am recommending a more flexible, future-proof mechanism for establishing limits on carbon credits. Amendment 12 and its associated amendments deliver that. We believe that, essentially, we are responding to the committee’s stage 1 report. We will have to set a limit on the usage of carbon credits in advance of annual targets coming into force, using expert advice. Amendment 12 is the best mechanism for doing that.

I cannot support the majority of the amendments from Mr McNulty or the amendments from Ms McInnes and Mr Harper because of the difficulties that they would present, but in the spirit of demonstrating our commitment to meeting Scottish targets through addressing Scotland’s emissions, I am content to commit to not purchasing any carbon credits in the period from 2010 to 2012 as we work initially towards a 34 per cent target in 2020. On that basis, I can accept amendment 57. I am confident that we can make that commitment in the light of where we are at the moment, but I do not consider it wise to commit beyond that because we simply do not know whether Europe will commit to reducing emissions by 30 per cent. It is up to us to deploy arguments in that regard.

Amendment 10 makes it clear that the net Scottish emissions account may not be credited with an amount of carbon units that exceeds any statutory limit, which is the allowable amount set by amendment 12.

On amendment 13, it is possible that the Scottish ministers will need, on occasion, the power to modify the limit on carbon units if there is a significant change in the circumstances under which they were set. It is pragmatic and sensible to provide a power that might be required in some circumstances, but the bill as currently drafted would not permit such change. When I was speaking about other amendments, I spoke about the need to be able to respond to the presently unknown future.

Although the Committee on Climate Change has recommended to the UK Government that carbon units should not form part of a 34 per cent interim target, it recognises that they might be required for a 42 per cent target. Any order under this section will be subject to affirmative resolution, allowing the Scottish Parliament the opportunity fully to scrutinise modification proposals. Further, before any such order is laid, the Scottish ministers will be required to seek expert advice. That is where amendment 14 applies. It requires ministers to request advice from the relevant body—initially the UK Committee on Climate Change and, potentially, a Scottish body—before setting or modifying limits on the net amounts of carbon units that can be credited to the net Scottish emissions account for specified periods.

Amendment 19 requires that the advisory body must, when providing advice to the Scottish ministers on annual targets, also express a view on the extent to which the annual targets should be met by the use of carbon units, with reference to the allowable amount as set in accordance with amendment 12.

The Convener: For the record, I welcome Elaine Murray to the committee.

I call Alison McInnes to speak to amendment 12AA and other amendments in the group.

Alison McInnes: Listening to the debate, it is clear that we are all trying to achieve much the same thing, as we all want to minimise the use of international credits and maximise the effort that must be made domestically. I prefer Des McNulty’s approach, which is set out in amendment 50, and therefore think that my amendments 12AA and 12 AB are not required. I will support the amendments that limit ministers’ ability freely to set the cap.

The Convener: I call Des McNulty to wind up the debate and indicate whether he intends to press amendment 50.

Des McNulty: I am particularly indebted to Oxfam, Christian Aid and some of the other agencies that are involved in the Stop Climate Chaos Coalition for the work that they have done on this issue. Like other members, I have also been contacted by a wide range of constituents who have highlighted the importance of taking into account the international development dimension of climate change and of ensuring that that becomes part of the bill. Amendment 50 offers the clearest possible way forward in that regard and gives us a set of parameters that will enable us not only to set out our intentions clearly just now but establish a legal framework that we can build on in years to come.

I will press amendment 50.
The Convener: The question is, that amendment 50 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
M: Innes, Alison (North East Scotland) (LD)
M: Nulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 50 agreed to.

The Convener: Does Robin Harper wish to press or withdraw amendment 125?

Robin Harper: May I ask the minister a question?

The Convener: I will allow one brief question, but I would prefer it if debates were kept within the initial debating period.

Robin Harper: Does the minister agree that the figures for domestic reductions and the figures for the purchases of carbon credits should be published separately so that we can be clear about the progress we are making?

Stewart Stevenson: I am quite content with that.

Robin Harper: As amendment 50, which has been agreed to, covers the ground that my amendment deals with, I shall not move amendment 125.

Amendment 125 not moved.

Section 8—Progress towards targets

The Convener: Amendment 9, in the name of the minister, is grouped with amendments 101, 111, 20, 112, 21, 64, 22 and 115. Again, I refer members to the notes on pre-emption.

Stewart Stevenson: Amendments 9 and 20 to 22 are, essentially, technical amendments that are designed to permit earlier requests for reports on progress against targets and earlier responses to those requests. As a team, we are committed to early reporting on progress on annual targets wherever possible.

Officials have identified that sections 8, 23 and 24, as drafted, create unhelpful rigidity in that respect. The amendments in my name seek to remove that rigidity to permit Scottish ministers to seek reports on progress and provide responses to those reports earlier than the timetable has indicated.

The amendments in the name of Ms Mclnnes seek to do a number of things. Amendments 101, 111 and 112 would change sections 8, 23 and 24 so that action would be required "as soon as reasonably practicable", but they do not specify specific deadlines and could be considered to weaken the provisions in the bill. Generally, the Government amendments 9 and 20 to 22 are better drafted and permit a more specific deadline to be applied, thereby guaranteeing the point by which the actions in question must occur.

16:15

I draw the committee's attention to amendments 64 and 115 in particular. Amendment 64 would introduce unhelpful rigidity by requiring the Scottish ministers to lay a response to the advisory body's report within two months. The deadline would be tight to achieve, particularly if a holiday period was included within those two months and, as I anticipate, Cabinet approval was required for the response document. I am committed to responding to all reports as quickly as possible, but I cannot envisage being able to guarantee that the Scottish ministers could, in all circumstances, meet a two-month deadline, particularly considering the wide range of interests that such a report may cover. I am equally sure that the Scottish Parliament would prefer to receive a comprehensive, carefully considered report that might take a little longer. For that reason, I oppose amendment 64.

Amendment 115 is fundamentally flawed and adherence to it might, in some circumstances, be impossible. The amendment would require all annual target reports to be laid no later than "the first 31 October after the data relating to the target year becomes available".

That would be impossible in all cases where the data became available close to that calendar date. For example, if the Scottish emissions data became available on 30 October, the Scottish ministers would still be obliged to lay the annual report the following day—an impossible task, as I am sure the committee appreciates.

Amendment 115 could also be considered to weaken the provision in the bill that requires that the annual report be laid "no later than 31 October in the second year after the target year."

The amendment changes that to 31 January in the third year after the target year and does not clarify when the backstop date of 31 January in the third
year after the target year comes into play. That complexity makes it unclear whether the combination of a duty and two dates connected by the words "in any case" creates a free choice of when to report.

For those reasons, I oppose amendment 115 and urge all committee members to reject it.

I move amendment 9.

Alison McInnes: I accept that the minister and I are both trying to speed up the process of gaining information on annual targets. When the committee took evidence on the matter, it was clear that there was frustration about the time lag in receiving the data and an acknowledgement that, as we got better at reporting on the targets as time went on, the data would become available earlier on.

I agree that amendments 101, 111, 112, 64 and 115 are complex and might well be clumsy, but I did my best with the lawyers to find a way of expressing my aim to speed up the process and give a little extra flexibility. They stretch the process over 15 months so that we are able to get the earliest possible data.

That is what I have attempted to do with amendments 101, 111, 112, 64 and 115. Therefore, I will move them.

Des McNulty: I ask the minister to go over again his reason for opposing amendment 101.

Stewart Stevenson: Amendment 101 would delete from section 8 the wording "In the second year following a year for which an annual target has been set … the Scottish Ministers must request the relevant body to prepare"

and replace it with:

"The Scottish Ministers must in each year, beginning with the year 2011, request the relevant body to prepare, as soon as reasonably practicable".

In other words, it would remove a particular date by which ministers have to do something and replace it with the statement that they must do it "as soon as reasonably practicable".

I would not be greatly upset if the committee were to agree to that, because it would relieve the minister of a current obligation, but I think that that would be unwise.

Alison McInnes: You will note that amendments 101 and 111 also say, "and in any case no later than", so there would be an end-stop as well as flexibility.

Stewart Stevenson: I cannot identify the requirement to which you refer in amendment 101; I can only find the wording:

"as soon as reasonably practicable".

Perhaps we will have to agree to differ on that.

We have had an adequate exploration of the issues. The amendments in my name create the opportunity for us to accelerate dates and do not carry with them the risks that the amendments in Ms McInnes's name carry of relieving ministers of obligations. I ask the committee to support the amendments in my name and to reject the amendments in Ms McInnes’s name.

The Convener: I remind members about pre-emption. If amendment 9 is agreed to, I will not be able to call amendment 101.

The question is, that amendment 9 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR

Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
Johnstone, Alex (North East Scotland) (Con)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

AGAINST

McInnes, Alison (North East Scotland) (LD)

The Convener: The result of the division is: For 7, Against 1, Abstentions 0.

Amendment 9 agreed to.

Amendment 51 moved—[Des McNulty].

The Convener: The question is, that amendment 51 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR

Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

AGAINST

Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 51 agreed to.

Amendment 52 moved—[Des McNulty].

The Convener: The question is, that amendment 52 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.
FOR
Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
AGA INST
Johnstone, Alex (North East Scotland) (Con)
Gibson, Rob (Highlands and Islands) (SNP)
McInnes, Alison (North East Scotland) (LD)
Harvie, Patrick (Glasgow) (Green)
Gordon, Charlie (Glasgow Cathcart) (Lab)

The Convener: The result of the division is: For 5, Against 3, Abstentions 0.
Amendment 52 agreed to.
Section 8, as amended, agreed to.
Section 9—Greenhouse gases
The Convener: Amendment 53, in the name of Dr Elaine Murray, is grouped with amendments 102 and 54.

Elaine Murray (Dumfries) (Lab):
Chlorofluorocarbons and hydrochlorofluorocarbons were used as refrigerants and blowing agents in plastic foam insulation prior to January 2004. Foam insulation is widely used in roofs, walls and as the core of insulating foam panels used in steel-clad industrial buildings. They are ozone-depleting substances, which cause depletion of the stratospheric ozone layer and are controlled under the Montreal protocol. European Community regulation 2037/2000 requires that where practical, such substances are disposed of safely and, in the case of fridges and freezers, are recovered and disposed of under rigorous conditions. Unfortunately, the same is not true of the plastic foam insulation in steel-clad buildings when such buildings are demolished; despite the size of the ODS bank in pre-2004 foam insulation being estimated as 10 to 20 times that present in fridges and freezers.

Hydrofluorocarbons and perfluorocarbons are covered under the United Nations Framework Convention on Climate Change, as they are greenhouse gases. Unfortunately, despite the prevalence of chlorofluorocarbons and hydrochlorofluorocarbons in plastic foam insulation, they are not covered by the Kyoto agreement. The gases are also significant greenhouse gases; their carbon footprint is some 300 million to 400 million times that of carbon dioxide. In the UK, 357 tonnes of those gases was recovered through the recycling of 2 million domestic refrigerators. However, as I said earlier, there is 10 to 20 times as much of those gases in plastic foam insulation, yet it is not recovered in the same way or with the same care—indeed, it tends to go into hazardous landfill.

Amendment 53 would add chlorofluorocarbons and hydrochlorofluorocarbons to the list of greenhouse gases. Amendment 54 identifies their current levels under the Montreal protocol—the baseline in section 10. The amount of these gases that will go into the atmosphere is likely to increase given the increase in the number of ODS-clad buildings reaching the end of their life and requiring to be demolished.

By recognising that these substances are also greenhouse gases and accounting for them in the targets, the bill would place Scotland ahead of the rest of the world. I appreciate that the six greenhouse gases that are specified in the bill—carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride—are those that are covered by the Kyoto agreement. I also appreciate that section 9(2) enables ministers to add gases to the list and that section 11 enables them to set a baseline for additional greenhouse gases.

My aim in lodging amendments 53 and 54 was to highlight the importance of recovering these substances appropriately and recognising the significance of the materials that they contain in contributing to climate change. In the long term, we should not be content simply to monitor the Kyoto gases and ignore emissions from other climate-changing gases. We know where the gases are and how they should be processed at the end of the life of buildings. It is therefore possible to prevent emission.

Amendment 102, in the name of Patrick Harvie, requires ministers to monitor actively the effect of gases that are not included on the list and report to Parliament on whether they should be included. I am not a committee member but, having read the amendment, I have a fair amount of sympathy for the intention to enable ministers to update the list of greenhouse gases. I will listen carefully to the views of members and the minister before deciding whether to press amendment 53 and move amendment 54. I will also listen to the debate on amendment 102. I urge ministers to monitor the impact of chlorofluorocarbons and hydrochlorofluorocarbons with a view to including them on the list in future, if not at this stage.

I move amendment 53.

The Convener: Before I speak to amendment 102, I put on record my recognition of the spirit in which Elaine Murray has brought amendments 53 and 54 to the committee.

The idea of setting in stone the list of greenhouse gases that will be included in the framework is an issue, as is the potential for creating an impediment to flexibility if any change is required. Section 9 allows ministers to modify the list if, under an agreement or arrangement at
European level, a gas has been recognised as contributing to climate change. Ministers are required to lay a draft statutory instrument before the Parliament to do that.

In lodging amendment 102, I sought to make slightly more proactive the duty to monitor gases and report to Parliament from time to time on whether it is desirable for a gas to be added to the list. If the Scottish Government is contemplating undertaking that activity, either in association with the advisory body or independently, it would be helpful for the minister to indicate that.

Specifying the list in the way that the member proposes is perhaps too much of a binding position. Other gases may need to be included at future points. I am thinking of nitrogen trifluoride, which is a potent greenhouse gas, but which has not been included on the list because it has hardly been used in our society. However, the increasing use of plasma screens may be enough to make it a significant greenhouse gas. The issue is more to do with changes in the use of gases than with change in the science or our awareness of the climate impact of gases. All of this is not predictable, so having an approach that keeps things flexible is probably the right one to take.

The advisory body will be able to advise, and Parliament will be able to scrutinise, but amendment 102 would place some additional requirements on Government to take proactive steps to keep the issues under consideration and to report to Parliament from time to time. I hope that the minister will be able to accept the amendment.

As no other member wishes to contribute to the debate on this group of amendments, I invite the minister to respond.

16:30

Stewart Stevenson: Dr Murray has, as usual, made a well-informed contribution on a subject that might not otherwise have been debated by the committee or by Parliament. The discussion was well worth having.

Amendment 53 seeks to include CFCs and HCFCs in the list of greenhouse gases covered by the bill. However, we do not feel that that is necessary, because a legislative framework already exists. We are well ahead with CFCs and HCFCs, and further work is being undertaken in relation to the steel-clad buildings to which Dr Murray referred. There is an EU review of the disposal of material recovered from such buildings, and the Scottish Environment Protection Agency is part of that review. CFCs are no longer deployed in any new way, and HCFCs will cease to be deployed by the end of this year.

In the bill, we have deliberately followed the Kyoto protocol—not simply because it allows international comparisons but because it avoids picking up other protocols such as the Montreal protocol, which is the one that covers the gases that Dr Murray seeks to include. The bill gives ministers the power to add gases and to modify the description of gases, but it does not give ministers the power to remove gases—even ones that have been added by secondary legislation. The powers to modify are strictly circumscribed. Nitrogen trifluoride, for example, could be added if human use of the gas showed that it ought to be covered.

Amendment 102 is drawn in very general terms. Under the amendment, ministers would have to “monitor the impact on climate change of those gases in the atmosphere not listed in subsection (1)”. That would cover every single gas that is not listed, including gases that, in certain circumstances, have beneficial effects—such as clouds, although not necessarily water vapour. The amendment is very broadly drawn, and we would not encourage the committee to support it.

We are fully engaged in the issues that Dr Murray has raised, and we expect to introduce the necessary secondary legislation once the European framework is established. We believe that that would be a more appropriate way in which to deal with CFCs and HCFCs and with the disposal of material from buildings such as steel-clad buildings for which there currently is not a legislative environment that protects us adequately. We feel that the bill would be the wrong place in which to deal with such matters.

The Convener: I invite Elaine Murray to wind up the debate on this group and to indicate whether she wishes to press or withdraw amendment 53.

Elaine Murray: I am pleased with the progress that has been made over the past few months in acknowledging the problems with these chemicals. When I was first approached on the issue, I did not realise that they were not included among the Kyoto gases. At that time, the general awareness of the potential problems associated with the chemicals was much lower. I was pleased to hear from the minister about the actions that are being taken and the role that SEPA will play.

I note what the minister said about amendment 102, in the name of Patrick Harvie. If the amendment had referred to “greenhouse gases” instead of “those gases in the atmosphere not listed in subsection (1),” the problem to do with the large number of gases that potentially should be monitored might have been avoided.
I am inclined not to press amendment 53 and not to move amendment 54. My main concern in lodging the amendments was to raise awareness of problems to do with chlorofluorocarbons and hydrochlorofluorocarbons. I am assured—to an extent—that the Government is considering the matter. I will continue to monitor the situation and ask questions about it.

Amendment 53, by agreement, withdrawn.

The Convener: Without prejudice to my ability to lodge a slightly tweaked version of amendment 102 at stage 3, I will not move amendment 102.

Amendment 102 not moved.

Section 9 agreed to.

Section 10—The baseline

Amendment 54 not moved.

Section 10 agreed to.

Section 11 agreed to.

Section 12—the net Scottish emissions account

The Convener: Amendment 126, in the name of Robin Harper, is grouped with amendments 127 to 130.

Robin Harper: I lodged amendments 126 to 130 simply to improve the clarity and focus of section 12. I will be happy if the minister accepts them and not unduly despondent if he rejects them.

I move amendment 126.

Stewart Stevenson: Amendments 126, 128 and 130 would restrict the types of carbon unit that may be credited to the net Scottish emissions account to units purchased by the Scottish ministers, which would prevent ministers from accounting for the effect of trading schemes, in particular the EU emission trading scheme. It is vital to the setting and achieving of annual targets that we should be able to account for such emissions. The Scottish installations that participate in the EU emission trading scheme account for some 40 per cent of Scottish emissions. The EU emission trading scheme allocations help to moderate the effect of annual fluctuations, which can occur year on year. The variation can be as significant as plus or minus 6 per cent.

Amendments 127 and 129 would remove the provisions that will allow the Scottish ministers to require, in regulations, that carbon units debited from the net Scottish emissions account increase the account by the equivalent amount of emissions. If Scottish installations within the EU emission trading scheme sell carbon units to emitters abroad, they are, in effect, enabling an emission to be made. That should be reflected in the net Scottish emissions account. Amendments 127 and 129 would prevent that from happening and therefore lead us to understated our contribution to the carbon economy.

Global carbon markets are a key component of attempts to curb rising emissions, as Sir Nicolas Stern emphasised in his review of the economics of climate change. We cannot have our cake and eat it. If we reduce the net Scottish emissions account when we credit carbon units to it, we must take a fair and equitable approach and increase it when units are debited. The amendments in Robin Harper’s name would not mean that there was no carbon trading; they would mean only that carbon trading would not be reflected in the account, whether the effect was positive or negative. Therefore, I ask Robin Harper not to press amendment 126 and not to move amendments 127 to 130.

Robin Harper: Without prejudice to my ability to lodge similar amendments at stage 3, I seek to withdraw amendment 126 and will not move the other amendments in the group.

Amendment 126, by agreement, withdrawn.

Amendment 127 not moved.

Amendment 10 moved—[Stewart Stevenson]—and agreed to.

Amendments 128 and 129 not moved.

The Convener: Amendment 55, in the name of Des McNulty, is grouped with amendment 56.

Des McNulty: The objective behind amendments 55 and 56 is to ensure that, in trying to achieve greenhouse gas emission reductions, we take cognisance of the impact of schemes that operate in other parts of the world. It is sensible to ensure that the Scottish ministers have regard to the impact on sustainable development in other countries when they are engaged in a process to reduce emissions. Amendment 56 would ensure that our activities do not damage, but could benefit, other countries.

I move amendment 55.

The Convener: I will add a few words of support for the proposed approach. It is clear that we have focused substantially on the extent to which international credits can be used and on the proportion of domestic effort that is to be made to reach our targets. Less attention has been paid to the quality of activity that happens outwith Scotland and its impact on developing economies in particular. It is entirely appropriate that Des McNulty has lodged amendments 55 and 56 to raise the issue of sustainable development in this context.
Stewart Stevenson: I acknowledge Des McNulty’s principled and long-term engagement and interest in the development of less developed countries, and I suspect that we all associate ourselves with that. However, amendments 55 and 56 are somewhat problematic, so I offer him the opportunity to engage further to establish how we can develop the idea.

Proposed section 12(3)(b), which amendment 56 would insert, would not be able to be satisfied. Section 18(4) defines carbon units, which do not in themselves deliver reductions in greenhouse gas emissions. Carbon units represent emission allowances or reductions or removals that have already occurred. The most significant point is that proposed section 12(3)(c) would prevent ministers from crediting EU emission trading scheme units to the net Scottish emissions account. I do not think that the member intended that, which is why I offer to engage with him.

I draw members’ attention again to the fact that 40 per cent of Scotland’s emissions lie in the traded sector—in the EU emission trading scheme. We cannot recognise the participation of Scotland’s greatest emitters in that scheme while being unable to take account of the units that form part of it. The EU ETS is the greatest policy lever that we have to drive down emissions from our most significant emitters. I therefore ask the member to seek to withdraw amendment 55 and to take up the offer of further engagement, which we are willing to have.

16:45

Des McNulty: On the basis of the minister’s willingness to engage further with me on how the intention behind my amendments can be developed more effectively, I am happy to withdraw amendment 55 and return with revised amendments at stage 3.

Amendment 55, by agreement, withdrawn.

Amendment 56 not moved.

Section 12, as amended, agreed to.

After section 12

Amendment 57 moved—[Des McNulty]—and agreed to.

Section 13 agreed to.

Section 14—Scottish share of emissions from international aviation and international shipping

The Convener: Amendment 58, in my name, is grouped with amendments 11, 11A and 103.

Amendment 58 seeks to enact the committee’s broad acceptance that the inclusion of aviation and shipping emissions in the framework should be a requirement rather than merely a possibility that the Government can exercise. The Government’s amendment 11 seeks to achieve a similar objective and puts a timescale on it, and it might be seen as preferable to my amendment 58. However, if we were to take seriously the Government’s amendment 11, we should accept amendment 11A as an amendment to that amendment, and I urge the minister to do the same. There is little point placing a legal requirement on ministers but then positively permitting failure. One year seems a generous timescale that does not fall foul of the argument that was made in a similar group of amendments earlier. Given that the Government has already made that commitment in amendment 11, one year is an entirely achievable timescale and, in order to reject amendment 11A, there would need to be a clear reason why it could not be achieved.

With amendment 58, we arguably require immediate initiation of work on the matter. If we are to accept that amendment 11 is a preferable way of achieving the requirement, amendment 11A is a more than reasonable condition. In either case, amendment 103, which is also in the group, is clearly needed in order to implement the committee’s recommendation at paragraph 132 on radiative forcing. There is little point in counting only part of aviation’s contribution to climate change. Some have argued that aviation gets a raw deal sometimes and too much focus in the climate change debate, but it is clear that we should not give it too easy a ride. We should account for a full and fair assessment of the effect that aviation emissions have on climate change, and that includes the additional factor of emissions at altitude. My amendment 103 seeks to achieve that.

I move amendment 58.

Stewart Stevenson: The Scottish ministers recognise the importance of tackling emissions from international aviation and shipping. That is why we committed in the bill to including Scotland’s share of those emissions in our climate change targets.

I appreciate, and I have said before, that the way in which section 14 of the bill was drafted—using the word “may” instead of “must”—caused some to fear that ministers would not act on their commitment. I take this opportunity, again, to say that that is not the case.

I have been advised that the language in the bill is a drafting necessity to ensure that ministers retain the ability to use the power in section 14 more than once. That is why I have not brought forward a Scottish Government amendment to change, as amendment 58 does, “may” to “must”, because the “must” is discharged by ministers.
laying an order but does not necessarily mandate that such an order will be passed into law by Parliament. The “may” provides for the ministers successively to lay orders and leaves open that possibility.

Ministers may also require to lay further orders to adapt to future international agreements on international aviation and shipping. Our approach is intended to remove ambiguity, and our amendment 11 seeks to do that. It creates a new duty requiring a draft order to be laid no later than 2010, which gives certainty that the emissions will be included in Scotland’s annual targets from the start.

On Alison McInnes’s amendment 11A, I emphasise that the Scottish ministers have absolutely no intention of failing to meet the 2010 deadline. New section 14(2B), which amendment 11 introduces, is simply designed to ensure that, should unforeseen circumstances conspire to delay the first draft order being laid, the requirement remains and the power remains in force for that to happen. Ms McInnes’s amendment 11A would remove that safeguard, so I cannot support it.

We do not object to the principle of amendment 103, but there are drafting problems associated with it as it currently exists. It refers to the Scottish ministers “making an order”, but the Scottish ministers do not have the power to make orders. We have the power only to lay orders; it is the Scottish Parliament that makes them. As drafted, the amendment would also apply to shipping emissions—in the context of radiative forcing—which appears to be unnecessary. Nonetheless, we are happy to continue to engage on the issue to ensure that we reflect the variety of issues in the radiative forcing context, taking account not only of altitude but of matters such as the fuels that are burned and the method by which combustion takes place. I ask the committee to support amendment 11 but not to support other amendments in the group.

The Convener: I ask Alison McInnes to speak to amendment 11A and other amendments in the group.

Alison McInnes: I welcome the fact that ministers have agreed with the need to include shipping and aviation from the outset, but new section 14(2B), introduced by amendment 11, provides them with wriggle room. The minister says that it removes ambiguity; I believe that it is a get-out clause and that we need to remove it.

The Convener: As no other member wishes to contribute, I will say in winding up that the issue that I am most concerned about—the additional impact of emissions at altitude—clearly has to be addressed. I would like a requirement in the bill that that issue be addressed by the Government in the way that it brings forward the order, but at this point I would like to consider the minister’s response and decide whether an alternative version of amendment 103 might be more appropriate at stage 3.

Stewart Stevenson: Will the convener take a brief intervention?

The Convener: Yes.

Stewart Stevenson: It would be useful to point out to the committee that, if we delete the proposed subsection (2B) introduced by amendment 11, no requirement or power to bring anything forward would exist if ministers missed the target of 1 June 2010.

The Convener: I am a bit at variance with the minister’s view that a full year is insufficient to give a confident commitment that the June 2010 deadline can be met.

In any case, I seek agreement to withdraw amendment 58.

Amendment 58, by agreement, withdrawn.

A11 moved—[Stewart Stevenson.]

Amendment 11A moved—[Alison McInnes.]

The Convener: The question is, that amendment 11A be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR

Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)

AGAINST

Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McNulty, Des (Gydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 2, Against 6, Abstentions 0.

Amendment 11A disagreed to.

Amendment 11 agreed to.

Amendment 103 not moved.

Section 14, as amended, agreed to.

Sections 15 to 17 agreed to.

Section 18—Carbon units and carbon accounting

The Convener: Amendment 104, in my name, is in a group on its own.
In lodging amendment 104, I sought to explore issues around the operation of the carbon units scheme. However, I would now like to consider the debates on previous groups of amendments in relation to carbon units and consider before stage 3 whether a different approach is necessary, so I will not move the amendment.

Amendment 104 not moved.

Des McNulty: I have a procedural point. As the meeting has been going on for almost three hours now, I suggest that we go as far as dealing with amendment 59, for which Brian Adam has been patiently waiting, then halt at that point.

The Convener: The intention is to work to the end of part 2 of the bill, so your suggestion would allow us to do that. The remaining amendments will be rolled over to next week’s meeting.

Amendment 130 not moved.

Section 18 agreed to.

After section 18

Amendment 12 moved—[Stewart Stevenson.]
Amendment 12A moved—[Des McNulty.]
Amendment 12A not moved.
Amendment 12AB moved—[Alison McInnes.]

The Convener: The question is, that amendment 12AB be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

For
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)

Against
Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 2, Against 6, Abstentions 0.

Amendment 12AB disagreed to.

Amendment 12 moved—[Alison McInnes].

The Convener: The question is, that amendment 12C be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

For
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)

Against
Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 12A agreed to.

Amendment 12C moved—[Alison McInnes].

The Convener: The question is, that amendment 12D be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

For
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)

Against
Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 2, Against 6, Abstentions 0.

Amendment 12C disagreed to.

Amendment 12D moved—[Alison McInnes].

The Convener: The question is, that amendment 12B be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

For
Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 12B agreed to.

Amendment 12E moved—[Alison McInnes].

The Convener: The question is, that amendment 12E be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
Peattie, Cathy (Falkirk East) (Lab)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 2, Against 6, Abstentions 0.

Amendment 12E disagreed to.

Amendment 12F moved—[Alison McInnes].

The Convener: The question is, that amendment 12F be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 2, Against 6, Abstentions 0.

Amendment 12F disagreed to.

Amendment 12, as amended, agreed to.

Amendments 13 and 14 moved—[Stewart Stevenson]—and agreed to.
understand; a community development approach must be adopted.

To measure how successful that engagement is, the methods that are used must be evaluated. People must have an opportunity to monitor the process and to assess whether it is the best way of making progress with communities. I am clear that unless we do a hearts and minds job, it will be extremely difficult for us to move forward, particularly at community level.

Des McNulty: If we do not have a successful public engagement strategy, we will not succeed in achieving the aspirations that are set out in the bill. It is clear that although the task of reducing climate change is not for Government alone, Government must play a co-ordinating role in bringing together other agencies, such as churches, schools and businesses, and encouraging individuals and groups to take their share of the load as far as reducing climate change is concerned.

I am particularly indebted, as Brian Adam will be, to the Church of Scotland for the work that it has done in advancing the initiative through its eco-congregation movement. The Church of Scotland has reflected not only on what has been achieved, but on what remains to be achieved and its desire to have a public engagement strategy. In expanding on the original intention and providing a framework within which the process of creating a succession of public engagement strategies can be taken forward, amendment 59 is highly appropriate. I want progress on that aim to be made on a cross-party basis, and I hope that we can all support amendment 59.

The Convener: I endorse the position that has been outlined by Brian Adam and other members regarding the public engagement strategy. The process that is established must be much more profound and proactive than the usual stakeholder consultation that Government conducts—quite correctly—on a host of issues. Given the behavioural change that is necessary in the context of climate change, a much stronger focus on public engagement is needed.

However, it should be remembered that public engagement is easier said than done. What has happened in the planning system, where there was a desire to achieve much more public participation, is an example of how fine intentions are not always easily delivered. We will have to proceed with the public engagement strategy in such a way that it is empowering—rather than finger wagging or lecturing people, we want to give them the tools that they need to make the changes that are sought by Government and Parliament.

That said, I am happy to support amendment 59.

Stewart Stevenson: I welcome the nature of the preceding discussion and echo Mr McNulty’s desire to see the adoption of a cross-party approach. I am slightly more sanguine than some about the current engagement process, at least with certain parts of the community. The young, in particular, are heavily engaged and are influencing adults.

Many of Scotland’s churches have taken an exemplar approach, in seeking to engage communities and through their individual actions. In principle, I support amendment 59. However, there are difficulties with the drafting. I presume that it is an unintended consequence that, although the amendment would oblige the Scottish ministers to produce an engagement strategy in 2010, another one in 2011 and then every five years until 2036, after 2036, there would not be a requirement for further engagement strategies. It is absolutely clear that that is not the intention of the members who spoke in favour of the amendment.

I wish to work with members to ensure that, at the end of stage 3, the bill has provisions that address the requirement and do not have the unintended consequence that amendment 59 would have. I am in the committee’s hands on the approach that should be taken. The amendment could be withdrawn and we could work together to produce a new one. Alternatively, if the committee is so minded, the provisions could be included in the bill and we could work to establish appropriate amendments. In any event, the shared objective is that, by the end of stage 3, we should have provisions that address the policy aim of amendment 59, but with drafting that is technically more fit for purpose.

Brian Adam: It is always a challenge for those who are not in the Government to produce technically sound amendments. I accept the minister’s point.

We should consider how consultation is carried out. I remember that, in the early days of the Parliament, when we dealt with the removal of clause 2A or section 28, the statutory consultees included the Potato Marketing Board. I am delighted that we have moved beyond that in relation to statutory consultees, but we have not necessarily nailed down the issue. Mr Harvie said that we do not always engage people. In the previous session of Parliament, I was in charge of the Interests of Members of the Scottish Parliament Bill. I recall that we could not get 30 members of the public throughout Scotland to respond to our consultations, on a matter that was interesting for us. There might be more interest in that matter in the current political climate, but there was not much then. However, tens of thousands of
people responded on the proposal to introduce a smoking ban.

I hope that, as part of the process and when the minister engages with us—if that is the direction that the committee decides to take—we can look beyond the statutory consultees and the usual suspects. The minister has made the case for an alternative amendment that would be more appropriate technically. I seek leave to withdraw amendment 59, on the basis that further engagement along the lines that have been discussed will be entered into prior to stage 3.

Amendment 59, by agreement, withdrawn.

The Convener: That brings us to the end of our consideration of amendments for today. I thank those who have borne with my bad throat throughout the meeting, and I thank the minister and his colleagues for attending.

At our next meeting, we expect to consider the bill up to and including the end of section 47, which is on forestry. Any amendments to those sections should be lodged by noon on Thursday at the very latest—that is the deadline. Of course, to enable the clerks to do their work as efficiently as possible, it would be better to lodge amendments early than to do so at 5 minutes to 12.

As I said, that concludes today’s consideration of amendments. I must go and see what the Potato Marketing Board said about section 28—

17:15

Rob Gibson (Highlands and Islands) (SNP): We have made steady, but not speedy progress. Are we content that enough time has been allocated for stage 2 consideration of the bill? Is there an alternative plan that will ensure that we can consider all the amendments in the designated time?

The Convener: I suppose that we have three broad options. First, I could allow speeches only of a certain length, so that things moved along more rapidly. Secondly, we could have longer meetings next week and the week after, given that only two more meetings at stage 2 are scheduled in the timescale that has been agreed by the Parliament. Thirdly, we could ask for more time. The serious implication of choosing the third option is—I think—that it would be impossible to reach stage 3 until September. Do members have a preference for one of those approaches? What do you think, Rob?

Rob Gibson: I will let other members give their views before I say anything.

Shirley-Anne Somerville (Lothians) (SNP): Given the importance of events that will take place in September and December, it would be appropriate to have an act to show people by September, whatever they think about certain amendments. It would be useful to the Parliament if the committee completed its consideration of the bill before the summer recess.

Cathy Peattie: I agree, but it is important that we have the opportunity to discuss matters and do not try to rush things forward. We must not end up with a bill that is not competent or with which people are not happy.

Charlie Gordon (Glasgow Cathcart) (Lab): If we are to have late meetings, let us not pretend that we are a family-friendly Parliament.

Rob Gibson: After next week’s meeting, perhaps we could consider whether it would be appropriate for us to have another meeting on a Monday.

The Convener: The option to meet on a Monday exists, as does the option to start our next two meetings earlier, rather than have meetings that run on very late. I see that the minister wants to comment, although this is really a matter for the committee.

Stewart Stevenson: I just thought that it might be helpful to say that we could plan for the possibility of the committee’s sitting considerably later in the evening and make ourselves available, subject to the details. We are your servants in the matter and will not constrain your decision making.

The Convener: Thank you. Will you apply the same flexibility in the context of earlier starts as well as later conclusions to meetings?

Stewart Stevenson: Broadly, yes. We will rearrange other matters as required.

The Convener: Thank you. I think that it would be best if I discussed the matter with the clerks and e-mailed members this evening or tomorrow morning to suggest an approach. Thank you for your co-operation.

Meeting closed at 17:19.
2nd Marshalled List of Amendments for Stage 2

The Bill will be considered in the following order—

Sections 1 to 20  Schedule 1
Sections 21 to 66  Schedule 2
Section 67  Long Title

Amendments marked * are new (including manuscript amendments) or have been altered.

Section 19

Des McNulty
187 In section 19, page 9, line 3, after <Ministers’> insert <duty under section 2 and>

Patrick Harvie
105 In section 19, page 9, line 4, at end insert—

<(  ) the function of providing advice, analysis, information and other assistance on climate change to any member of the Scottish Parliament;>

Des McNulty
188 In section 19, page 9, line 10, at end insert—

<(  ) for the conferral of functions on the advisory body relating to advice on the effectiveness of the Scottish Ministers’ proposals and policies for achieving the interim and 2050 targets;>

Section 20

Des McNulty
189 In section 20, page 9, line 28, at end insert—

<(  ) for the conferral of functions on the Committee relating to advice on the effectiveness of the Scottish Ministers’ proposals and policies for achieving the interim and 2050 targets;>

Cathy Peattie
131 In section 20, page 9, line 36, at end insert—

<(  ) Before making an order under subsection (1), the Scottish Ministers must consult the Scottish Parliament.>
Schedule 1

Cathy Peattie
132 In schedule 1, page 34, line 17, at end insert—
<(  ) Before appointing members of the Committee, the Scottish Ministers must consult the Scottish Parliament.>

Stewart Stevenson
15 In schedule 1, page 36, line 19, after <payment> insert <of>

Stewart Stevenson
16 In schedule 1, page 36, line 20, after <provision> insert <of>

Stewart Stevenson
17 In schedule 1, page 36, line 21, after <payment> insert <of>

Stewart Stevenson
18 In schedule 1, page 36, line 22, leave out first <of>

Section 21

Rob Gibson
190 In section 21, page 9, line 38, after <27> insert <and (Reports on programmes for adaptation)>

Rob Gibson
191 In section 21, page 10, line 6, at end insert—
<(  ) bringing section (Reports on programmes for adaptation) into effect comes into force, subsection (4) of section (Progress towards implementation of programmes for adaptation) ceases to have effect.>

Section 22

Patrick Harvie
106 In section 22, page 10, line 8, leave out subsection (1) and insert—
<(  ) The Scottish Ministers must, before laying an order under section 4(1), request and publish advice from the advisory body on the target-setting criteria set out under section 4(4).>

Patrick Harvie
107 In section 22, page 10, line 12, leave out <(1)(a)> and insert <(1)>
Patrick Harvie
108 In section 22, page 10, line 13, leave out <whether the> and insert <what>

Des McNulty
192 In section 22, page 10, line 13, leave out <appropriate> and insert <consistent with a reduction over time of the net Scottish emissions account which would allow the interim target and the 2050 target to be met>

Patrick Harvie
109 In section 22, page 10, line 14, at end insert—
<the objective of not exceeding the fair and safe Scottish emissions budget.>

Patrick Harvie
110 In section 22, page 10, line 15, leave out <(1)(a)> and insert <(1)>

Des McNulty
60 In section 22, page 10, leave out lines 17 to 20

Stewart Stevenson
19 In section 22, page 10, line 19, after <with> insert <section 12(1A) and>

Des McNulty
61 In section 22, page 10, line 21, after <targets> insert <and the domestic effort target>

Des McNulty
193 In section 22, page 10, line 24, at end insert—
<the respective contributions towards meeting the annual targets that should be made by—
(i) energy efficiency;
(ii) energy generation;
(iii) land use;
(iv) transport;>

Des McNulty
194 In section 22, page 10, leave out lines 25 to 27

Liam McArthur
195 In section 22, page 10, line 27, at end insert—
<(d) the proportion of the net Scottish emissions budget for the period 2010-2050 available for electricity generation and in particular as to—>
(i) an appropriate total lifetime greenhouse gas budget per megawatt hour of generating capacity;

(ii) appropriate initial levels of greenhouse gas emissions per megawatt hour.

Liam McArthur

196 In section 22, page 10, line 31, at end insert—

<(  ) In subsection (3)(d), “net Scottish emissions budget” means the aggregate amount of net Scottish emissions for the period 2010-2050 recommended by the relevant body which is consistent with achieving the targets set by or under Part 1.>

Section 23

Cathy Peattie

134 In section 23, page 10, line 33, leave out <prepare> and insert <lay before the Scottish Parliament>

Alison McInnes

111 In section 23, page 11, line 7, leave out from beginning to <year”),> in line 8 and insert <The first report under this section prepared after data relating to a year for which an annual target has been set (a “target year”) becomes available>

Stewart Stevenson

20 In section 23, page 11, line 7, leave out from <the> to <on> in line 8 and insert <a relevant year must also set out the advisory body’s views on the matters mentioned in subsection (3C).

(3A) In subsection (3), the “relevant year” means such year as the Scottish Ministers may, by order, designate in accordance with subsection (3B).

(3B) The year which may be designated under subsection (3A) is the first year following a year for which an annual target has been set (a “target year”) or the second year following a target year.

(3C) The matters referred to in subsection (3) are>

Des McNulty

62 In section 23, page 11, line 9, at end insert—

<(  ) whether the domestic effort target was met in that target year;>

Des McNulty

63 In section 23, page 11, line 10, leave out <way in which that target was or was> and insert <ways in which those targets were or were>

Alison McInnes

112 In section 23, page 11, line 13, leave out from <no> to end of line 16 and insert <as soon as reasonably practicable after the data relating to the target year becomes available and in any case no later than 31 January in the third year following the target year.>
Stewart Stevenson
21 In section 23, page 11, line 16, leave out <later>

Cathy Peattie
135 In section 23, page 11, line 16, at end insert—

< ( ) Before specifying a year under subsection (2) or appointing a date under subsection (4)(b), the Scottish Ministers must consult the Scottish Parliament.>

Section 24

Alison McInnes
64 In section 24, page 11, leave out lines 22 to 24 and insert <2 months after the report was so laid.>

Stewart Stevenson
22 In section 24, page 11, line 24, leave out <later> and insert <other>

Section 25

Cathy Peattie
237* In section 25, page 11, line 26, after <Ministers> insert <or any committee of the Scottish Parliament>

Section 27

Patrick Harvie
113 In section 27, page 12, line 2, leave out subsection (1)

Cathy Peattie
136 In section 27, page 12, line 3, at end insert—

< ( ) Before giving any directions under subsection (1), the Scottish Ministers must consult the Scottish Parliament.>

Patrick Harvie
114 In section 27, page 12, line 6, leave out subsections (3) and (4)

Section 28

Des McNulty
65 In section 28, page 12, line 16, at end insert—

< ( ) The report must also state whether the domestic effort target has been met in the target year to which the report relates.
( ) If the domestic effort target has not been met, the report must explain why.

Alison McInnes

115 In section 28, page 12, line 18, leave out <31 October in the second> and insert <the first 31 October after the data relating to the target year becomes available and in any case no later than 31 January in the third>

Section 29

Patrick Harvie

116 In section 29, page 12, line 23, at end insert—

<(ba) state the cumulative amount of net Scottish emissions in the period from the baseline year to the target year;>

Des McNulty

67 In section 29, page 12, line 31, at end insert—

<( ) state the proportion of the reduction in the net Scottish emissions account which is accounted for by reductions in net Scottish emissions;>

Patrick Harvie

117 In section 29, page 12, line 31, at end insert—

<( ) state the cumulative amount of net Scottish emissions reported under subsection (1)(ba);>

Liam McArthur

137 In section 29, page 13, line 4, at end insert—

<( ) state the average greenhouse gas emissions per megawatt hour of electricity generated in Scotland in the target year;

( ) state the average greenhouse gas emissions per megawatt hour, and the estimated lifetime cumulative emissions, of any new electricity generation capacity greater than 50 megawatts approved in Scotland in the target year.>

Liam McArthur

138 In section 29, page 13, line 4, at end insert—

<( ) in relation to any electricity generation permission granted in respect of a plant with average per megawatt greenhouse gas emissions which exceed—

(i) those achievable by a modern combined cycle gas turbine; or

(ii) any level specified in guidance issued in relation to consents granted under section 36 of the Electricity Act 1989 (c.29),

give reasons as to why such permission was granted and how such permission will be compatible over the plant’s lifetime with achievement of the targets set out in this Act.>
Cathy Peattie

118 In section 29, page 13, line 4, at end insert—

<(  ) The report for each year in the period 2011-2050 must—
(a) state the amount of the net Scottish emissions account for each preceding target year;
(b) state the cumulative amount of the net Scottish emissions account for the target year and all preceding target years.>

Stewart Stevenson

23 In section 29, page 13, line 9, at end insert—

<(  ) If the amount of the net Scottish emissions account for an earlier target year requires to be adjusted, the report must—
(a) explain why the adjustment is required;
(b) specify the adjustment required; and
(c) state the adjusted amount.>

Section 30

Des McNulty

68 In section 30, page 13, line 20, leave out <and the 2050 target> and insert <, the 2050 target and, in each target year, the domestic effort target>

Alison McInnes

119 In section 30, page 13, line 23, at end insert—

<(  ) In particular, the report must define and quantify the contribution that the following areas within the Scottish economy are expected to make to the meeting of targets under the Act—
(a) energy efficiency;
(b) energy generation;
(c) land use;
(d) transport.>

Section 31

Des McNulty

69 In section 31, page 13, line 32, at end insert <or that the domestic effort target has not been met in the target year to which the report relates>
After section 31

Shirley-Anne Somerville

After section 31, insert—

<Reports on emissions attributable to Scottish consumption of goods and services

(1) The Scottish Ministers must lay before the Scottish Parliament a report in respect of each year in the period 2010-2050 containing the following information.

(2) The report must, in so far as reasonably practicable, set out the emissions of greenhouse gases (whether in Scotland or elsewhere) which are produced by or otherwise associated with the consumption and use of goods and services in Scotland during that year.

(3) The report may also contain such other information as the Scottish Ministers consider appropriate.>

Des McNulty

After section 31, insert—

<Report on progress towards meeting the interim target

(1) The Scottish Ministers must, no later than 31 December 2015, lay before the Scottish Parliament a report on progress towards meeting the interim target.

(2) The report must, in particular, state the progress that has been made in reducing emissions and indicate whether this progress is consistent with a reduction over time of the net Scottish emissions account which would allow the interim target and the 2050 target to be met.>

Section 32

Stewart Stevenson

In section 32, page 13, line 39, leave out <2030> and insert <2020>

Stewart Stevenson

In section 32, page 14, line 4, leave out <2030> and insert <2020>

Stewart Stevenson

In section 32, page 14, line 6, leave out <2030> and insert <2020>

Cathy Peattie

In section 32, page 14, line 6, at end insert—

< ( ) state the cumulative amount of the net Scottish emissions account for the period 2010-2020;>

Stewart Stevenson

In section 32, page 14, line 9, leave out <2030> and insert <2020>
Stewart Stevenson

28 In section 32, page 14, line 10, leave out <2030> and insert <2020>

Stewart Stevenson

29 In section 32, page 14, line 11, leave out <2030> and insert <2020>

Stewart Stevenson

30 In section 32, page 14, line 13, leave out <2030> and insert <2020>

Stewart Stevenson

31 In section 32, page 14, line 18, leave out <2032> and insert <2022>

Section 33

Cathy Peattie

121 In section 33, page 14, line 27, at end insert—

<( ) state the cumulative amount of the net Scottish emissions account for the period 2010-2050;>

Section 34

Des McNulty

71 In section 34, page 15, line 3, after <must> insert—

<( ) immediately send a copy of the report to the persons who convene and chair such committees of the Scottish Parliament as are for the time being appointed by virtue of standing orders; and

( )>

Patrick Harvie

122 In section 34, page 15, line 5, at end insert—

<( ) But a statement in relation to a report mentioned in subsection (2)(a) or (b) must not be made before the period for Parliamentary consideration has expired.

( ) In this section, the “period for Parliamentary consideration” means the period of 60 days beginning on the day on which the draft is so laid; and in reckoning that period no account is to be taken of any time during which the Scottish Parliament—

(a) is dissolved, or

(b) is in recess for more than 4 days.

( ) Before making a statement under subsection (1) in relation to a report mentioned in subsection (2)(a) or (b), the Scottish Ministers must have regard to any resolution or report of, or of any committee of, the Scottish Parliament made, during the period for Parliamentary consideration, as regards the report.>
As an amendment to amendment 122, line 2, leave out from beginning to <not> and insert <; but no such statement may>

In section 34, page 15, line 15, leave out from <meet> to end of line 16 and insert <attend, if invited, the proceedings of any such committees of the Scottish Parliament as are for the time being appointed by virtue of standing orders, for the purposes of giving evidence on the report.>

In section 34, page 15, line 16, at end insert—

<( ) The Scottish Ministers must have regard to any resolution or report of, or of any committee of, the Scottish Parliament made following the laying of a report mentioned in subsection (2) as regards the contents of the report and any future reports.>

In section 34, page 15, line 16, at end insert—

<(4) The Scottish Ministers must not implement the proposals and policies set out in a report mentioned in subsection (2)(c) unless the Scottish Parliament has, by resolution, approved the report.

(5) Where the Scottish Parliament does not approve a report mentioned in subsection (2)(c), the Scottish Ministers must lay a further report under section 31(2), containing amended proposals and policies, before the Parliament; and subsection (4) and this subsection apply to such a further report as they apply to the report originally laid before the Parliament.

(6) Before submitting a further report by virtue of subsection (5), the Scottish Ministers must have regard to any resolution or report of, or any committee of, the Scottish Parliament in relation to the report previously laid before the Parliament.>

After section 35

After section 35, insert—

<Reporting on emissions associated with imports: consultation

The Scottish Ministers must, no later than 1 June 2010, consult such persons as they consider appropriate about possible methodologies for recording and reporting on emissions generated outwith Scotland which are associated with the importation of goods and services into Scotland.>

In section 36, page 15, line 27, at end insert—
(A1) A public body must, in exercising its functions, act—
   (a) in the way best calculated to contribute to the delivery of the targets set in or under Part 1 of this Act;
   (b) in the way best calculated to help deliver any programme laid before the Scottish Parliament under section 45;
   (c) in a way that it considers is most sustainable.

(A2) In this Part, a “public body” means a Scottish public authority within the meaning of section 3(1)(a) of the Freedom of Information (Scotland) Act 2002 (asp 13).

Cathy Peattie

199 In section 36, page 15, line 28, after <make> insert <further>

Cathy Peattie

200 In section 36, page 15, line 30, leave out <“(climate change duties”).> and insert—
   <(1A) The duties imposed by subsection (A1) and any duty imposed by virtue of an order under subsection (1) are referred to in this Act as “climate change duties”.

Cathy Peattie

201 In section 36, page 15, line 31, after <duties> insert <under subsection (A1) or>

Patrick Harvie

202 In section 36, page 16, line 3, at end insert—
   <(3A) A draft of a statutory instrument containing the first order under subsection (1) must be laid before the Scottish Parliament within one year of the date that the Bill for this Act was passed by the Scottish Parliament.
   (3B) If a draft of the first order is not laid within the period mentioned in subsection (3A), the Scottish Ministers must, as soon as reasonably practicable after the expiry of that period, and in so far as reasonably practicable, make a statement to the Scottish Parliament explaining why the draft was not so laid.>

Section 37

Cathy Peattie

203 In section 37, page 16, line 14, leave out subsection (1) and insert—
   <(1) The Scottish Ministers must give guidance to relevant public bodies in relation to climate change duties and those bodies must have regard to such guidance.>

Cathy Peattie

204 In section 37, page 16, line 16, after <must> insert—
   <( ) have regard to any advice from the relevant body; and
   ( )>
Section 38

Cathy Peattie

205 In section 38, page 16, line 26, leave out <may> and insert <must>

Cathy Peattie

206 In section 38, page 16, line 27, after <prepare> insert <annual>

Cathy Peattie

207 In section 38, page 16, line 28, at end insert—

<(  )  requiring any relevant public body found, following an investigation under section 40, to be failing to comply with its climate change duties, to prepare a report on the actions it is taking to secure future compliance with those duties;>

John Park
Supported by: Des McNulty, Sarah Boyack

208 In section 38, page 16, line 29, at beginning insert <subject to subsection (1A),>

John Park
Supported by: Des McNulty, Sarah Boyack

209 In section 38, page 16, line 31, at end insert—

<(1A) Reports required by virtue of subsection (1)(a) must contain information about the ways in which relevant public bodies have used procurement policies and wider workplace policies to contribute to compliance with their climate change duties.>

Section 40

Cathy Peattie

210 In section 40, page 17, line 13, at end insert—

<(  )  In determining whether to carry out an investigation under subsection (1), the monitoring body must have regard to any advice received from the relevant body.>

Section 42

Stewart Stevenson

139 In section 42, page 17, line 37, leave out <Act> and insert <Part>

Stewart Stevenson

140 In section 42, page 18, line 1, leave out <Act> and insert <Part>
In section 42, page 18, line 5, at end insert <and the relevant body>

In section 42, page 18, line 5, at end insert—

<( ) The Scottish Ministers must lay the report before the Scottish Parliament.>

After section 44

After section 44, insert—

CHAPTER
ENVIRONMENTAL ASSESSMENT

Environmental assessment

(1) This section applies where the Scottish Ministers intend to adopt a plan or programme in respect of which an environmental report under section 14(1) of the Environmental Assessment (Scotland) Act 2005 (asp 15) identifies significant greenhouse gas emissions.

(2) Before adopting the plan or programme, the Scottish Ministers must—

(a) request advice from the relevant body (within the meaning of section 5(5)) as to—

(i) whether adoption of the plan or programme is likely to be compatible with achievement of the targets set by, or by virtue of, Part 1;

(ii) if not, what steps can be taken to ensure such compatibility; and

(b) consider and take account of that advice.

(3) Any advice requested under subsection (2)(a) must, after it has been sent to the Scottish Ministers, be published in such manner as the relevant body consider appropriate.

(4) After adopting a plan or programme of the kind mentioned in subsection (1) in respect of which advice has been received under paragraph (a)(ii) of subsection (2), the Scottish Ministers must—

(a) lay the plan or programme before the Scottish Parliament; and

(b) as soon as practicable after doing so, and in so far as reasonably practicable, make a statement to the Scottish Parliament explaining what steps of the kind mentioned in that paragraph will be taken.>

Section 45

In section 45, page 18, leave out line 32

In section 45, page 18, line 33, leave out <in particular,>
Stewart Stevenson

143 In section 45, page 19, line 1, leave out <the Scottish Ministers’> and insert <their>

Des McNulty

214 In section 45, page 19, line 3, at end insert—

< ( ) the arrangements for involving employers, trade unions and other stakeholders in meeting those objectives;>

< ( ) the mechanisms for ensuring public engagement in meeting those objectives;>

Stewart Stevenson

144 In section 45, page 19, line 4, at end insert <; and>

< ( ) otherwise addressing the risks identified in the report under section 56 of the 2008 Act>

Stewart Stevenson

145 In section 45, page 19, line 6, leave out <under this section>

Stewart Stevenson

146 In section 45, page 19, line 8, leave out <laid under subsection (2)>

Stewart Stevenson

147 In section 45, page 19, line 9, leave out <under this section>

Stewart Stevenson

148 In section 45, page 19, line 10, leave out <the Scottish Ministers> and insert <they>

Rob Gibson

215 In section 45, page 19, line 10, after <receive> insert <the copy of>

After section 45

Rob Gibson

216 After section 45, insert—

<Reports on progress towards implementation of programmes for adaptation>

(1) This section applies where the Scottish Ministers lay a programme under section 45(2) before the Scottish Parliament.

(2) The Scottish Ministers must lay before the Scottish Parliament reports setting out their assessment of the progress made towards implementing the objectives, proposals and policies set out in the programme.
(3) The first report under this section must be laid before the Scottish Parliament no later than the expiry of the period of 12 months beginning with the day on which the programme is laid.

(4) The second and subsequent reports under this section must be laid before the Scottish Parliament no later than the expiry of each subsequent period of 12 months.

Rob Gibson

217 After section 45, insert—

<Progress towards implementation of programmes for adaptation>

(1) This section applies where—

(a) the Scottish Ministers lay a programme under section 45(2) before the Scottish Parliament;

(b) the Secretary of State lays a second or subsequent report under section 56 of the 2008 Act before Parliament.

(2) Where subsection (1)(a) applies, the Scottish Ministers must, before the expiry of the period of 2 years beginning with the day on which the programme is laid, request the relevant body to prepare a report setting out its assessment of the progress made towards implementing the objectives, proposals and policies set out in that programme.

(3) Where subsection (1)(b) applies, the Scottish Ministers must, as soon as reasonably practicable after they receive the copy of the report laid, request the relevant body to prepare a further report setting out its assessment of the progress made towards implementing the objectives, proposals and policies set out in the most recent programme laid by the Scottish Ministers under section 45(2).

(4) The Scottish Ministers must, as soon as reasonably practicable after they receive the relevant body’s report under subsection (2) or, as the case may be, further report under subsection (3), lay it before the Scottish Parliament.

Rob Gibson

218 After section 45, insert—

<Reports on programmes for adaptation>

(1) This section applies where—

(a) the Scottish Ministers lay a programme under section 45(2) before the Scottish Parliament;

(b) the Secretary of State lays a second or subsequent report under section 56 of the 2008 Act before Parliament.

(2) Where subsection (1)(a) applies, the advisory body must, before the expiry of the period of 2 years beginning with the day on which the programme is laid, prepare a report setting out its assessment of the progress made towards implementing the objectives, proposals and policies set out in that programme.

(3) Where subsection (1)(b) applies, the advisory body must, as soon as reasonably practicable after the report is laid, prepare a further report setting out its assessment of the progress made towards implementing the objectives, proposals and policies set out in the most recent programme laid by the Scottish Ministers under section 45(2).
The advisory body must, as soon as reasonably practicable after preparing a report under subsection (2) or, as the case may be, a further report under subsection (3), lay it before the Scottish Parliament.

Peter Peacock
Supported by: Des McNulty, Liam McArthur

After section 45, insert—

Land use strategy

Duty to produce a land use strategy

(1) The Scottish Ministers must, no later than 31 March 2011, lay a land use strategy before the Scottish Parliament.

(2) The strategy must, in particular, set out—
   (a) the Scottish Ministers’ objectives in relation to sustainable land use;
   (b) their proposals and policies for meeting those objectives; and
   (c) the timescales over which those proposals and policies are expected to take effect.

(3) The objectives, proposals and policies referred to in subsection (2) must contribute to—
   (a) achievement of the Scottish Ministers’ duties under section 1, 2 or 3(1)(b);
   (b) achievement of the Scottish Ministers’ objectives in relation to adaptation to climate change, including those set out in any programme produced by virtue of section 45(2); and
   (c) sustainable development.

(4) Before laying the strategy before the Scottish Parliament, the Scottish Ministers must publish a draft strategy and consult with such bodies as they consider appropriate and also with the general public.

(5) The strategy must be accompanied by a report setting out—
   (a) the consultation process undertaken in order to comply with subsection (4); and
   (b) the ways in which views expressed during that process have been taken account of in finalising the strategy (or stating that no account has been taken of such views).

(6) The Scottish Ministers must, no later than—
   (a) five years after laying a strategy before the Scottish Parliament under subsection (1); and
   (b) the end of every subsequent period of five years,
   lay a revised strategy before the Scottish Parliament; and subsections (2) to (5) apply to a revised strategy as they apply to a strategy laid under subsection (1).

Section 46

Stewart Stevenson

In section 46, page 19, line 17, leave out <specify such> and insert <modify section 23 so as to substitute for any of the dates for the time being mentioned in subsection (1), (2) or, as the case may be, (3) of that section such other>
In section 46, page 19, leave out lines 20 to 22

In section 46, page 19, line 24, at end insert—

<( ) An order under subsection (1) may not modify any of the dates for the time being mentioned in section 23 if the modification would result in a period during which it is lawful to make muirburn in any year being shorter than the corresponding period which applied immediately before the coming into force of section 46 of the Climate Change (Scotland) Act 2009 (asp 00).>

In section 46, page 19, line 26, leave out from beginning to <a> in line 27 and insert <No statutory instrument containing an order under subsection (1) may be made unless a draft of the instrument has been laid before, and approved by>

In section 47, page 19, line 36, at end insert—

<( ) An order under subsection (1) must have the effect of contributing to sustainable development.>

In section 47, page 20, line 6, at end insert—

<( ) Any body corporate formed, trust established or person appointed by the Forestry Commissioners by virtue of an order under subsection (1) is a public body or office holder for the purposes of section 1 of the Nature Conservation (Scotland) Act 2004 (asp 6).>

In section 47, page 20, line 7, leave out subsection (4)

In section 48, page 20, line 16, leave out from second <the> to end of line 19 and insert—

<( ) promoting energy efficiency; and

( ) improving the energy efficiency of living accommodation, in Scotland.>
Iain Smith (on behalf of the Economy, Energy and Tourism Committee)

223 In section 48, page 20, line 19, at end insert—

<(  ) The plan must set annual energy efficiency targets and describe how those targets are to be reported on.>

Stewart Stevenson

154 In section 48, page 21, line 1, after <technologies> insert <(other than those used for the production of heat)>

After section 48

Stewart Stevenson

155 After section 48, insert—

<Promotion of renewable heat

Duty of Scottish Ministers to promote renewable heat

(1) The Scottish Ministers must prepare and publish a plan for the promotion of the use of heat produced from renewable sources.

(2) The plan prepared under subsection (1) must be published no later than 12 months after the day on which this section comes into force.

(3) The Scottish Ministers—
   (a) may, from time to time; and
   (b) must, before the end of the period mentioned in subsection (4), review the plan prepared and published under this section.

(4) The period referred to in subsection (3)(b) is the period of 2 years beginning with the date on which—
   (a) the plan is first published; or
   (b) the plan was last reviewed under subsection (3).

(5) Where, following a review under subsection (3), the Scottish Ministers vary the plan, they must, as soon as reasonably practicable after so doing, publish the plan as so varied.

(6) In this section, “renewable sources” has the same meaning as in section 48(8).>

Section 49

Stewart Stevenson

156 In section 49, page 21, line 16, after <(6)> insert <or section (Duty of Scottish Ministers to promote renewable heat)(1) or (5)>

Section 50

Liam McArthur

224 In section 50, page 21, line 26, leave out <may> and insert <must>
Stewart Stevenson

157 In section 50, page 21, line 26, leave out <make provision relating to> and insert—
<( ) provide for>

Liam McArthur

225 In section 50, page 21, line 26, after <assessment> insert <and cost-effective improvement>

Stewart Stevenson

158 In section 50, page 21, line 30, at end insert—
<( ) require owners of such buildings to take steps, identified by such assessments, to—
(i) improve the energy performance of such buildings;
(ii) reduce such emissions.>

Stewart Stevenson

159 In section 50, page 22, line 2, after <activities> insert <carried out in buildings>

Stewart Stevenson

160 In section 50, page 22, line 5, at end insert—
<(ha) the form of any recommendations, contained in such certificates, as to the improvement of the energy performance of buildings and the reduction of emissions produced by or otherwise associated with buildings or activities carried out in buildings;
(hb) the manner in which and periods within which persons must take steps to comply with any recommendations contained in such certificates;
(hc) the registration of such certificates;
(hd) the disclosure of information which is entered in the register;>

Liam McArthur

160A As an amendment to amendment 160, line 2, after <to> insert <cost-effective measures for>

Liam McArthur

226 In section 50, page 22, line 16, at end insert—
<( ) The Scottish Ministers must, within 12 months of this Act receiving Royal Assent, publish a report setting out—
(a) what measures they intend to take to reduce emissions from non-domestic buildings; and
(b) when they intend to make provision as mentioned in paragraphs (ha) and (hb).>
After section 50

Iain Smith (on behalf of the Economy, Energy and Tourism Committee)

After section 50, insert—

<Energy performance of living accommodation

Living accommodation: assessment of energy performance and emissions

(1) The Scottish Ministers may, by regulations, make provision relating to the assessment of—
   (a) the energy performance of living accommodation;
   (b) the emission of greenhouse gases produced by living accommodation.

(2) The regulations may in particular include provision about—
   (a) the circumstances in which the regulations apply;
   (b) the living accommodation to which the regulations apply;
   (c) the persons who may be required to have assessments carried out;
   (d) the periods within which such assessments must be carried out;
   (e) the procedure and methodology for assessing the energy performance of living accommodation;
   (f) the procedure and methodology for assessing the greenhouse gas emissions produced by the living accommodation;
   (g) the persons who may carry out such assessments;
   (h) the issuing of certificates, following such assessments, including the form, manner and content of such certificates;
   (i) subject to subsection (3), the enforcement authority in relation to the regulations;
   (j) subject to subsection (4), the functions of that authority;
   (k) the keeping of information and its production to the enforcement authority;
   (l) the enforcement of the duties imposed by the regulations;
   (m) offences in relation to failures to comply with requirements of the regulations.

(3) The enforcement authority provided for in the regulations is to be such person or body as the Scottish Ministers consider appropriate.

(4) The functions of the enforcement authority may include power to levy charges to recover the reasonable costs incurred by it in exercising its functions under the regulations.>

Section 51

Stewart Stevenson

Leave out section 51
Section 58

Stewart Stevenson
162 In section 58, page 28, line 3, after <return> insert—
   <( ) such articles;>

Stewart Stevenson
163 In section 58, page 28, line 3, after <articles> insert <("returnable packaging"); or
   <( ) both such articles and such packaging.>

Stewart Stevenson
164 In section 58, page 28, line 6, at end insert—
   <( ) accept the return to them of—
      (i) such articles;
      (ii) returnable packaging; or
      (iii) both such articles and such packaging;>

Stewart Stevenson
165 In section 58, page 28, line 7, leave out from <packaging> to end of line 8 and insert <to them—
   <(i) such articles;
   (ii) returnable packaging; or
   (iii) both such articles and such packaging;
   ( ) return such articles to the producers of them;>

Stewart Stevenson
166 In section 58, page 28, line 9, leave out <such> and insert <returnable>

Stewart Stevenson
167 In section 58, page 28, line 12, at end insert—
   <( ) accept the return to them of—
      (i) such articles;
      (ii) returnable packaging; or
      (iii) both such articles and such packaging;>

Stewart Stevenson
168 In section 58, page 28, line 13, leave out <packaging to them> and insert <to them—
   <(i) such articles;
   (ii) returnable packaging; or
(iii) both such articles and such packaging>

Stewart Stevenson

169 In section 58, page 28, leave out line 14 and insert—

<(  ) recycle, or have recycled—

(i) such articles;
(ii) returnable packaging; or
(iii) both such articles and such packaging.>

Stewart Stevenson

170 In section 58, page 28, line 15, leave out from <in> to <producers> in line 16 and insert <a “scheme administrator”>

Stewart Stevenson

171 In section 58, page 28, leave out line 18 and insert—

<(  ) accept the return of—

(i) such articles;
(ii) returnable packaging; or
(iii) both such articles and such packaging.;>

Stewart Stevenson

172 In section 58, page 28, line 19, leave out <such packaging> and insert—

<(i) such articles;
(ii) returnable packaging; or
(iii) both such articles and such packaging>.

Stewart Stevenson

173 In section 58, page 28, line 19, at end insert—

<(  ) return such articles to the producers of them;>

Stewart Stevenson

174 In section 58, page 28, line 20, leave out <such> and insert <returnable>

Stewart Stevenson

175 In section 58, page 28, leave out line 23 and insert—

<(  ) recycle, or have recycled—

(i) such articles;
(ii) returnable packaging; or
(iii) both such articles and such packaging.>
In section 58, page 28, line 31, at end insert—

⟨( ) the inclusion, in the sale price of articles, of a non-returnable element to cover the reasonable costs incurred by retailers, producers or a scheme administrator in administering such schemes;

( ) the articles the return of which entitles persons to payment of sums equal to deposits;

( ) the methods by which such articles are to be identified;⟩

In section 58, page 28, line 32, leave out from ⟨associated⟩ to ⟨deposits⟩ in line 33 and insert ⟨which is returnable packaging for the purposes of such schemes⟩

In section 58, page 28, line 34, leave out ⟨such⟩ and insert ⟨returnable⟩

In section 58, page 28, line 36, at end insert—

⟨( ) the places to which articles can be returned;⟩

In section 58, page 28, line 37, after ⟨which⟩ insert ⟨returnable⟩

In section 58, page 28, line 39, at end insert—

⟨( ) the scheme administrator;⟩

Leave out section 58

After section 58

After section 58, insert—

⟨Deposit and return schemes: designation of scheme administrator

(1) The Scottish Ministers may, by order, designate—

(a) a body established under section (Power to establish scheme administrator)(1); or

(b) such other person or body as they consider appropriate (an “existing body”),

as a scheme administrator of a deposit and return scheme established by virtue of section 58.⟩
(2) An order under subsection (1)(b) may, in so far as the Scottish Ministers consider it necessary or expedient to do so, modify the functions of an existing body by—
   (a) conferring functions on;
   (b) removing functions from; or
   (c) otherwise varying the functions of,
   the body.
(3) That order may in particular include provision about—
   (a) borrowing by the existing body (with the approval of the Scottish Ministers);
   (b) the charging by the body, in respect of the exercise of its functions in relation to a deposit and return scheme, of such reasonable amounts as the Scottish Ministers consider appropriate.
(4) In exercising functions in relation to a deposit and return scheme, a scheme administrator must comply with any written directions of a general or specific nature as the Scottish Ministers may from time to time give to it in relation to those functions.

Stewart Stevenson
183 After section 58, insert—

<Power to establish scheme administrator
(1) The Scottish Ministers may, by order, establish a body to be a scheme administrator of a deposit and return scheme established by virtue of section 58(1).
(2) A body established under subsection (1) is to be a body corporate.
(3) The body may do anything which appears to it—
   (a) to be necessary or expedient for the purpose of, or in connection with, the exercise of its functions in relation to a deposit and return scheme;
   (b) to be conducive to the exercise of those functions.
(4) In particular, the body may—
   (a) enter into contracts;
   (b) with the agreement of the Scottish Ministers, borrow money;
   (c) charge, in respect of the exercise of its functions in relation to a deposit and return scheme, such reasonable amounts as the Scottish Ministers consider appropriate.
(5) An order under subsection (1) may in particular include provision about—
   (a) the status and constitution of the body;
   (b) the status of the members and any employees of the body;
   (c) the remuneration, allowances and pensions of such members and such employees;
   (d) the conferral of functions on the body;
   (e) the keeping by the body of accounts and accounting records.

Stewart Stevenson
184 After section 58, insert—
<Finance of scheme administrator>

(1) The Scottish Ministers may, for the purpose of or in connection with the exercise by a scheme administrator of functions in relation to a deposit and return scheme—

(a) pay grants;

(b) make loans,

to the administrator of such amounts as Ministers may determine.

(2) Any such grant or loan may be paid or, as the case may be, made, on such terms and subject to such conditions (including, in the case of a loan, conditions as to repayment) as the Scottish Ministers consider appropriate.

(3) The Scottish Ministers may, from time to time after any grant or loan is paid or, as the case may be, made, vary the terms and conditions on which it was paid or made.

(4) The Scottish Ministers may guarantee, in such manner and on such conditions as they consider appropriate, the discharge of any financial obligation in connection with any sums borrowed by a scheme administrator for the purpose of, or in connection with, the exercise of its functions in relation to a deposit and return scheme.>

Section 59

Des McNulty
Supported by: Angela Constance

74 Leave out section 59

Section 62

Cathy Peattie

228 In section 62, page 30, line 23, at end insert—

<( ) public bodies (as defined in section 36(A2))>

Section 64

Iain Smith (on behalf of the Economy, Energy and Tourism Committee)

229 In section 64, page 31, leave out lines 29 and 30

Alex Johnstone

186 In section 64, page 31, leave out lines 31 to 35

Section 65

Stewart Stevenson

32 In section 65, page 32, line 8, leave out <section 10(2)> and insert <subsection (2) of section 10>
Stewart Stevenson
33 In section 65, page 32, line 9, leave out <subsection (2)(a)> and insert <paragraph (a)>

Stewart Stevenson
34 In section 65, page 32, line 9, at end insert <of that subsection>

Cathy Peattie
230 In section 65, page 32, line 13, leave out from <means> to end of line 14 and insert <has the meaning given by section 36(1A)>.

Cathy Peattie
231 In section 65, page 32, line 29, after <body”> insert <(except in Part 4 and section 62)>

Schedule 2

Iain Smith (on behalf of the Economy, Energy and Tourism Committee)
232 In schedule 2, page 39, leave out lines 24 to 26

Section 67

Rob Gibson
233 In section 67, page 33, line 13, after <27> insert <, (Reports on programmes for adaptation)>

Cathy Peattie
234 In section 67, page 33, line 14, after <day> insert <(in the case of sections 36 to 44, being not later than 18 months after this Act receives Royal Assent)>

Rob Gibson
235 In section 67, page 33, line 15, after <27> insert <and (Reports on programmes for adaptation)>

Long Title

Stewart Stevenson
35 In the long title, page 1, line 2, leave out <2030> and insert <2020>

Cathy Peattie
236 In the long title, page 1, line 3, leave out from <confer> to first <to> in line 4 and insert <impose, and confer power on Ministers to further>
Climate Change (Scotland) Bill

2nd Groupings of Amendments for Stage 2

This document provides procedural information which will assist in preparing for and following proceedings on the above Bill. The information provided is as follows:

- the list of groupings (that is, the order in which amendments will be debated). Any procedural points relevant to each group are noted;
- a list of any amendments already debated;
- the text of amendments to be debated on the second day of Stage 2 consideration, set out in the order in which they will be debated. THIS LIST DOES NOT REPLACE THE MARSHALLED LIST, WHICH SETS OUT THE AMENDMENTS IN THE ORDER IN WHICH THEY WILL BE DISPOSED OF.

Groupings of amendments

**Progress towards meeting interim and final targets: advice and reports etc.**
187, 188, 189, 192, 197

**Advice etc. to members of the Scottish Parliament**
105

**Relationship between advisory body and Scottish Parliament**
131, 132, 134, 135, 237, 136

**Minor amendments**
15, 16, 17, 18, 139, 140, 145, 146, 147, 148, 32, 33, 34

**Programmes for adaptation**
190, 191, 141, 142, 143, 214, 144, 215, 216, 217, 218, 233, 235

**Contribution of different sectors: advice and reports**
193, 194, 195, 196, 137, 138, 119

**Power to give directions to advisory body**
113, 114

**Reports on targets etc.: content**
116, 67, 117, 118, 23, 120, 121

**Reports on certain kinds of emissions**
70, 124

**Reports: provision of information to the Scottish Parliament**
71, 122, 122A, 72, 73, 123
Public bodies: climate change duties
198, 199, 200, 201, 202, 203, 228, 230, 231, 234, 236

Role of relevant body etc.
204, 210, 211, 212

Public bodies: reporting on climate change duties
205, 206, 207, 208, 209

Environmental assessment
213

Land use strategy
219

Power to vary times for making muirburn
149, 150, 151, 152

Power to modify functions of Forestry Commissioners
220, 221, 153

Promotion of energy efficiency
222, 223, 232

Promotion of renewable heat
154, 155, 156, 161

Energy performance: non-domestic buildings
224, 157, 225, 158, 159, 160, 160A, 226, 229

Energy performance: living accommodation
227

Deposit and return schemes
162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 185, 182, 183, 184, 186

Charges for supply of carrier bags
74

Amendments already debated

Interim target: modification
With 1 - 24, 25, 26, 27, 28, 29, 30, 31, 35

Setting annual targets: criteria
With 79 - 109

Role of relevant body in relation to annual targets
With 82 - 106, 107, 108, 110
Achievement of annual targets: respective contributions of domestic reductions and crediting of carbon units
With 50 - 60, 19, 61, 62, 63, 65, 68, 69

Notes on amendments in this group
Amendment 60 pre-empts amendment 19

Annual targets: progress towards achievement
With 9 - 111, 20, 112, 21, 64, 22, 115

Notes on amendments in this group
Amendment 111 pre-empts amendment 20
Amendment 112 pre-empts amendment 21
Amendment 64 pre-empts amendment 22
Present:

Rob Gibson               Charlie Gordon
Patrick Harvie (Convener) Alex Johnstone
Alison McInnes           Des McNulty
Cathy Peattie (Deputy Convener) Shirley-Anne Somerville

In attendance: Jim Hume, Liam McArthur, John Park and Peter Peacock.

**Climate Change (Scotland) Bill:** The Committee considered the Bill at Stage 2 (Day 2).

The following amendments were agreed to (without division): 15, 16, 17, 18, 190, 191, 108, 19, 193, 194, 20, 21, 22, 67, 137, 118, 23, 70, 197, 24, 25, 26, 120, 27, 28, 29, 30, 31, 121, 72, 73, 207, 139, 140, 212, 141, 142, 143, 214, 144, 145, 146, 147, 148, 215, 216, 217, 218, 219, 149, 150, 151, 152, and 153.

The following amendments were agreed to (by division)—

187 (For 5, Against 3, Abstentions 0)
61 (For 5, Against 3, Abstentions 0)
62 (For 5, Against 3, Abstentions 0)
63 (For 5, Against 3, Abstentions 0)
65 (For 5, Against 3, Abstentions 0)
68 (For 5, Against 3, Abstentions 0)
69 (For 5, Against 3, Abstentions 0)
71 (For 4, Against 3, Abstentions 1)
122A (For 5, Against 3, Abstentions 0)
198 (For 5, Against 3, Abstentions 0)
199 (For 5, Against 3, Abstentions 0)
200 (For 5, Against 3, Abstentions 0)
201 (For 5, Against 3, Abstentions 0)
203 (For 5, Against 3, Abstentions 0)
208 (For 5, Against 3, Abstentions 0)
221 (For 5, Against 3, Abstentions 0)

The following amendments were disagreed to (by division)—
105 (For 1, Against 7, Abstentions 0)
106 (For 2, Against 6, Abstentions 0)
109 (For 2, Against 6, Abstentions 0)
195 (For 2, Against 6, Abstentions 0)
196 (For 2, Against 6, Abstentions 0)
111 (For 2, Against 6, Abstentions 0)
112 (For 2, Against 6, Abstentions 0)
64 (For 2, Against 6, Abstentions 0)
115 (For 2, Against 6, Abstentions 0)
138 (For 2, Against 6, Abstentions 0)
122 (For 2, Against 6, Abstentions 0)
123 (For 2, Against 6, Abstentions 0)
204 (For 4, Against 4, Abstentions 0; amendment disagreed to on casting vote)
210 (For 4, Against 4, Abstentions 0; amendment disagreed to on casting vote)
211 (For 4, Against 4, Abstentions 0; amendment disagreed to on casting vote)

Amendments 131, 113, 116, 205, 213 and 220 were moved and, with the agreement of the Committee, withdrawn.

The following amendments were not moved: 188, 189, 132, 107, 192, 110, 60, 134, 135, 237, 136, 114, 117, 119, 124, 202, 206 and 209.

Sections 20, 25, 26, 27, 35, 39, 40, 41, 43 and 44 were agreed to without amendment.

Section 19, schedule 1, sections 21, 22, 23, 24, 28, 29, 30, 31, 32, 33, 34, 36, 37, 38, 42, 45, 46 and 47 were agreed to as amended.

The Committee ended consideration of the Bill for the day section 47 having been disposed of.
Scottish Parliament
Transport, Infrastructure and Climate Change Committee
Tuesday 2 June 2009

[THE CONVENER opened the meeting at 13:31]

Climate Change (Scotland) Bill: Stage 2

The Convener (Patrick Harvie): Good afternoon. If everybody is settled, we can proceed. Welcome to the 15th meeting this year of the Transport, Infrastructure and Climate Change Committee. I remind members and everybody else present that mobile devices should be switched off. We have received no apologies. As yet, no non-committee members are present, but I gather that some may attend later.

We have two items on the agenda today, item 1 being continued consideration of amendments at stage 2 of the Climate Change (Scotland) Bill. I welcome once again the Minister for Transport, Infrastructure and Climate Change, Stewart Stevenson; Philip Wright, deputy director for climate change; Fiona Page, the bill team leader; Frances Beck, solicitor; Max McGill, assistant Scottish parliamentary counsel—and do we have David Henderson-Howat with us?

The Minister for Transport, Infrastructure and Climate Change (Stewart Stevenson): He will come to the table later.

The Convener: Thank you, minister.

I remind members of the situation, as I explained it at the start of our previous meeting, regarding the use of the casting vote and the procedures that we will use. The situation is no different from last week.

We have two items on the agenda today, item 1 being continued consideration of amendments at stage 2 of the Climate Change (Scotland) Bill. I welcome once again the Minister for Transport, Infrastructure and Climate Change, Stewart Stevenson; Philip Wright, deputy director for climate change; Fiona Page, the bill team leader; Frances Beck, solicitor; Max McGill, assistant Scottish parliamentary counsel—and do we have David Henderson-Howat with us?

The Minister for Transport, Infrastructure and Climate Change (Stewart Stevenson): He will come to the table later.

The Convener: Thank you, minister.

I remind members of the situation, as I explained it at the start of our previous meeting, regarding the use of the casting vote and the procedures that we will use. The situation is no different from last week.

Section 19—Meaning of advisory body

The Convener: Amendment 187, in the name of Des McNulty, is grouped with amendments 188, 189, 192 and 197.

Des McNulty (Clydebank and Milngavie) (Lab): Amendment 187 adds “duty under section 2” to 
“functions under sections 5, 7, 8”
in section 19. That is explicitly to allow the relevant advisory body, whether it be the United Kingdom Committee on Climate Change or a Scottish climate change committee, to advise ministers on the interim target, should they require that. Putting something into the bill to allow that process to take place seems sensible and worth while.

Amendments 188 and 189 are, in a sense, probing amendments. I want to be sure that the advisory body is in a position not just to give ministers “advice on climate change” in general terms—such advice could be defined in a variety of ways—but to give ministers “advice on the effectiveness of the Scottish Ministers’ proposals and policies for achieving the interim and 2050 targets”.

There must be dialogue between the advisory body and ministers, not just on the task of tackling climate change but on the mechanisms that ministers employ. I presume that ministers intend to allow the Committee on Climate Change or a Scottish committee on climate change to give advice on the effectiveness of their policies and proposals. My amendments would include a provision on that in the bill, so I will be interested in the minister’s response.

Amendment 192 uses a similar form of words to that in an amendment of mine that we discussed at our previous meeting. The aim is to ensure that the advisory committee considers the way in which the trajectory of cuts in emissions is maintained, particularly to achieve the interim target. The form of words was accepted in a previous amendment, so I hope that it will be accepted again today.

Amendment 197 is probably the most important of the five amendments. It would require a report to be produced in 2015 on progress towards meeting the interim target. That would give the Parliament a break point to identify how we are getting on and, I hope, to put in place any measures that are needed to ensure that we meet the interim target. I hope that amendment 197 will receive the support of my fellow committee members.

I move amendment 187.

Stewart Stevenson: I am glad that Mr McNulty said that he regards amendment 197 as the most important one in the group, because I am pleased to say that I am content to support it. It will place a duty on the Scottish ministers to report on progress towards the interim target. That will give the Parliament a break point to identify how we are getting on and, I hope, to put in place any measures that are needed to ensure that we meet the interim target. I hope that amendment 197 will receive the support of my fellow committee members.

I move amendment 187.

Stewart Stevenson: I am glad that Mr McNulty said that he regards amendment 197 as the most important one in the group, because I am pleased to say that I am content to support it. It will place a duty on the Scottish ministers to report on progress towards the interim target. The proposed content and timing of the report are sensible. It is reasonable that it should be laid by the end of December 2015, which is about the midway point between the commencement of the annual emissions targets in 2010 and the date of the interim target in 2020.

I appreciate Mr McNulty’s intentions in lodging amendment 197 and the remaining amendments in the group, but we have minor difficulties with those other amendments. Although we support the policy direction in which Mr McNulty is trying to
take us, I cannot currently support those amendments.

Amendment 187 seeks to add to the functions of the advisory body the function of giving advice on the Scottish ministers' duty under section 2 to ensure that the interim target is met. I can understand why members might want to add that to the advisory body's functions, but amendment 187 goes about that in the wrong way. In a real sense, the advisory body already has that function under the bill.

The advisory body's functions are listed in section 19(3). The sections that are listed in section 19(3)(a), which are all in part 1 of the bill, place a duty on ministers to request advice or a report from the advisory body. Section 2 contains no such duty, but section 8, which is listed in section 19(3)(a), contains a duty on ministers to request from the advisory body a report on our progress towards the achievement of the interim target. Although that is not framed as a duty to request or give advice, in essence it amounts to the same thing. Therefore, amendment 187 is not necessary.

Amendments 188 and 189 are well intentioned. I would like to accept them, as I appreciate their aim of adding an extra element to the functions of the body that provides advice, but I suggest that a more suitable place in the bill to achieve what amendment 188 seeks is section 19(3). The amendment would insert material into section 19(4), but that would not guarantee that the advisory body had that function. Section 19(4) lists things that "may" be included in an order under section 19(3)(c). Amendment 188 would therefore not guarantee that the function was conferred on the advisory body. However, I am perfectly happy to take the view of the committee on that and to consider in advance of stage 3 how we can amend the bill to take that policy point forward in a way that is effective and consistent with the bill as a whole.

I can see the intention behind amendment 192. It follows amendment 38, which the committee agreed to last week and which inserted similar words into section 3. However, amendment 192 would require the advisory body to provide advice on the consistency of achieving the interim target after 2020. I therefore cannot support amendment 192, but I am happy to work on tightening up the wording and to lodge an amendment at stage 3 to achieve Des McNulty's aim.

Des McNulty: I am minded not to move amendments 188 and 189 and to work with the minister to find a sensible way of delivering the intention behind the amendments. The minister made the same offer in relation to amendment 192, and I am happy to co-operate in that and not to move amendment 192.

I was not entirely convinced by what the minister said about amendment 187. The amendment would allow the advisory body the opportunity not just to contribute to whether the target is achieved but to consider the target in the round. That is why the particular form of words was chosen—it was to expand the capacity of the advisory body beyond the bill's intention. I therefore intend to press amendment 187.

The Convener: The question is, that amendment 187 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

Amendment 187 agreed to.

The Convener: Amendment 105, in my name, is in a group on its own.

The amendment is intended to give the advisory body the function of providing advice, analysis, information and assistance to members of the Scottish Parliament, including committees composed of members of the Scottish Parliament.

We have previously been told on the record during our formal meetings, and it has been stated in other public forums, that the UK Committee on Climate Change—the existing body—will have some form of relationship to the Parliaments here and at Westminster. It will not have a direct relationship just with Government. Amendment 105 seeks to formalise that system to some extent.

The committee has expressed some surprise that the Scottish Government decided not to seek formal advice from the UK Committee on Climate Change in advance of the passage of the bill and that it argued that such a move would be inappropriate. It is possible that a future Scottish Government might seek to take a different approach to climate change from that which is recommended by the advisory body or supported by the Parliament. In that situation, it would be of great value if the Parliament, or a successor committee to this one, were able formally to seek advice on the same basis from the advisory body. That is all that amendment 105 seeks to achieve.
It is consistent with the approach of giving the advisory body a degree of independent status. Having a slightly formalised relationship with Parliament outside of the relationship to Government would be helpful.

Stewart Stevenson: Will the convener take an intervention?

The Convener: That is all I was going to say. The minister will have the opportunity to contribute to the formal debate on the amendment.

Stewart Stevenson: I just wondered whether, as the mover of the amendment, you are able to inform us as to the cost to Parliament.

The Convener: The cost to Parliament?

Stewart Stevenson: Of having access to the advisory body or committee. Those who have access to and take advice from that committee will have to pay for it and to provision that body accordingly.

The Convener: I would suggest that that is a case-by-case scenario. The Parliament, in making such approaches, would consider the implications at the time.

I move amendment 105.

13:45

Des McNulty: Amendment 105 seems to be very widely drawn. It would allow "any" individual member of the Scottish Parliament to seek "advice, analysis, information and other assistance" from the UK Committee on Climate Change or the Scottish climate change committee. The body that ought to provide advice to individual members is probably the Scottish Parliament information centre. If committees, as parliamentary bodies, wish to seek advice from the relevant advisory body, they should be allowed to do so, but through a proper process. That might be through a response to a report, an invitation to give evidence or some other such mechanism.

There are other amendments later in the marshalled list that allow that process to take place, and I am reluctant to support amendment 105, given how widely it is drawn. There are perhaps more suitable mechanisms for delivering an appropriate interface between parliamentary committees and the UK Committee on Climate Change or a Scottish climate change committee.

Stewart Stevenson: Mr McNulty has made many of the points that I too would make. SPICe is certainly the in-house source of advice here, and it can commission advice on behalf of parliamentarians. The committee and Parliament would need to consider it carefully if they were to remove responsibilities that SPICe might be thought to have in that respect and to place them elsewhere. The associated costs would have to be considered. If the source of the questions was from Parliament, it would properly be for Parliament to pay for the advice that it received, just as the Government has to pay out of its own resources for the resourcing of any committee or body that provides advice to ministers. Those are issues that bear further thinking about. I encourage committee members not to support amendment 105.

I should also point out that committees have the power, which they have exercised in many instances, to appoint their own advisers. That has often provided a useful way of getting the particular expertise that committees wish and of developing a more intimate, on-going relationship with the sources of advice than would be likely to be possible with a UK or Scottish advisory committee.

The Convener: In response to the financial question, I entirely concede that the consideration of cost would have to be taken seriously, although I do not think that it is a reason for prohibiting members of the Scottish Parliament from seeking advice, on a formal basis, from the advisory body. Such decisions would have to be made on a case-by-case basis, and permission should be given for them to be taken at the time.

In response to Des McNulty’s comments, I will say that I deliberately did not restrict amendment 105 to parliamentary committees. If the amendment were agreed, parliamentary committees would certainly be able to seek advice formally from the advisory body. However, as the committee has acknowledged on a number of occasions, climate change is such a cross-cutting issue that individual members will have a clear interest in it, even if they are not members of a committee with a particular remit for climate change. I therefore intended to make amendment 105 broad so that it includes individual members who are not members of a committee with a specific remit.

Amendment 105 would simply give permission to members of the Scottish Parliament to seek such advice. I hope that it is not a probability, but it is certainly a possibility that the Government does not put to the advisory body a specific question that members of the Scottish Parliament consider important. Amendment 105 will allow members to ask the question.

The question is, that amendment 105 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.
FOR
Harvie, Patrick (Glasgow) (Green)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 1, Against 7, Abstentions 0.

Amendment 105 disagreed to.
Amendment 188 not moved.
Section 19, as amended, agreed to.

Section 20—Scottish Committee on Climate Change
Amendment 189 not moved.

The Convener: Amendment 131, in the name of Cathy Peattie, is grouped with amendments 132, 134, 135, 237 and 136.

Cathy Peattie (Falkirk East) (Lab): The amendments in this group are probing amendments on the relationship between the Scottish Parliament and the advisory body. Ministers will have a role in ensuring that the Scottish Parliament is aware of the establishment of the Scottish committee on climate change, and of its staffing, its role and remit, and its targets and direction. The amendments are about involving the Parliament in every way possible.

Amendment 237 is similar to Patrick Harvie’s amendment 105 in that it concerns the right of committees of the Scottish Parliament and the advisory body. Ministers will have a role in ensuring that the Scottish Parliament is aware of the establishment of the Scottish committee on climate change, and of its staffing, its role and remit, and its targets and direction. The amendments are about involving the Parliament in every way possible.

Amendment 237 is similar to Patrick Harvie’s amendment 105 in that it concerns the right of committees of the Scottish Parliament to call for evidence so that they are aware of issues that may have moved on since the time of the original bill. That could help with inquiries, for example. I want committees of this Parliament to have the right to call the advisory body to give evidence. The committees would then be able to report to Parliament.

I move amendment 131.

Stewart Stevenson: The amendments in this group would require the Scottish ministers to consult the Scottish Parliament in specific circumstances before setting up the advisory body or giving it any direction.

If ministers establish a Scottish committee on climate change, it will be a significant step. I would be content to consult the Parliament before introducing an order to establish the committee; I am therefore content to accept the principle of amendment 131. However, the drafting appears to contain an error: it refers to consulting “Before making an order”.

That expression is not appropriate for an order that is subject to the affirmative procedure, as this one would be. The draft of the order will, of course, be presented to Parliament for approval, so Parliament will have an opportunity to scrutinise it and decide whether or not to approve it. I am therefore not entirely sure what is intended by amendment 131.

I am happy to give a commitment to the committee and to Parliament that ministers will consult before bringing forward a draft order—before the start of the 40 days—on establishing a Scottish climate change committee. Under what Bill Aitken has previously described as the mischief of the law, that commitment now has legal force.

Amendment 135 provides for a requirement to consult the Scottish Parliament. Given that the Parliament must scrutinise and approve the affirmative order, it is not clear what additional scrutiny the consultation duty affords, so I will not support that amendment. Although the same applies to amendment 131, I understand the significance of ministers seeking to establish a Scottish climate change committee, which is why I have said what I have.

On amendment 132, I remind the committee that the main purpose of the advisory body is to provide expert advice to the Scottish ministers. The amendment would require ministers to consult the Scottish Parliament before appointing members to the Scottish climate change committee. That would create a division and a potential conflict of responsibilities that would be likely to be unhelpful.

If appointments to the committee were to be agreed by the Scottish Parliament and ministers, accountability would become difficult as the members of the advisory body would be looking in more than one direction. Paragraph 2 of schedule 1 sets out the expertise and experience that the committee should have, and ministers would need to have regard to that when making the appointments. That is a sufficient and normal safeguard, and there are, of course, procedures already in place on public appointments.

To require that the ministers consult the Parliament prior to appointing members would be a departure from existing practice and could potentially deter applicants. It is already difficult in some circumstances to get a sufficient range of good-quality applicants. There are questions about how Parliament would be consulted and whether that would involve all members or only the members of relevant parliamentary committees. What would Parliament do as part of the process? There are a considerable number of questions and
uncertainties, so I do not wish members to support amendment 132.

Amendment 134 requires the advisory body to lay a report before Parliament in each year from the specified year onwards. Section 23(4) already provides for the laying of reports under section 23 and the time limits that are to apply to that. Amendment 134 carries the risk of introducing some confusion, given the provisions that are already in the bill.

On amendment 136, it is appropriate that ministers can give directions to the climate change committee about the exercise of functions without first clearing that with the Scottish Parliament. As is the case with amendment 132, it is not clear exactly how ministers would consult Parliament in a way that fulfilled the duty that the amendment encompasses.

I remind members that section 27(2) prohibits ministers from directing the advisory body as to the content of any advice or report, which protects its ability to publish its expert views unhindered and untrammelled by directions from ministers.

Amendment 237 provides a new duty under section 25 for the advisory body to provide advice, analysis and information on ministers’ functions under the act. We have, in some ways, already discussed that in relation to amendment 105. Amendment 237 potentially asks the committee to comment on areas in which it does not actually have, or require to have, the expertise that would enable it to provide information on ministers’ functions. In practice, it would be difficult to go down that road, and I ask members not to proceed on that.

I hope that my assurances to Cathy Peattie will encourage her to feel that it has been worth lodging those probing amendments and getting statements from the minister—which I hope she feels are adequate for the purpose—on the record.

14:00

Cathy Peattie: The minister is aware that I strongly support the establishment of a Scottish committee on climate change and that I am trying to ensure its success. As I said at the start, my amendments are probing. I am content with what the minister has said and seek leave to withdraw amendment 131.

Amendment 131, by agreement, withdrawn.

Section 20 agreed to.

Schedule 1

The Scottish Committee on Climate Change

Amendment 132 not moved.
At present, the Scottish Government is developing its first climate change adaptation programme, which is out for public consultation. The programme will run from 2009 to 2011, when it will be reviewed in the light of the first UK climate change risk assessment. The subsequent programme will, therefore, run from 2012 to 2017.

I should say a bit about the UK climate change risk assessment. It will assess the current and predicted impacts in Scotland as well as the rest of the UK. Many risks will be similar throughout the UK, but some will be specific to Scotland or parts of Scotland, for example those associated with deep peat or native pine woods.

The UK CCRA will provide unprecedented information for Scotland by sector and climatic region—those regions are north, east and west. The Scottish ministers have elected to participate in the assessment, as it will be conducted by a consortium of the UK’s leading experts and will draw on the knowledge of the adaptation sub-committee of the UK CCC. I realise that there are a lot of UK CCRA and UK CCCs in this—trust me.

The Scottish Government funds the UK CCRA along with the UK, Northern Irish and Welsh Administrations. To ensure that the assessment meets Scottish requirements, the Scottish Government will continue to play an active role throughout its development. The Government is part of the steering group that directs the work and will also play a leading role in the provision of Scottish data and information for the assessment, and intends to draw on the expertise of the Scottish Environment Protection Agency, Scottish Natural Heritage and others to assist in the exercise.

The first UK CCRA will be delivered in 2011, and subsequent reports will be produced every five years. Adaptation requires a long-term approach, as developments in climate change science run on a more or less five-year cycle and impacts and adaptation measures affect us over the long term.

The findings of the UK CCRA will inform policy development within Scotland. In formulating the Scottish ministers’ programme for adapting to climate change, further consideration of the findings will necessarily be carried out by relevant Scottish policy developers, particularly within the Scottish Government and its agencies.

I submit that amendments 190, 191, 215 to 218, 233 and 235 strengthen the Government’s approach to adaptation, increase scrutiny of it and accountability for it, and underline the annual reporting on it.

I move amendment 190.

**Stewart Stevenson:** Last week, we focused on numbers and targets; this week, we are starting to engage on the activities that we need to undertake. Adaptation is an important activity, and I am happy to encourage committee members to support all the amendments in the group.

No Government can address climate change alone; adapting to the changes in our environment will require the engagement of every part of our community. The Scottish Government is working to clarify roles for key stakeholders and define how it will work with them. Mr McNulty’s amendment 214 is in line with that, therefore I am happy to commend it to the committee.

Adapting to climate change is also vital to laying the foundations for our future economy, environment and social wellbeing. The Scottish Government wants to do all that it can to foster innovation, and this group of amendments will strengthen progress reporting on the Scottish ministers’ programme for adapting to climate change. I am therefore content to support all the amendments, but particularly amendments 190, 191, 215 to 218, 233 and 235.

The Government’s amendments 141 to 144 are quite straightforward: they simply seek to amend section 45 to give priority to the Scottish ministers’ programme for adapting to climate change.

I hope that the committee will see its way to supporting all the amendments in the group.

**Des McNulty:** The proposals in amendment 214 take forward two recommendations that we made in our stage 1 report: the requirement for public engagement and the need to involve stakeholders, particularly employers and trade unions. I am pleased that the minister is willing to accept the amendment. For our part, we are keen to support the amendments in the name of Rob Gibson.

**Rob Gibson:** In winding up, I thank members for their contributions and the minister for his support. Amendment 215 is necessary, because there is an error in the bill. It says that we will receive a report from the UK secretary of state; in fact, we will receive a copy of the report. Amendment 215 corrects that error. I did not mention that earlier; I kept it for last. I wanted to see whether everyone was still awake. I will press amendment 190.

Amendment 190 agreed to.

Amendment 191 moved—[Rob Gibson]—and agreed to.

Section 21, as amended—[Rob Gibson].

**Section 22—Advice on annual targets etc**

Amendment 106 moved—[Patrick Harvie].
The Convener: The question is, that amendment 106 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

For
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)

Against
Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy ( Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 2, Against 6, Abstentions 0.

Amendment 106 disagreed to.

Amendment 107 not moved.

Amendment 108 moved—[Patrick Harvie].

The Convener: Can I see all those in favour?

Alex Johnstone (North East Scotland) (Con):
Instead of moving to a vote, do you not want to put the question, convener? We are agreed—I am agreed.

The Convener: You are? Are others agreed?

Members: Yes.

Alex Johnstone: Show more optimism, convener.

The Convener: There is no need to vote on amendment 108.

Amendment 108 agreed to.

The Convener: Where are we now? You have thrown me. [Laughter.]

I call amendment 192, in the name of Des McNulty, which has already been debated with amendment 187.

Des McNulty: I think that I had an assurance on the matter from the minister.

Amendment 192 not moved.

Amendment 109 moved—[Patrick Harvie].

The Convener: The question is, that amendment 109 be agreed to. Are we agreed?

Members: No.

The Convener: Clearly, Alex Johnstone does not want a precedent to be set.

There will be a division.

For
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)

Against
Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 2, Against 6, Abstentions 0.

Amendment 109 disagreed to.

Amendment 110 not moved.

The Convener: I call amendment 60, in the name of Des McNulty, which has already been debated with amendment 50. If amendment 60 is agreed to, amendment 19 will be pre-empted.

Amendment 60 not moved.

Amendment 19 moved—[Stewart Stevenson]—and agreed to.

Amendment 61 moved—[Des McNulty].

The Convener: The question is, that amendment 61 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

For
Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

Against
Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 61 agreed to.

Amendment 193, in the name of Des McNulty, is grouped with amendments 194 to 196, 137 to 138 and 119.

14:15

Des McNulty: Amendments 193 and 119 are, in a sense, similar; the issue is their positioning in the bill. The committee has adopted an approach of asking for the respective contributions that the four main areas of energy efficiency, energy generation, land use and transport should make towards meeting the annual targets. That approach should be identified in section 22, which deals with the giving of advice, because that will provide the earliest indication of what is accepted. I half take the view that if amendment 193 is agreed to, amendment 119 might not be
necessary, but I will leave it to Alison McInnes to make her own case in that regard.

The committee is keen on amendment 193 being incorporated in the bill, as that will carry forward an approach that the committee agreed to in its stage 1 report. On that basis, I commend amendment 193 to members.

I move amendment 193.

The Convener: I welcome Liam McArthur, who has joined us.

Liam McArthur (Orkney) (LD): Thank you very much, convener.

At the outset, I should probably declare an interest. As committee members and the minister will be aware, there were press reports at the weekend that it is likely that the Orkney island on which I grew up—Sanday—will be uninhabitable by the end of the century as a consequence of climate change. According to some projections, Sanday and the neighbouring island of North Ronaldsay will be completely under water by then. My parents still live happily and healthily at the north end of Sanday, and I am painfully conscious that my prospective inheritance may sink below the waves in the decades ahead.

I represent a constituency that is seen as a bellwether for climate change. That brings home to me the purpose of my amendments and the bill. My amendments seek to ensure that decisions on new electricity generating plants such as coal-fired plants are made with the full understanding of their impact on the budgets and targets that we set for Scotland's overall greenhouse gas emissions. The amendments build on the sound principle in section 29 that recognises the importance of electricity generation to our overall emissions and the proportionate, given the importance of electricity to the overall achievement of our climate change targets.

I do not want to put words into the minister's mouth, but he may be uncomfortable with the levels of detail in amendments 195 and 196. However, I argue that the detail can be seen as proportionate, given the importance of electricity generation to our overall emissions and the achievement of the targets that will be set.

Amendments 195 and 196 reinforce Des McNulty's amendment 193 by specifying that the advice should address lifetime emissions against a cumulative budget, not simply against annual emissions. The UK Committee on Climate Change increasingly supports that approach, which is borne out by its decision to assess and recommend average greenhouse gas emissions per megawatt hour of capacity for the UK at several dates in the timeline towards the virtual decarbonisation of the electricity supply. It would clearly be reasonable and useful to seek such advice from the advisory body.

Amendments 137 and 138 reinforce amendment 119 by requiring the reports that are called for also to address the lifetime emissions of new consents and to explain the logic behind granting new consents that are likely to cause concern. Ministers may wish to define an appropriate level through guidance in due course, but I think that the California standard—which measures against the emissions of a modern gas plant—is appropriate, at least in probing the amendments with ministers.

In recent weeks and months, there have been many welcome carbon capture and storage developments from the Governments north and south of the border and at the European Union level. The bill is probably not the place to mandate CCS, but the amendments on advice and reporting would mean that a carbon capture and storage station consent would not trigger a ministerial statement, although an unabated coal permission would. That is a helpful distinction.

Alison McInnes (North East Scotland) (LD): Amendment 119 introduces a new subsection. It was lodged in response to a unanimous committee recommendation that the bill ought to contain some broad sectoral targets. The amendment does not get into the matter of what those targets should be; rightly, it leaves that to ministers through the development of action plans. However, it is important for the bill to acknowledge at the outset the role that everyone will play in trying to meet the targets.

In order to meet emissions reduction targets, it will be important for all sectors to contribute, and my amendment 119 will ensure from the start that ministers have a duty to direct the four major contributors to Scottish emissions on the efforts that they have to make towards meeting the overall annual targets. Enshrining basic sectoral targets in the bill will help to ensure that emissions are reduced across the Scottish economy. That is the most efficient way of ensuring that the majority of our reduction targets are met through domestic effort rather than the use of carbon units. Sectoral targets will encourage innovation in those sectors, which might result in the development of new technologies, techniques and policies that can play a role in boosting Scotland's economy as other countries look to adopt those innovations.

I support Liam McArthur's amendments 195, 196, 137 and 138. I support Des McNulty's amendment 193, but I query the need for amendment 194.

Stewart Stevenson: I am pleased to confirm that we encourage the committee to support amendment 193 and that, if Mr McNulty feels that it is required, we have no difficulty with amendment 194.
As the committee said in its stage 1 report, energy efficiency, energy generation, land use and transport will be important areas in any strategy to reduce Scotland’s emissions. Mr McNulty’s amendments 193 and 194 clearly address those issues, ensuring that they are not excluded from any advice that the advisory body gives to the Scottish ministers on annual targets. I doubt that, in practice, they would be excluded, but it is entirely proper that we seek to amend the bill to ensure that they are formally covered.

Alison McInnes’s amendment 119 is on a similar subject. We are quite comfortable with the general policy intention that underpins the amendment, but there are some drafting problems that mean that we cannot support it as it stands. It is rather difficult to argue that energy efficiency is a sector of or an area within the Scottish economy, which is where the difficulty lies. However, I am comfortable with the policy direction and, if Alison McInnes is content, I am quite happy to bring forward a Government amendment at stage 3 to achieve the same outcome, however that is done.

On Liam McArthur’s amendments 195, 196, 137 and 138, I had not been aware that Sanday and Ronaldsay were going to disappear beneath the waves. It is a statement of the obvious to say that I would not welcome our losing any part of Scotland, but I would also not like Mr McArthur’s inheritance to be affected, so we will see what help we can give him on that one.

We have sympathy with the general ethos of Mr McArthur’s amendments, because it is worth while to be able to demonstrate how green our electricity generation is, as that have the benefit of motivating innovation and so on. That was the reason why we included details of electricity consumption in section 29(4). I am therefore content to recommend that the committee support amendment 137, because reporting greenhouse gas emissions that are associated with electricity generation would be a useful addition to the bill. We will want to consider further whether there might be some difficulties around the data that will be available to support and sustain that reporting. If we establish that that is the case, we will seek to fine-tune the bill at stage 3. However, we are content for the amendment to be passed at this stage—we will not try to tinker with the policy intention.

Amendments 195 and 196 present us with some difficulties. Amendment 195 is intended to require the advisory body to provide advice to the Scottish ministers in respect of emission standards for electricity generators. However, the drafting makes it difficult to know what the advisory body would actually be required to include in that advice. There is also a discrepancy with the time periods in amendment 195. The amendment refers to “the net Scottish emissions budget for the period 2010-2050”, but is placed within section 22, which requires the advisory body to provide advice in relation to the setting of annual targets. Batches of annual targets will be set in 2010, 2011, 2016, 2021 and so on. Annual target batches will cover 12 to 16 years at any given time, prior to the immediate run-in to 2050. Amendment 195 would require the advisory body to provide advice on electricity generation emissions every time that batches of annual targets were set. That would be done without reference to the annual targets but, instead, with reference to the net Scottish emissions budget for the whole period from 2010 to 2050, which is somewhat at odds with other reporting timescales in the bill.

The proposed new section 22(3)(d)(i) in amendment 195 would require the advisory body, when providing advice to the Scottish ministers on the setting of annual targets, to express a view as to the “appropriate total lifetime greenhouse gas budget per megawatt hour of generating capacity”, but it is not clear from the amendment whether that would be a single average figure per megawatt hour for the period 2010 to 2020, although we find it difficult to see what else it could be.

The units are also a problem. The term “megawatt hour” is incorrect in the context. Megawatt hours are measures of energy that is generated over time, in other words, power delivered. Energy generation capacity, to which the amendment refers, is measured simply in megawatts—no time factor is associated with it. A budget, which in this context is an amount of emissions over time, cannot be set in relation to measures of energy generated over time.

The proposed section 22(3)(d)(ii) refers to “appropriate initial levels of greenhouse gas emissions per megawatt hour.” Setting aside the issue of the measurement units, which I have already referred to, the advisory body would have to give its views on that matter at least every five years, and it would not be possible for it to give its views on initial levels of emissions each time.

Amendment 196 also contains a technical flaw as it refers to “the relevant body” but is placed within section 22, which is concerned with advice that the advisory body must provide to the Scottish ministers.
Amendment 138 uses the term "modern combined cycle gas turbine" as a reference point. We are not clear what the legal interpretation of the term "modern" might turn out to be, given that the bill is designed to last until 2050. We also have difficulties with the fact that the amendment's reference point is gas, and does not appear to take other energy sources into account.

We need a balanced energy mix. Reference was made to carbon capture and storage. The post-combustion CCS proposals for Longannet are welcome. We are leading the way on that. That technology and others have the potential to reduce emissions, and the Government has made clear that we place huge importance on that and are committed to the decarbonisation of our electricity by 2030, which follows the recommendations of the Committee on Climate Change.

The factors that I have outlined explain our difficulties with the detail of many of the amendments, which is why we cannot support them, although we absolutely understand why members lodged them.

The Convener: I ask Des McNulty to wind up the debate on this group and indicate whether he wishes to press or withdraw amendment 193.

Des McNulty: It has been interesting to listen to the minister speak about Liam McArthur's amendments. I took from that that there is a shared objective, but there are some concerns about the drafting. Perhaps we can come back to that at stage 3.

I hope that the committee will agree to amendment 193. We might consider a revised version of amendment 119 in due course, if that proves to be necessary.

I press amendment 193.

Amendment 193 agreed to.

Amendment 194 moved—[Des McNulty]—and agreed to.

The Convener: Amendment 195, in the name of Liam McArthur, has already been debated with amendment 193. I ask Liam McArthur whether he wishes to move the amendment.

Liam McArthur: I am inclined to move amendment 195. Although the minister was sympathetic to the rationale behind it, I am not sure that he made clear whether he proposed to return with wording to address his concerns about amendments 195, 196 and 138. In the absence of that clarification, I move amendment 195.

The Convener: The question is, that amendment 195 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peatlie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 2, Against 6, Abstentions 0.

Amendment 195 disagreed to.

Amendment 196 moved—[Liam McArthur].

The Convener: The question is, that amendment 196 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peatlie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 2, Against 6, Abstentions 0.

Amendment 196 disagreed to.

Section 22, as amended, agreed to.
Section 23—Reporting on progress towards targets

Amendment 134 not moved.

The Convener: Amendment 111, in the name of Alison McInnes, has already been debated with amendment 9. I point out that if amendment 111 is agreed to, I will be unable to call amendment 20.

Amendment 111 moved—[Alison McInnes].

The Convener: The question is, that amendment 111 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

For
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)

Against
Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 2, Against 6, Abstentions 0.

Amendment 111 disagreed to.

Amendment 20 moved—[Stewart Stevenson]—and agreed to.

Amendment 62 moved—[Des McNulty].

The Convener: The question is, that amendment 62 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

For
Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

Against
Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 62 agreed to.

Amendment 112 moved—[Alison McInnes].

The Convener: The question is, that amendment 112 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

For
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)

Against
Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 112 disagreed to.

Amendment 21 moved—[Stewart Stevenson]—and agreed to.

Amendment 135 not moved.

Section 23, as amended, agreed to.

Section 24—Scottish Ministers' response to reports on progress

The Convener: Amendment 64, in the name of Alison McInnes, was debated with amendment 9. I point out that, if amendment 64 is agreed to, I will be unable to call amendment 22, in the name of the minister.

Amendment 64 moved—[Alison McInnes].

The Convener: The question is, that amendment 64 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.
Amendment 64 disagreed to.

Amendment 22 moved—[Stewart Stevenson]—and agreed to.

Section 24, as amended, agreed to.

Section 25—Duty of advisory body to provide advice or other assistance

Amendment 237 not moved.

Section 25 agreed to.

Section 26 agreed to.

Section 27—Power to give directions to advisory body

The Convener: Amendment 113, in my name, is grouped with amendment 114.

Amendment 113 amends the section that gives ministers the power to give directions to the advisory body. Once again, I return to the theme of the independence of the advisory body. It seems to me entirely reasonable that ministers should be able to give guidance on specific issues to the advisory body. However, the power to give directions seems to go further than is required and, if we are to agree that ministers should be able to exercise the power to give directions to the advisory body, I would like the minister to give us specific reasons for that.

We have made it clear all along that we want the Scottish Government’s approach to climate change to be science led. As the advisory body will be the principal source of scientific advice on the issue, it is important that that body can exercise its functions in a manner that is at least broadly independent. I am as sure as I can be that the current Government would not wish to frustrate the efforts to tackle climate change. However, we are setting up a system that must be robust whatever future Government might exist and in the face of significant challenges. The ambition to secure substantial and dramatic long-term cuts in carbon emissions and greenhouse gas emissions will result in some difficult decisions being made, and some aspects of what is required will be unpopular. It is possible that a future Government might want to take a different approach from that which the science suggests is required. Therefore, it seems necessary that the advisory body should be able to exercise its functions independently, and that a future Government is not allowed to take an easy option that may be politically less damaging but environmentally more damaging.

Amendment 113 simply removes the section that allows ministers to give directions to the advisory body.

I move amendment 113.

Stewart Stevenson: Amendment 113 would delete all of section 27 apart from the statement:

"The Scottish Ministers may not direct the advisory body as to the content of any advice or report."

The convener appeared to suggest that, without the amendment, ministers could influence the expert advice that is to be provided by the advisory body. However, section 27(2) makes it perfectly clear that that cannot happen.

It might be worth pointing out that the corresponding powers in the UK Climate Change Act 2008 are more broadly drawn. The act says:

"The national authorities may give the Committee directions

"as to ... the exercise of ... its functions generally, or ... any of its functions under schedule 1."

With section 27(2), we have ensured that the powers are more tightly drawn and that the advisory body can provide independent expert advice.

Why would ministers wish or require to give directions to the advisory body? One mechanical example of what might happen if the powers were to be deleted—I make it clear that this is as much speculation as a situation in which a minister might wish to damage the body’s powers, which of course would not happen under any Administration—is that if, say, the body wished to take over the whole Royal high school campus for its headquarters, the minister would have no power to direct that it should not do so or that it should set itself up at a more appropriate location or in a more appropriate size of building. Once the exclusion in section 27(2) is taken into account, the direction retained is the direction that it would be proper to give to any body. I simply do not think that amendment 113 is directing its fire in the right direction and I encourage the committee not to support it.
body’s ability to perform its functions. It is, however, worth reflecting on whether the intention behind amendment 113 might be better expressed by taking a different approach to section 27(2), which it seeks to retain.

Amendment 113, by agreement, withdrawn.
Amendments 136 and 114 not moved.

Section 27 agreed to.

Section 28—Reports on annual targets

Amendment 65 moved—[Des McNulty].

The Convener: The question is, that amendment 65 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 65 agreed to.

Amendment 115 moved—[Alison McInnes].

The Convener: The question is, that amendment 115 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 2, Against 6, Abstentions 0.

Amendment 115 disagreed to.

Section 28, as amended, agreed to.

Section 29—Reports on annual targets: content

The Convener: Amendment 116, in my name, is grouped with amendments 67, 117, 118, 23, 120 and 121.

Amendment 116 relates to paragraphs 66 to 72 of the committee’s stage 1 report, which deal with the question of reporting on cumulative emissions. In particular, we recommended that, although a reporting regime on cumulative emissions must be separate from reporting on the targets that the bill will establish formally, the Government should develop an approach on the data for cumulative emissions.

14:45

I acknowledge that several approaches could be taken. It could be argued fairly that Cathy Peattie’s amendments 118, 120 and 121 provide a better and more effective method of achieving the aim than my suggestion provides. Either approach would work better alongside the approach that I suggested in other amendments, which was that we should use the form of words a “fair and safe” level of emissions. We might still have time to address the need for that form of words.

We have heard the arguments in favour of reporting on cumulative emissions. The committee is well aware that the emissions in any one year, whether in 2020, 2050 or any other point in time, are not the emissions that have an impact on climate change—that impact is a result of the total emissions over the period. It is therefore a requirement that the committee’s recommendation should be taken into account. I am happy to hear arguments for other approaches and to hear the minister’s response. However, I hope that, at the end of the debate, a version of our agreed recommendation—that we need reporting on cumulative emissions—is agreed by the committee.

I move amendment 116.

Des McNulty: I will leave Cathy Peattie to speak to her amendments on cumulative assessment. I simply say that I broadly prefer her approach to that which was suggested by Patrick Harvie.

Amendment 67 in my name is intended to ensure that we have a record of the extent to which the reduction in the net Scottish emissions account can be accounted for by reductions in net Scottish emissions. In other words, it seeks to include information on the proportion of domestic reductions in the overall reductions that are derived from the efforts that are undertaken.

Cathy Peattie: It is obvious from our debates and discussions that there is a fair amount of common ground on the call for cumulative
targeting and measuring. Amendments 118, 120 and 121 are fairly simple, I guess. They would require annual reporting on cumulative emissions from 2010 to 2050, with a breakdown for the periods 2010 to 2020 and 2010 to 2050. We must be clear about how we measure emissions, and we should recognise the importance of cumulative targets. It is vital that the provisions are included so that there is no ambiguity on how cumulative emissions are measured and the role of cumulative targets.

Stewart Stevenson: We are relaxed about the amendments in the group, although we particularly commend those in the name of Cathy Peattie as ones that should attract support, as I think the convener acknowledged.

Amendment 23, which is in my name, is relatively technical. There might be occasions when it is necessary for us to adjust the amount of the Scottish net emissions account for a past year, because of either significant changes in emissions or the use of credits. It is important that we can correct the account in a variety of circumstances. The amendment would require the Government to give an account to Parliament of why an adjustment is required and to restate the accounts. As we proceed to 2050, international standards and measurements will change and we will find from time to time omissions or double counting in published numbers, so it is important to have the power but to be accountable for its exercise.

The Convener: I welcome the clear recognition that an approach of cumulative emissions reporting is required. I endorse again the approach that Cathy Peattie proposes. On that basis, I seek leave to withdraw amendment 116.

Amendment 116, by agreement, withdrawn.

Amendment 67 moved—[Des McNulty]—and agreed to.

Amendment 117 not moved.

Amendment 137 moved—[Liam McArthur]—and agreed to.

Amendment 138 moved—[Liam McArthur].

The Convener: The question is, that amendment 138 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 138 agreed to.

Amendment 119 not moved.

Section 30, as amended, agreed to.

Section 31—Reports on proposals and policies where annual targets not met

Amendment 69 moved—[Des McNulty].

The Convener: The question is, that amendment 69 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)
The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 69 agreed to.

Section 31, as amended, agreed to.

The Convener: I suggest a short comfort break. If members aim to be back at 3 o’clock, that will be extremely helpful.

14:53

Meeting suspended.

14:59

On resuming—

The Convener: I welcome Jim Hume, Peter Peacock and John Park to the meeting. They have joined us for the resumption of our consideration of amendments.

After section 31

The Convener: Amendment 70, in the name of Shirley-Anne Somerville, is grouped with amendment 124.

Shirley-Anne Somerville (Lothians) (SNP): With the exception of specified emissions from international aviation and shipping, Scottish emissions, according to the bill, are emissions that "are emitted from sources in Scotland". That approach is consistent with the reporting methodology that is required under the protocols of the United Nations Framework Convention on Climate Change. However, measuring Scotland’s emissions using that production-based methodology does not take account of emissions that are generated outside Scotland in the creation of goods and services that are ultimately consumed in Scotland. A frequently used example is the closure of the Ravenscraig steelworks in 1991. Scotland’s carbon emissions reduced considerably as a result of that closure, but our consumption of steel has increased since 1991 and we use a greater quantity of imports.

The purpose of amendment 70 is to place a duty on the Scottish ministers to produce "a report in respect of each year in the period 2010-2050", which must "set out the emissions of greenhouse gases … which are produced by or otherwise associated with the consumption and use of goods and services in Scotland during that year."

Measuring and reporting emissions on the basis of consumption is a developing area. In its stage 1 report, the committee recommended that any provisions in that respect “should be flexible enough to take account of developing international understanding of the methodology for consumption reporting.”

Amendment 70 provides such flexibility, and it has the support of the Stop Climate Chaos Coalition, which I thank for its assistance in putting together the amendment.

I move amendment 70.

The Convener: Amendment 124 is in my name. Like Shirley-Anne Somerville’s amendment, it emphasises the importance of finding mechanisms to address consumption-based emissions. The effort to cut Scotland’s long-term greenhouse gas emissions will be worth very little if all that we end up doing is exporting emissions to other countries. It is clear to most people that a substantial chunk of Scotland’s and the UK’s emissions reduction over recent decades is a result of industries moving overseas, rather than of practices changing. Carbon emissions that are moved from one country to another should not really be thought of as reductions in emissions.

The committee explored those issues in its stage 1 report and recommended “that a mechanism for reporting on consumption should be established which is in addition to, but separate from, the framework of targets set out in the Bill.”

Amendment 124 seeks to ensure that the Scottish Government’s development of a methodology to achieve that would be put to public consultation. It stands together reasonably well with Shirley-Anne Somerville’s amendment 70, which I intend to support. Amendment 70 requires ministers to lay a report containing information on emissions that are produced in association with "the consumption and use of goods and services in Scotland".

Amendment 124 simply adds that there should be a process of consultation around the methodology. On its own, amendment 124 places a requirement on the Government to come forward with proposals; in association with amendment 70, it makes it clear that the process should happen more or less immediately, and certainly for the 2010 report. For that reason, I think that the two amendments in the group are compatible.

Stewart Stevenson: Amendments 70 and 124 address the need for a consumption reporting duty. The production-based measurement that the bill establishes is consistent with international emissions reporting practice, as established under the UN Framework Convention on Climate Change. However, like other members, I recognise that measuring Scotland’s emissions using production methodology does not tell the full story, as it does not account for the emissions that are produced by the goods and services that we import. For that reason, I am happy to support
amendment 70, which will help to provide a fuller picture when it comes to calculating and reporting Scotland’s emissions.

By contrast, amendment 124 in the convener’s name focuses on consultation about possible ways of recording and reporting consumption. If amendment 70 is agreed to, amendment 124 is not necessary because the information to which it refers is a subset of the information that is required under amendment 70.

More fundamentally, amendment 124 deals only with the process of importation and does not deal with any other issues that are associated with the goods and services. Therefore, it is extremely restrictive with regard to the effect of goods and services that have come from elsewhere. The act of importation is but a small part of the carbon cost of such an activity.

Accordingly, I invite the committee to support amendment 70 but not amendment 124.

Shirley-Anne Somerville: Given the minister’s remarks on amendment 124 and its narrow interpretation, I am reluctant to request that the committee support it.

I stress the fact that WWF Scotland has advised me that, if amendment 70 is agreed to, the bill would be the first to make consumption reporting a legislative requirement. Although we may disagree about whether other parts of the bill are world leading, the proposed new section that amendment 70 would insert truly would be.

Amendment 70 agreed to.

Amendment 197 moved—[Des McNulty]—and agreed to.

Section 32—Report on the interim target
Amendments 24 to 26 moved—[Stewart Stevenson]—and agreed to.
Amendment 120 moved—[Cathy Peattie]—and agreed to.
Amendments 27 to 31 moved—[Stewart Stevenson]—and agreed to.
Section 32, as amended, agreed to.

Section 33—Report on the 2050 target
Amendment 121 moved—[Cathy Peattie]—and agreed to.
Section 33, as amended, agreed to.

Section 34—Reports: provision of further information to the Scottish Parliament
The Convener: Amendment 71, in the name of Des McNulty, is grouped with amendments 122, 122A, 72, 73 and 123.

Des McNulty: My purpose in lodging amendments 71 to 73 was to attempt to streamline the reporting process so that the Parliament’s requirements and the Government’s responsibilities mesh. I sought advice from the clerk on the best mechanism to do that, so there is a weight of consideration behind introducing the right mechanisms to trigger reports being sent to the right places and dealt with correctly by the Parliament’s committees.

On amendment 122, in the convener’s name, and amendment 122A, in the name of Alison McInnes, I seem to remember that the convener was one of the critics of the national planning framework reporting system, and I wonder whether a restricted 60-day consultation period would give all committees in all circumstances the maximum flexibility and opportunity to fulfil their reporting responsibilities. I would prefer the mechanism that I suggest.

I will wait to hear what Alison McInnes has to say on amendment 123, but I fear that the amendment as drafted might inhibit the Scottish Government from doing good things in advance of Parliament holding a meeting to agree to put them in place. I am not sure that the proposed mechanism is the best approach, and I commend instead the approach that I put forward in amendments 71 to 73.

I move amendment 71.

The Convener: I will speak to amendment 122 and the other amendments in the group. I acknowledge that the basic model that I am proposing is the one that was adopted in relation to the national planning framework: the idea of a fixed period for parliamentary consideration.

I acknowledge the spirit in which the Government introduced its proposal for a process of communication or debate with the committee conveners. It was broadly recognised that, although that mechanism was not quite the right one for enhanced scrutiny, it was brought forward in the right spirit. The Government recognises that the consideration of the reports is more than a small piece of business that a committee might polish off in one agenda item in an afternoon, and that we require something more.

That was similarly acknowledged in relation to the national planning framework. I argued for the mechanism in that case to be strengthened in some aspects, and there was debate on the length of time that should be allowed, but a more fundamental argument was about whether ministers should approve the NPF or Parliament should approve it through a vote. That argument is perhaps less relevant to the application of the mechanism to the parliamentary consideration of reports in this area. The parliamentary
consideration period of 60 days would allow not only the committee that has climate change as a specific part of its remit—this committee or a successor committee—but other committees that have responsibility for policy areas with a clear relevance to climate change, such as housing, agricultural land use or energy, to consider the report and to produce a report if they saw fit.

I do not object, as such, to some of Des McNulty’s proposal, but I am not entirely sure that it adds to what parliamentary committees are already able to do. Committees can call ministers to appear before them—as the minister who is before us today does from time to time—to answer questions. I am not sure what specific benefit arises from expressing that power, which we already have, in the bill. I emphasise the additionality of the mechanism that I am proposing, which requires a pause of 60 business days in which parliamentary committees can conduct a process, after which the minister can bring forward a statement.

I am happy to accept Alison McInnes’s amendment to amendment 122, as it clarifies it somewhat. I ask Alison McInnes to speak to amendment 122A and other amendments in the group.

Alison McInnes: I support amendment 122, as amended by my minor amendment 122A, which provides a bit of clarity and does not need much further explanation. On a point of principle in relation to amendment 122, I agree that the idea of assessing the situation in the same way as the national planning framework deserves a great deal of consideration and carries a lot of merit. If we are to make the changes that are needed in response to climate change, we need cross-party support and thorough, on-going debate, and we need to encourage the iterative process that will emerge from such debate, to ensure that over the years all members of the Parliament are properly engaged.

The approach would ensure that, although it would remain the responsibility of the Government of the day to develop proposals to compensate for the excess emissions, the Government would be required to take on board the Parliament’s views, as happens with the national planning framework. The requirement to gain the Parliament’s approval for the proposals should enable us to come up with the most effective approach.

Mr McNulty said that a delay of 60 days would prevent the Government from taking effective action. However, we are talking about a long-term programme. If we miss a target, it will be appropriate to take a little time to reflect on how we can get back on track.

Stewart Stevenson: This group of amendments is very much about how the Parliament will be informed. I do not want to be unduly prescriptive about the matter on behalf of the Government, because it is substantially for the Parliament to determine how it wants information to be provided and how it wants to interact with ministers. The point was made that ministers are regularly required to appear before committees of the Parliament. I have done a quick check and I think that I have appeared before six or seven committees so far, and I am sure that other ministers operate on a similar basis.

I am relatively relaxed about amendment 71, in Des McNulty’s name. However, amendment 71 would not add a great deal to the bill and there is a risk that its proposed approach is at odds with rule 14.1.1 of the standing orders of the Scottish Parliament, which envisages a single gateway for the provision of information to the Parliament. I suggest to Mr McNulty that the debate will serve the purpose that he seeks to achieve and I ask him not to press amendment 71.

The language of the debate on amendments 122, 122A and 123 was interesting. The convener talked about a mechanism that “requires a pause of 60 … days” and Ms McInnes talked about the need to “take a little time” to consider missed targets. If there is any subject in relation to which the Government has been under intense pressure as the bill has progressed, it has been the need for urgent action.

The approach that is set out in amendment 123 would provide for a pause in circumstances in which a target was missed. It is worth making the point that a report would be laid before the Parliament some two years after the year in which the target should have been met. Amendment 123 carries the risk that ministers would not be able to engage in advance of the report being laid. In general, the missing of a target will be foreseen as a result of early data, which will be available to members and ministers. In any event, failure to
meet a target will be precisely the point at which the urgent action that is asked of the Government will be most needed.

It is certainly the case that, when there is a missed target, substantial account has to be taken of the circumstances and Government response. That said, it would be a particularly inopportune point in the cycle at which to put the handcuffs on ministers and prevent them from taking any necessary actions that might just make the difference. I strongly suggest that we do not proceed along the way that is set out in amendment 123.

Amendment 72 does not add anything significant to the bill, as we attend parliamentary committees already. In fact, the requirements are less onerous than the provision in section 34 that it seeks to replace. We recognise the cross-cutting nature of climate change. Some have suggested that the meetings with conveners would be held in private, but we would be very disappointed if that were the case, as it is important that things are done in public.

On amendment 73, of course, Parliament must hold ministers to account on this subject as it does on so many others. The bill probably goes further than anything that we have done so far to ensure high levels of scrutiny. However, the contents of reports should be a matter for ministers to decide and Parliament should question ministers on what they should include in reports, what their actions are and what reports are about. If Parliament were to control and dictate the content of reports, there would be little role for ministers in defending them and it would be difficult to hold ministers to account for them.

I hope that that is helpful. We take the view that it is fundamentally for the Parliament to come to its conclusions on this matter, but I hope that, in coming to its decisions, the committee will take account of my remarks.

Des McNulty: I do not have much to add to what the minister and I have said on amendment 123 other than to say that it is well intentioned but probably not the right thing to do.

On amendment 122, the national planning framework mechanism was deemed appropriate for something that would be brought forward every five, six or 10 years—an event with a process defined for dealing with it. However, that mechanism is being applied here to an annual process of target review. Is the NPF mechanism, with all its associated constraints and timescales, as relevant in this context as it is in other settings?

We have heard that amendments 71 to 73 do not add much to the standing orders. In fact, they are a reflection of standing orders and the mechanism for ensuring that committees get information and can respond speedily.

Amendment 71 contains a requirement for copies of reports to be sent to committee conveners. We are unhappy about the proposed use of the Conveners Group, which meets in private, as the mechanism for scrutiny. We want that task to involve a committee that meets in public.

If we agree to amendments 71 to 73, we will not only get the information but committees will be enabled explicitly to call witnesses before them to give evidence on the report and require ministers to have regard to resolutions or reports from the Parliament or its committees. The proposed mechanism is simple and straightforward. I hope that members support the amendments.

I will press amendment 71.

The Convener: The question is, that amendment 71 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

For
Gordon, Charlie (Glasgow Cathcart) (Lab)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

Against
Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

Abstentions
Harvie, Patrick (Glasgow) (Green)

The Convener: The result of the division is: For 4, Against 3, Abstentions 1.

Amendment 71 agreed to.

Amendment 122 moved—[Patrick Harvie].
Amendment 122A moved—[Alison McInnes].

The Convener: The question is, that amendment 122A be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

For
Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

Against
Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 122A agreed to.
The Convener: The question is, that amendment 122, as amended, be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
AGA INST
Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 2, Against 6, Abstentions 0.

Amendment 122 disagreed to.

Amendments 72 and 73 moved—[Des McNulty]—and agreed to.

Amendment 123 moved—[Alison McInnes].

The Convener: The question is, that amendment 123 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
AGA INST
Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 2, Against 6, Abstentions 0.

Amendment 123 disagreed to.

Section 34, as amended, agreed to.

Section 35 agreed to.

After section 35
Amendment 124 not moved.

Section 36—Duties of public bodies relating to climate change

The Convener: That brings us to climate change duties on public bodies. Amendment 198, in the name of Cathy Peattie, is grouped with amendments 199 to 203, 228, 230, 231, 234 and 236.

Cathy Peattie: It will be important that duties are placed on public bodies, to ensure that the ideas in the bill are taken forward.

It is perhaps starting the wrong way round, but amendment 236 seeks to amend the reference to public bodies in the long title. The duties on public bodies in relation to climate change are reflected in this suite of amendments.

The voluntary approach did not work for equalities. Right at the start of the bill team’s work, the team told us of the hope that local authorities and other public bodies would accept the commitments on climate change. It took 20 years for commitments on equalities to go through and for public bodies to take on their role; we do not have 20 years in which to be hopeful that climate change will be taken seriously by local authorities and other public bodies. However, many local authorities have done a lot of work so far, so I do not think that they have anything to worry about in this legislation.

Public bodies will contribute to the climate adaptation programme. Amendment 234 mentions the timescale—18 months would be allowed after royal assent. That will allow time for local authorities and other public bodies to organise funding and consider their climate change role. This is not about being prescriptive; it is about organisations considering their duties and what they can do to meet climate change targets.

We think that there needs to be clarity on the definition of a public body. Amendment 198 would make it clear which bodies are covered; the amendment refers to the Freedom of Information (Scotland) Act 2002. The national health service, Scottish Water, SEPA, SNH, Scottish Enterprise and others would be included. All of those organisations will have an important role to play. That might relate to the ethos of the organisation, or to how they use transport. I know that we will hear about the NHS and public procurement later on.

My amendments are about ensuring that the bill contains a broad commitment to the introduction of public sector duties. They will mean that if, in 10 years’ time, the Scottish ministers learn of best practice evidence from another country that has better public sector duties, they could decide to adopt one of that country’s initiatives. As well as allowing us to look at where we are now, my amendments provide for a timescale and allow for future flexibility as regards public bodies’ duties.

I move amendment 198.

15:30

The Convener: Thank you very much. I will speak to amendment 202 and others.
I welcome what Cathy Peattie said in her introduction on amendment 198. Section 36(1) will give the Scottish ministers the power to introduce an order to impose climate change duties on public bodies. I recognise the value of the introduction of such duties; in lodging amendment 202, all that I sought to do was to put a timescale on the requirement for ministers to make an order under section 36(1). I have suggested that that should be done within a year of the bill being passed.

However, it seems to me that Cathy Peattie’s amendments are preferable, in that they would create a framework for such duties immediately on the passing of the bill. I certainly intend to support Cathy Peattie’s amendments and to move amendment 202 only if hers should fall; I hope that they do not.

During stage 1, I was greatly encouraged by the number of public bodies that were genuinely supportive of the idea of having public sector duties. Their attitude was analogous to that of certain individuals in more enlightened parts of the private sector, who argue for clear regulation on the basis that they know that the climate change agenda has to be followed and that clarity is necessary so that they can direct investment in the right direction or set up systems to ensure that their businesses can adapt to it. The enlightened public sector bodies, too, have nothing to fear from such duties and much to welcome from the clarity that they will provide. It will not be enough, a few years hence, to look around the public sector in Scotland and see that there are a few islands of excellence from which other people can learn great lessons. We need to ensure that those lessons are rolled out and implemented across the board, and I think that Cathy Peattie’s public sector duties proposal will achieve that.

I repeat that I will pursue amendment 202 only if Cathy Peattie’s amendments are not agreed to, which I hope does not happen.

Des McNulty: We are discussing a section of the bill on which there are differences of principle between the Government and some of the other parties as regards whether climate change duties should be imposed on public bodies. I am keen that that debate—the debate about the principle—does not prevent us, if Parliament wills that there should be such duties, from having a proper debate about the best mechanism for ensuring that those duties are not inappropriate or unduly onerous. We must make a decision about the principle and then ensure that the mechanisms that are put in place give best effect to that decision.

It is important that I put on record that in supporting the principle of creating climate change duties for public bodies, it is certainly not my intention—nor, I am sure, is it Cathy Peattie’s—to imply that local authorities or other public bodies are in any way deficient. We believe that many local authorities are doing an excellent job in addressing climate change. We want to regularise that position and link it to the Government’s broad efforts, rather than see a duty in the bill as a stick to beat local authorities or any other public body. Guidance that binds what is done by public bodies—including local authorities—with what is done by Government is inherently desirable.

Cathy Peattie’s amendment 206 could be interpreted as requiring public bodies to make separate annual reports. I do not think that that is Cathy’s intention. Public bodies already make annual reports and the idea is that information on how they are getting on with addressing climate change should become an integral part of those reports. There are issues that may need to be tidied up, but I hope that we can progress at both levels: that we can have a decision in principle about whether there should be a public duty, and then a sensible discussion about how to configure that in a way that is supportive and constructive rather than onerous and burdensome.

Stewart Stevenson: As Mr McNulty highlighted, this is an area in which—probably uniquely so far—there is a pretty fundamental difference of opinion. In large part, that is driven by the concerns expressed by the Liberal councillor Alison Hay, who speaks for the Convention of Scottish Local Authorities on the subject. I do not wish to overstate this, but on behalf of the local authorities, she believes that the development of a new relationship of partnership, equality and mutual respect between central and local government could be damaged by a return to central Government dictating what local authorities should do.

I put that in the context of the remarks that several who have contributed to the debate quite properly made, which is that local government is making good progress on the subject of climate change. I hope that that puts the issue in context and that there is no suggestion that local authorities are not up for the task—it is clear that they have all signed up to address climate change. The issue is simply a principled disagreement about how local government should come to a conclusion about its contribution.

More generally, though, public bodies for which ministers are responsible are a different matter. To impose duties on such bodies—which is essentially to impose duties on ministers—is quite proper. Des McNulty said that if amendment 198 is agreed to we must not use it as a stick to beat local authorities. I absolutely concur. I know that Des McNulty said that in good faith.
Further, I have no difficulty in agreeing with Mr McNulty when he says that we should have the best mechanism. He referred to the need to tidy up some issues. I hope that we live up to that aspiration. We would certainly not want legislation that was ambiguous or too draconian, or that created difficulties that local authorities felt that they could not manage.

Cathy Peattie’s amendments provide for a period for engagement with local authorities. However, that comes from a point of view of mandating the nature of the outcome that must follow that engagement, which is an approach that does not meet my preference.

The convener’s amendment 202 would be my preferred option. It places a duty on ministers to activate the powers in section 36(1) of the bill within a year. I would have no objection to that amendment.

The Convener: Minister, you say that you are comfortable with activating the powers, as you put it; within a year, but I am a little bit at a loss to understand the principled objection to Cathy Peattie’s proposals, which would do exactly the same thing, in a sense, but that bit sooner.

Stewart Stevenson: The beginning of section 36 is phrased: “The Scottish Ministers may, if they consider it appropriate to do so, by order, make provision relating to the imposition…”.

The point is that amendment 202 would give us a year to discuss with local authorities their plans—which will be produced via COSLA, I imagine—for taking the principal objection to Cathy Peattie’s proposals, which would do exactly the same thing, in a sense, but that bit sooner.

I suspect that we will end up in the same place on this matter, in the end. I do not seek to make an argument that we should end up elsewhere, as I genuinely think that local councils are up for this. I am giving respect to the strongly expressed opinion—which has been expressed to me as minister on a number of occasions—that COSLA does not wish, at this stage, to have duties imposed upon it before it has been able to do the work to produce its own proposals. It is simply on that relatively fine point that we are likely to continue to divide.

I assure the committee that, whatever decisions it comes to in this regard, the Government will, of course, work with and take forward whatever the outcome of this debate happens to be. I am sure that you would expect me to say that, but I take the opportunity to put it on the record.

Cathy Peattie: I feel strongly that amendment 198 should proceed. The minister spoke about our getting to the same place; I do not think that we can wait for more time to pass, and I do not think that it is enough to be hopeful. With respect, convener, your amendment 202 does not help to move things forward. It would lead to a whole lot of uncertainty, and it smacks of being hopeful.

The Convener: Heaven forbid that I should ever be hopeful.

The question is, that amendment 198 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 198 agreed to.

Amendment 199 moved—[Cathy Peattie].

The Convener: The question is, that amendment 199 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 199 agreed to.

Amendment 200 moved—[Cathy Peattie].

The Convener: The question is, that amendment 200 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 200 agreed to.

Amendment 201 moved—[Cathy Peattie].

The Convener: The question is, that amendment 201 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 201 agreed to.

Amendment 202 not moved.

Section 36, as amended, agreed to.

Section 37—Guidance to relevant public bodies
Amendment 203 moved—[Cathy Peattie].

The Convener: The question is, that amendment 203 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 203 agreed to.
Amendment 212 seeks to require the Scottish ministers to lay before the Scottish Parliament any report that they receive from the monitoring body. I am happy to accept the underlying principle and, indeed, am content to accept the amendment in the interests of open government and to ensure that the Parliament receives full and frank information.

Amendment 204 seeks to require that, prior to giving guidance to public bodies under section 43 of the bill, the Scottish ministers have regard to advice that they have been given by the advisory body—I beg your pardon, by the relevant body. This is where the confusion can arise. The Scottish ministers do not believe that the relevant body should have a direct role in Scottish public bodies’ discharge of their climate change duties. Over the next few years, the body in question will be the UK Committee on Climate Change, whose strength lies in giving expert advice that draws on the science and an analysis of what is going on, not in helping us to understand what policies would be appropriate for different parts of the Scottish public sector. That is the role of Government, using the expert advice. On a more technical level, amendment 204 does not work because it does not clearly impose any duty either to seek or to give advice.

Amendments 210 and 211 are similar to amendment 204 in that they risk muddying the functions of the relevant body by placing on it unnecessary and potentially costly duties with respect to the operation of Scottish public bodies. If it becomes necessary to monitor how public bodies are complying with their duties, the Scottish ministers have powers under section 39 to create a monitoring body. Moreover, if ministers ever feel that they need specific advice on the functions of public bodies in relation to climate change, they have powers to request such advice under section 38 of the UK act and section 25 of the Scottish bill. Again, on a technical level, there is neither provision in the bill to require the monitoring body to ask for advice nor any duty on the relevant body to provide advice—there is no provision because it is simply not necessary.

At stage 1—I think in making a more general point—Des McNulty said that he did not want the reporting arrangements in the bill to become overelaborate. This set of amendments carries the risk of overelaboration. We should seek to avoid that.

I am happy to commend amendment 212 to the committee.

Cathy Peattie: I understand what the minister is saying, but it is important that public bodies should gain from advisory body advice or reports and ministerial guidance. How can they take forward their work otherwise?

Public bodies have to look at their plans; they need to design their plans over 18 months or so in order to do that. They need to look at what is said at the time, the available advice and how their organisation can take that forward. Amendment 204 allows for that. I press amendment 204.

The Convener: The question is, that amendment 204 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
McInnes, Alison (North East Scotland) (LD)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 4, Against 4, Abstentions 0.

The Convener: As I indicated previously, my casting vote is for the status quo.

Amendment 204 disagreed to.

Section 37, as amended, agreed to.

Section 38—Reporting on climate change duties

The Convener: Amendment 205, in the name of Cathy Peattie, is grouped with amendments 206 to 209.

Cathy Peattie: Forgive me, convener, for my error in speaking to amendment 205 earlier in the meeting. My colleague pointed it out and I am grateful for that.

Amendment 205 seeks to ensure that ministers require relevant public bodies to produce reports on an annual basis, including annual reports—obviously they tend to be done on an annual basis.

Sections 40 to 42 are about the monitoring body having regard to the relevant advisory body. I heard what the minister said on the matter and I am willing to hear what more he has to say. Section 42 will trigger the process of reporting powers that are currently used to enable parliamentary consideration of the national planning framework.

Do you want me also to speak to amendment 62, or is it too early for that?

The Convener: Speak only to amendment 209.

Cathy Peattie: Amendment 209 is an important amendment. The committee discussed equal
opportunities and found that the bill was weak in that regard. Amendment 209 seeks to add public bodies to the list in section 62, referring to the definition of public bodies in a new section that will be created by amendment 198.

I move amendment 205.

**John Park (Mid Scotland and Fife) (Lab):** The thinking behind the amendments in the group is to strengthen the quality and calibre of information that the public sector makes available, and to highlight the important role that the public sector and public bodies play with regard to climate change. I am thinking in particular of the procurement decisions that they make, including on low-carbon energy choices and electric vehicles. There are other examples that we can highlight.

We recognise the importance of workplace policies, and there are a number of good examples in which such policies have driven climate change targets, whether in the workplace or more widely. They also result in culture change that can lead to individuals taking on good habits.

Through amendments 208 and 209 we want to establish a reporting structure that provides an opportunity for such activity to be highlighted so that other bodies can learn from it—not only public sector bodies but private sector organisations, the voluntary sector and Scotland more widely.

**Cathy Peattie:** As I said, the whole issue around public procurement is important and would make a tremendous difference to the legislation. I gave many examples of how the ethos of organisations can be affected in respect of how they operate and how they use transport to get from conferences and whatever. General consideration of public procurement in the national health service and in wider public organisations in relation to climate change would make a substantial difference. I support John Park’s amendments 208 and 209.

**Stewart Stevenson:** We commend Cathy Peattie’s amendment 207 to the committee. It seems eminently sensible that Scottish ministers should be able to require any relevant public body that is found to be failing to comply with its climate change duties, following investigation by the monitoring body, to prepare a report on the actions that it is taking to secure future compliance with those duties.

On John Park’s amendments 208 and 209, I acknowledge his long-term interest in procurement. We are well disposed to the principles that underpin the amendments. Procurement policy is an area in which public bodies should have scope to make improvements that contribute to tackling climate change. To focus minds by making reporting on that a specific requirement would be no bad thing. However, there are one or two drafting problems with the amendments as they stand. The use of the word “wider” creates a problem, because it suggests that procurement policies are a narrower form of workplace policy. That could create some difficulties, because that is not necessarily the case. Workplace policies include such things as employee relations, but procurement is an economic activity, as distinct from a workplace policy. I am simply exploring some of the difficulties in the drafting: we would be happy to lodge at stage 3 a Government amendment that will achieve John Park’s policy intention, if he feels that that will be helpful.

On amendments 205 and 206, I think that Cathy Peattie is imagining that Scottish ministers will seek to let public bodies off the hook by imposing climate change duties and then not ensuring that they are met. The bill as a whole, of course, gives Scottish ministers every reason to wish that actions are being taken across Scotland. In practice, it is highly likely that wherever Scottish ministers impose statutory climate change duties on public bodies, they will also impose a duty to report on compliance. However, to require in primary legislation that that must be the case in every circumstance and—more to the point—that the reports must be annual, is inflexible and somewhat disproportionate. For those reasons, I cannot suggest that the committee should support amendments 205 or 206.

**Cathy Peattie:** As I said, I think the amendments are important, but I understand what the minister is saying, so I would like not to press amendments 205 and 206. That will give me an opportunity to hear what the minister has to say in the future and—if I am not happy—to bring back the issue at stage 3.

Amendment 205, by agreement, withdrawn.

16:00

Amendment 206 not moved.

Amendment 207 moved—[Cathy Peattie] and agreed to.

Amendment 208 moved—[John Park].

The Convener: The question is, that amendment 208 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

For

Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Gydenbank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 208 agreed to.

Amendment 209 not moved.

Section 38, as amended, agreed to.

Section 39 agreed to.

Section 40—Investigations

Amendment 210 moved—[Cathy Peattie].

The Convener: The question is, that amendment 210 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR

Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

AGAINST

Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
McInnes, Alison (North East Scotland) (LD)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 4, Against 4, Abstentions 0. Again, the status quo is the bill as it stands, so the amendment falls.

Amendment 211 disagreed to.

Amendment 212 moved—[Cathy Peattie]—and agreed to.

Section 42, as amended, agreed to.

Sections 43 and 44 agreed to.

After section 44

The Convener: Amendment 213, in the name of Alison McInnes, is in a group on its own.

Alison McInnes: Amendment 213 links strategic environmental assessment more closely with the Climate Change (Scotland) Bill. It is intended to ensure that, when strategic environmental assessments identify that Government plans and programmes will have a large climate change impact, they will be reported on and scrutinised to ensure that they are compatible with the climate change targets. The idea is that, when a minister is minded to approve a plan or programme and the strategic environmental assessment has identified a significant greenhouse gas emission, the minister will be obliged to seek advice from the relevant body on whether or how the plan or programme could be made compatible with the annual targets. Any decision on such a plan or programme could not be made until the advice was given. If the minister wanted the plan or programme to proceed, it could proceed but the minister should make a statement to Parliament setting out why, how the targets would still be met and what other measures would be taken to ensure compliance with the annual targets.

It would be useful to hear whether the minister agrees that the strategic environmental assessment process must be properly aligned with the bill.

I move amendment 213.

Des McNulty: I have some questions about the possible impacts of the amendment. I will use a couple of projects in north-east Scotland as examples, as I know that they will be relevant to both the minister and Alison McInnes. In the event of a future Trump development requiring a strategic environmental assessment, would the provision in amendment 213 require that the decision be made in Parliament rather than by the planning authority? Would that be a good thing? The implication for such developments is not clear to me. Furthermore, would the provision be a barrier to the go-ahead of the Aberdeen western peripheral route, which also requires a strategic environmental assessment? Would either Alison McInnes or the minister regard that as a good
thing? I ask those questions simply for clarification and detail.

Stewart Stevenson: None of my remarks should be taken as applying to the private sector project to which Des McNulty referred, for which planning applications were, I believe, submitted yesterday. Ministers may be involved in making decisions on that project at a later stage.

Des McNulty mentioned the AWPR project, for which the Government is responsible. One of the key questions that are being asked is what would be the effect of the additional provision in amendment 213. We estimate that its effect would be to delay decisions by something in the region of six to nine months. It would also be necessary to increase significantly the resourcing of the UK Committee on Climate Change for that to be reflected in its business plan and to ensure that it would be in a position to undertake the work that would be involved. It is clear that the amendment would create a significant, and unnecessarily cumbersome and unhelpful, layer of bureaucracy.

It is worth revisiting the Environmental Assessment (Scotland) Act 2005, which requires that those who prepare public plans, programmes and strategies that are likely to have a significant impact on the environment—that includes on climatic factors—outline measures in an environmental report to prevent, reduce and, as far as possible, offset any significant adverse effects. People with an interest in or who are likely to be affected by the plan, programme or strategy will then have an opportunity to express any concerns or to make suggestions at the appropriate point in the consultation process. It is a mandatory requirement that those who prepare strategic environmental assessments under the 2005 act must consult Scottish Natural Heritage, the Scottish Environment Protection Agency and Historic Scotland for their expert advice during its preparation.

The post-adoption statement that the 2005 act requires means that responsible authorities, which include the Scottish ministers, already have to outline how their environmental report, and the consultation responses that have been received on it, have been taken into account in preparing the final plan, programme or strategy. In addition, if planning permission or other consent is required to which the Environmental Impact Assessment (Scotland) Regulations 1999 apply, it is likely that an environmental impact assessment will also be required. Scottish ministers must also lay before Parliament a significant report on proposals and policies to meet annual targets each time annual targets are set.

The safeguards do not stop there. As members will be aware, the Scottish Government is developing a carbon assessment tool to calculate the carbon impact of all Government spending decisions. That information will be available to Parliament and will undoubtedly inform debate and decision making on the budget bill each year.

Amendment 213 contains problematic language. I presume that the term "plan or programme" is used with the intention of importing that term’s meaning under the 2005 act, although that is not specified. However, the bill uses the words “plan” and “programme” in different contexts, so there could be significant confusion.

In addition, amendment 213 contains no timescales. Regardless of that, it is inconceivable that it could be implemented without delaying the preparation and delivery of vital plans, programmes and strategies.

The bill’s overarching objective is to reduce Scotland’s greenhouse gas emissions. That is why it places duties on Scottish ministers to ensure that Scotland’s emissions are reduced to meet statutory targets.

I hope that members have been reassured that amendment 213 is unnecessary. Members can think of the effects on a number of projects. An answer that I recently gave to a parliamentary question, for example, indicated that the original evaluation of the Edinburgh tram system showed that it would have a carbon cost of 177 kilotonnes. It is clear that that project would have been significantly delayed if the process in question had been in place. I leave it to others to consider whether that would have been a good or a bad thing.

Alison McInnes: I thank the minister for his thorough response. It would be utterly remiss of us to ignore strategic environmental assessments so I lodged amendment 213 in an attempt to align the processes. However, I accept that there are drafting and timescale issues and I will not press the amendment, although I do not want to jeopardise the opportunity to consider the matter at stage 3. We must accept that business as usual cannot continue. Mr McNulty and the minister cannot say on one hand that we need strong targets and on the other that we must do nothing that might slow down the process or make us rethink our approach. We must start to align our thinking with our ambition.

Amendment 213, by agreement, withdrawn.

Section 45—Programmes for adaptation to climate change

Amendments 141 to 143 moved—[Stewart Stevenson]—and agreed to.

Amendment 214 moved—[Des McNulty]—and agreed to.
Amendments 144 to 148 moved—[Stewart Stevenson]—and agreed to.

Amendment 215 moved—[Rob Gibson]—and agreed to.

Section 45, as amended, agreed to.

After section 45

Amendments 216 to 218 moved—[Rob Gibson]—and agreed to.

The Convener: Amendment 219, in the name of Peter Peacock, is in a group on its own. Peter Peacock has been waiting patiently to speak to his amendment.

Peter Peacock (Highlands and Islands) (Lab): As members know, the Rural Affairs and Environment Committee, of which I am a member, is a secondary committee in the scrutiny of the bill.

The dilemma of competing land uses has become apparent during the committee’s recent work. For example, when we considered the serious implications of the increasing incidence of flooding resulting from climate change, a ready conclusion was that the restoration of peatlands, the creation of marshlands and the planting of upland forests can make a considerable contribution to flood management. Similarly, reconnecting rivers to their flood plains and planting on river banks, on land that is currently cropped, can help to stem the flow of water. However, if we take a food security perspective, we might come to very different conclusions about how the same piece of land should be used. There are competing public policy objectives.

Land use came up again strongly during the committee’s scrutiny of the forestry provisions in the bill. There is no question but that the extension of forestry has a role to play in managing climate change, but where we plant trees and on what types of soil we do so are critical considerations. If we add to the mix the need for land for wind farms, hydro power and so on, we end up with a rich cocktail of policy questions, some of which are in conflict.

16:15

Other climate change issues come into play in the context of agriculture, which is a principal use of land. Although it accounts for about 25 per cent of Scotland’s greenhouse gas emissions, agriculture also acts as a greenhouse gas sink through sequestering sufficient carbon dioxide emissions. For example, grassland cropping can offset nearly 20 per cent of agricultural emissions, while an estimated 300 million tonnes of carbon are stored in our deep peatlands. That is about 20 times more carbon than is stored in all the UK’s forests and is equivalent to 190 years’ worth of Scotland’s total emissions. It has also been suggested that UK agriculture and land use change could mitigate around 6 per cent of current greenhouse gas emissions by 2012 and nearer 25 per cent by 2022, and that emissions from agriculture could by 2050 be around 50 per cent of 1990 levels if high feasible abatement potential is fully achieved.

Given those figures and the potential for delivering land use-related climate change action with the right policy drivers, I think it makes sense for the bill to address the agricultural and other wider policy issues. As it is becoming increasingly clear that better strategic consideration of land use is necessary, and that a land use strategy would be an important tool in creating a framework for reconciling the various aspects, amendment 219 seeks to place a duty on ministers to produce, consult on and lay before Parliament such a strategy. It would also require that the strategy contribute to achieving ministers’ wider climate change duties under the bill.

Amendment 219 also seeks to give effect to Parliament’s decision on 19 March to ensure that “all forestry proposals in future must be part of an integrated land-use strategy” and to call on “the Scottish Government to introduce a comprehensive sustainable land-use strategy”.

I am aware that the Government has been exploring the issues around a land use strategy, and I very much welcome its consideration of the matter. However, amendment 219 seeks to put beyond doubt the production of such a strategy after consultation, and to ensure that successive Administrations are required to keep it up to date.

I will listen very carefully to what the minister has to say but, notwithstanding his comments, I hope that the committee will approve amendment 219 to make clear the will of Parliament on this issue. If the minister wishes to come back at stage 3 with any technical improvements to the amendment I, like everyone else, will be happy to listen to his proposals. I live in hope—though not in expectation—that he will accept the amendment.

I move amendment 219.

Rob Gibson: I very much welcome this chance to discuss this proposal for a land use strategy, particularly given that a bill on crofting reform is about to be introduced. For many years, people have struggled with the concept of land use in crofting areas and have come to realise that much of its potential has been underutilised. Such considerations would fit in well with an assessment of what would be required in a strategic land use policy which would, after all, touch on food production and the need to protect...
areas of high natural value. Indeed, as far as the crofting bill is concerned, local discussions about what would comprise the best land use strategy would be valuable to many communities in ensuring that we do not perpetuate the kinds of monocultures that have not been good to the land.

I could mention other issues, but that is a good example of an area in which we must work carefully towards a conclusion. In any case, I think that a strategic land use policy is a very good idea.

Stewart Stevenson: Mr Peacock will not need any “notwithstandings”, because I am entirely content to support amendment 219. However, I have a certain amount to say about it.

Amendment 219 seeks to place on Scottish ministers a new duty to produce a new land use strategy. I am aware of the very significant support for such a move, although I should make the rather obvious points that we are talking about a general rather than a rural land use strategy and that in legal terms “land” covers inland waters, waterways and estuaries, all of which it would be appropriate to cover in such a strategy.

As committee members will be aware, several significant initiatives on various aspects of land use in Scotland are already under way. In August 2008, the Scottish Government launched its rural land use study with the aim of providing an integrated evidence base for the contributions that Scotland’s land might make to delivering sustainable economic growth and underpinning the implementation of policies such as the Climate Change (Scotland) Bill and the food policy. The research, which consultants are undertaking in three workstreams, is supported by stakeholder advisory groups, which include representatives of farmer and landowner groups as well as non-governmental conservation organisations, Scottish Natural Heritage and the Scottish Environment Protection Agency. The study’s findings will be discussed and debated at a rural land use summit that is scheduled for November 2009, which will identify how Scotland’s rural land contributes to a wide range of objectives, where the key conflicts and complementarities between different objectives lie, and in what ways such aspects can be addressed by policy and practice.

In implementing the European Union’s water framework directive, we introduced a new system of river basin management planning to enable Scotland to develop an integrated ecosystem approach to managing the impacts on our water resources. The proposed land use strategy could be a useful tool in delivering successful river basin management planning by ensuring that we strike the right balance between protection and sustainable use of our valuable natural resources.

As a major land use, forestry has a strategy of its own; however, it is important to see forest use and management in the wider land use context. Moreover, “The Scottish Soil Framework”, which was published in May 2009, sets out the Government’s vision for Scottish soils and ensures that they are recognised as a vital part of our economy, environment and heritage, and are to be safeguarded for existing and future generations.

All those areas of work are important. However, I agree that a comprehensive land use strategy could usefully pull together those and other key strands of strategic land use policy including crofting across the Scottish Government and could helpfully focus them on climate change.

I support amendment 219 and commend it to the committee.

Peter Peacock: I will not detain the committee any longer. I am grateful for the support of the minister and Rob Gibson and remind Alex Johnstone, who is seated on my immediate left, that the Conservatives supported the parliamentary motion that I mentioned. I will press the amendment and hope that the committee agrees to it.

Amendment 219 agreed to.

Section 46—Variation of permitted times for making muirburn

The Convener: Amendment 149, in the name of the minister, is grouped with amendments 150 to 152.

Stewart Stevenson: In discussions on the bill that officials held with key stakeholders during stage 1, NFU Scotland, the British Association for Shooting and Conservation, the Tenant Farmers Association of Scotland and the Game and Wildlife Conservation Trust expressed concern that the enabling power provided for in proposed new section 23A of the Hill Farming Act 1946, as inserted by section 46 of the bill, could be used to shorten the muirburn season. That concern was then mirrored in the Game and Wildlife Conservation Trust’s written submission.

Amendments 149 to 152 seek to address those concerns. Amendment 151 limits the order-making power in proposed new section 23A(1) of the 1946 act to ensure that the power is not exercised to reduce the length of the muirburn season to less than that provided for in section 23 of the act.

Addressing a commitment made in my additional written evidence at stage 1, I confirm that amendment 152 requires that an order made under proposed section 23A(1) of the 1946 act is subject to affirmative parliamentary procedure.

I move amendment 149.
Rob Gibson: A fire at Dunnet Head in April, which affected several hundred acres of ground where seabirds nest, might well have been covered by this set of amendments. The fact that the muirburn code did not seem to have been applied in that case caused disaster. The muirburn proposals will be helpful to clarify matters, so I hope that the committee will accept the amendments.

The Convener: I invite the minister to wind up and to press or withdraw amendment 149.

Stewart Stevenson: I wish to press amendment 149. Legislation is but part of the solution. Mr Gibson referred to the muirburn code, and it is important that everyone who carries out muirburn as part of their conservation activities takes full account of that.

Amendment 149 agreed to.

Amendments 150 to 152 moved—[Stewart Stevenson]—and agreed to.

Section 46, as amended, agreed to.

Section 47—Power to modify functions of Forestry Commissioners

The Convener: Amendment 220, in the name of Jim Hume, is grouped with amendments 221 and 153.

Jim Hume (South of Scotland) (LD): The amendments relate to the power to modify the functions of the forestry commissioners. The recent consultation and proposals to lease off around a quarter of the Forestry Commission estate revealed many concerns. They also highlighted the importance of the forestry estate in its diverse uses not just in providing a possible carbon sink to help to tackle climate change but in securing a supply of timber for industry and in providing benefits for recreational sport, tourism and access to forests, biodiversity and for the communities that live in and around those areas.

I lodged the amendments to ensure that the forestry estate is valued and protected for the many benefits that it provides. It is not simply an asset, nor a debatable carbon sequestration tool—as Peter Peacock mentioned, it is well known that planting in peat releases a huge amount of carbon into the atmosphere.

I agree that the Forestry Commission could benefit from joint ventures and that, therefore, it should have the power to progress its functions. I ask members to consider the benefits that the Forestry Commission has brought for tourism with the likes of the 7stanes mountain biking project in the south. The 7stanes trail would not have happened without co-operation from the Forestry Commission and stakeholders.

To safeguard the biodiversity of our forests, amendment 221 would ensure that the commission’s functions or any body and person that is formed with them—whether through a joint venture or not, including for renewable energy projects—takes biodiversity into account. Amendment 221 would make that duty explicit.

It is also important that any variation of the Forestry Commission’s functions takes into account the sustainability of developments. Some soils—I have mentioned peat-based soils—are inappropriate for tree production. The Forestry Commission also owns moorland, peat bogs and some biodiverse pasture land. There is a need to preserve and improve those areas, and the many functions of the forestry estate must be protected and enhanced. That is what amendment 220 would do.

Amendment 153 would remove the possibility of the Forestry Commission entering into long-term leases, which has been shown to be unpopular and unlikely to deliver long-term benefits. The Minister for Environment is on record as saying that she will not pursue the leasing proposals. Amendment 153 would ensure that such proposals would not be pursued by future Governments and ministers.

I move amendment 220.

Shirley-Anne Somerville: I advise ministers and Mr Hume that I have been in intensive discussions on the possibility of introducing a general sustainable development duty for ministers in respect of the functions under the bill. Although I do not object to the principle behind amendment 220, I think that the creation of an overarching sustainable development duty would be preferable. I worry that agreement to a specific amendment at this stage would result in a clash with the overarching duty that I hope to propose. My discussions are almost complete, and I hope to lodge within the next day an amendment that creates a general duty. I appreciate that it would have been better if the amendment had been available for Mr Hume to look at today, but I ask him to consider withdrawing amendment 220. If my amendment is not to his liking or the committee does not agree to it next week, he will be free to lodge his amendment again at stage 3.

16:30

The Convener: As no other members wish to comment, I invite the minister to respond.

Stewart Stevenson: I wrote down the point that Ms Somerville made and will respond to it later.

As we submitted an identical amendment to amendment 153, it will come as no surprise that we will support it. I am happy to confirm that we
are content not to proceed with the forestry leasing proposals that were initially planned. We support the removal of section 47(4).

Amendment 221 seeks to apply the biodiversity duty under the Nature Conservation (Scotland) Act 2004 to any body corporate or trust formed by the Forestry Commission. Although we agree that any such body would need to comply with the commission’s continuing duty to further the conservation of biodiversity on the national forest estate, amendment 221 is unnecessary and could lead to confusion and legal conflict.

The 2004 act defines the public bodies to which the biodiversity duty applies. The definition includes any person who exercises functions of a public nature, which could include private sector bodies established by the commission. Section 1 of the 2004 act therefore already applies to private bodies that exercise functions of a public nature, so we feel that amendment 221 is unnecessary and could lead to conflict between different pieces of legislation.

The principles of amendment 220 cause us no difficulties at all, but if Ms Somerville can lodge for debate next week an amendment that creates an overarching sustainable development duty, provided that the committee is happy with the details of that amendment, it is likely to commend itself as a preferred alternative.

The Convener: I ask Jim Hume to wind up and to indicate whether he wishes to press or withdraw amendment 220.

Jim Hume: At this stage, I will seek to withdraw amendment 220, although I leave open the possibility of lodging it again at stage 3 if Ms Somerville does not lodge an amendment of the kind that she has described. I agree that it would be better to cover the whole bill, so I do not have a problem with what she has proposed.

I will move amendments 221 and 153. I am glad that the minister has accepted amendment 153, but I still believe that amendment 221 is important, as it would make it absolutely explicit that any bodies, trusts or persons appointed by the commission are covered under the 2004 act.

The Convener: We will come to amendments 221 and 153 in a moment.

Amendment 220, by agreement, withdrawn.

Amendment 221 moved—[Jim Hume].

The Convener: The question is, that amendment 221 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 221 agreed to.

Amendment 153 moved—[Jim Hume]—and agreed to.

Section 47, as amended, agreed to.

The Convener: That ends our consideration of amendments for stage 2—I mean, for day 2 of stage 2. [Laughter.] We can see light at the end of the tunnel but we are not quite there yet.

I remind members that the deadline for all amendments for the rest of the bill is noon this Thursday—so it will be BlackBerrys out on Thursday morning for all of us on the election trail.

We hope to be able to consider all the remaining amendments in one further meeting. As happened today, next week’s meeting will start at 1.30.
Climate Change (Scotland) Bill

3rd Marshalled List of Amendments for Stage 2

The Bill will be considered in the following order—

Sections 1 to 20 Schedule 1
Sections 21 to 66 Schedule 2
Section 67 Long Title

Amendments marked * are new (including manuscript amendments) or have been altered.

Section 48

Iain Smith (on behalf of the Economy, Energy and Tourism Committee)
Supported by: Lewis Macdonald

222 In section 48, page 20, line 16, leave out from second <the> to end of line 19 and insert—

<(  ) promoting energy efficiency; and
(  ) improving the energy efficiency of living accommodation,
in Scotland.>

Iain Smith (on behalf of the Economy, Energy and Tourism Committee)

223 In section 48, page 20, line 19, at end insert—

<(  ) The plan must set annual energy efficiency targets and describe how those targets are to be reported on.>

Sarah Boyack

251* In section 48, page 20, line 19, at end insert—

<(  ) The plan must include details of how the Scottish Ministers intend to update planning and building regulations to ensure that all new buildings avoid a specified and rising proportion of their projected operational greenhouse gas emissions, calculated on the basis of the approved design and plans for the specific building, through the installation and operation of low and zero-carbon generating technologies.>

Patrick Harvie

252 In section 48, page 20, line 19, at end insert—

<(  ) The plan must include the following targets—
(a) by 2020, the level of energy efficiency in domestic buildings to be 20% higher than in 2010;
(b) by the end of 2020, the level of energy used in non-domestic buildings to be at least 10% less than the level of energy used in 2010;
(c) by the end of 2016, in so far as reasonably practicable, all domestic buildings to be low-carbon buildings;

(d) by the end of March 2013, the number of domestic buildings with one or more microgeneration installations to be at least eight times the number of domestic buildings with such installations in 2007;

(e) by the end of 2016, all new buildings constructed to be net zero carbon buildings;

(f) in 2010, the following greenhouse gas emissions reductions to be achieved compared to the level set in guidance documents issued in 2007 under section 4(1) of the Building (Scotland) Act 2003 (asp 8)—
   (i) 30% for new domestic buildings;
   (ii) 50% for non-domestic buildings;

(g) in 2013, the following greenhouse gas emissions reductions to be achieved compared to the level set in guidance documents issued in 2007 under section 4(1) of the Building (Scotland) Act 2003 (asp 8)—
   (i) 60% for new domestic buildings;
   (ii) 75% for non-domestic buildings.

( ) The Scottish Ministers may, by regulations, define the terms “low carbon” and “zero carbon”.

Stewart Stevenson

In section 48, page 21, line 1, after <technologies> insert <(other than those used for the production of heat)>

Iain Smith

In section 48, page 21, line 3, at end insert <and

( ) surplus heat from electricity generation or other industrial processes for district heating or other purposes;>

After section 48

Stewart Stevenson

After section 48, insert—

<Promotion of renewable heat

Duty of Scottish Ministers to promote renewable heat

(1) The Scottish Ministers must prepare and publish a plan for the promotion of the use of heat produced from renewable sources.

(2) The plan prepared under subsection (1) must be published no later than 12 months after the day on which this section comes into force.

(3) The Scottish Ministers—
   (a) may, from time to time; and
   (b) must, before the end of the period mentioned in subsection (4),
review the plan prepared and published under this section.

(4) The period referred to in subsection (3)(b) is the period of 2 years beginning with the date on which—
   (a) the plan is first published; or
   (b) the plan was last reviewed under subsection (3).

(5) Where, following a review under subsection (3), the Scottish Ministers vary the plan, they must, as soon as reasonably practicable after so doing, publish the plan as so varied.

(6) In this section, “renewable sources” has the same meaning as in section 48(8).

Rob Gibson

155A As an amendment to amendment 155, line 5, at end insert—

<( )  The plan must, in particular—
   (a) set—
       (i) targets for the percentage of heat to be produced from renewable sources; and
       (ii) in relation to each target, the date by which it should be met; and
   (b) describe how those targets are to be reported on.>

Section 49

Stewart Stevenson

156 In section 49, page 21, line 16, after <(6)> insert <or section <Duty of Scottish Ministers to promote renewable heat>(1) or (5)>

Rob Gibson

254 In section 49, page 21, line 23, at end insert—

<( )  Where the Scottish Ministers lay a plan mentioned in subsection (1) or a report mentioned in subsection (2) before the Parliament, they must, as soon as reasonably practicable after doing so, and in so far as reasonably practicable, make a statement to the Parliament relating to the plan or, as the case may be, report.>

After section 49

Liam McArthur

255 After section 49, insert—

<Emissions performance standard for new or extended energy generating stations

Energy generating stations: efficiency guidance

(1) The Scottish Ministers must provide or revise existing guidance under section 36 of the Electricity Act 1989 (c.29) setting out the conditions subject to which consent will be granted for the construction of new, or for the extension of existing, energy generating stations of a capacity greater than 50 megawatts.
(2) The guidance required under subsection (1) must set out—
   (a) the maximum greenhouse gas emissions permitted per megawatt hour of energy
       generated; and
   (b) how heat energy produced from combined heat and power stations is to be
       included when calculating levels of emissions.

(3) The guidance required under subsection (1) may include provision for different
maximum greenhouse gas emissions to be permitted in respect of—
   (a) different dates;
   (b) different technologies.

(4) The Scottish Ministers must comply with subsection (1) no later than 12 months after
the day on which this section comes into force.

(5) The Scottish Ministers must, before providing such guidance, request advice from the
advisory body regarding the total cumulative emissions budget available for electricity
generation in the period 2010-2050 and, in particular—
   (a) an appropriate total lifetime greenhouse gas budget per megawatt of generating
       capacity;
   (b) the appropriate initial levels of greenhouse gas emissions per megawatt hour of
       energy generated.

(6) If, in relation to the matters mentioned in subsection (5), the guidance under subsection
(1) differs from that which is recommended by the advisory body, the Scottish Ministers
must publish a statement setting out the reasons why.

Patrick Harvie

256 After section 49, insert—

Energy efficiency finance scheme for homeowners

(1) The Scottish Ministers must establish a scheme under which they may provide or
arrange for the provision of financial assistance to a person in connection with—
   (a) the improvement of the energy performance of a domestic building; or
   (b) the reduction in emissions of greenhouse gases produced or otherwise associated
       with a domestic building.

(2) Such assistance may, in particular, take the form of—
   (a) guaranteeing or joining in guaranteeing the payment of the principal of, and
       interest on, money borrowed by the person (including money borrowed by the
       issue of loan capital) or of interest on share capital issued by the person;
   (b) grants;
   (c) standard loans;
   (d) subsidised loans.

(3) Assistance may be provided on such terms as the Scottish Ministers think fit (subject to
any provision about such terms made by or under this section).
(4) The Scottish Ministers may by regulations make further provision about the provision of assistance under subsection (1).

(5) Those regulations may, in particular, make provision as to—

(a) the procedure for application for financial assistance under subsection (1);
(b) the determination of applications;
(c) the approved expense in relation to any grant or loan;
(d) the amount of any grant or loan;
(e) the terms of any grant or loan;
(f) the payment of any grant or loan;
(g) the conditions applicable to any grant or loan;
(h) any penalties in the event of any breach of conditions of any grant or loan.

Section 50

Liam McArthur

224 In section 50, page 21, line 26, leave out <may> and insert <must>

Stewart Stevenson

157 In section 50, page 21, line 26, leave out <make provision relating to> and insert—

<(  ) provide for>

Liam McArthur

225 In section 50, page 21, line 26, after <assessment> insert <and cost-effective improvement>

Stewart Stevenson

158 In section 50, page 21, line 30, at end insert—

<(  ) require owners of such buildings to take steps, identified by such assessments, to—

(i) improve the energy performance of such buildings;
(ii) reduce such emissions.>

Stewart Stevenson

159 In section 50, page 22, line 2, after <activities> insert <carried out in buildings>

Stewart Stevenson

160 In section 50, page 22, line 5, at end insert—

<(ha) the form of any recommendations, contained in such certificates, as to the improvement of the energy performance of buildings and the reduction of emissions produced by or otherwise associated with buildings or activities carried out in buildings;>
(hb) the manner in which and periods within which persons must take steps to comply with any recommendations contained in such certificates;

(hc) the registration of such certificates;

(hd) the disclosure of information which is entered in the register;

Liam McArthur

160A As an amendment to amendment 160, line 2, after <to> insert <cost-effective measures for>

Liam McArthur

226 In section 50, page 22, line 16, at end insert—

<( ) The Scottish Ministers must, within 12 months of this Act receiving Royal Assent, publish a report setting out—

(a) what measures they intend to take to reduce emissions from non-domestic buildings; and

(b) when they intend to make provision as mentioned in paragraphs (ha) and (hb).>

After section 50

Iain Smith (on behalf of the Economy, Energy and Tourism Committee)
Supported by: Lewis Macdonald

227 After section 50, insert—

<Energy performance of living accommodation

Living accommodation: assessment of energy performance and emissions

(1) The Scottish Ministers may, by regulations, make provision relating to the assessment of—

(a) the energy performance of living accommodation;

(b) the emission of greenhouse gases produced by living accommodation.

(2) The regulations may in particular include provision about—

(a) the circumstances in which the regulations apply;

(b) the living accommodation to which the regulations apply;

(c) the persons who may be required to have assessments carried out;

(d) the periods within which such assessments must be carried out;

(e) the procedure and methodology for assessing the energy performance of living accommodation;

(f) the procedure and methodology for assessing the greenhouse gas emissions produced by the living accommodation;

(g) the persons who may carry out such assessments;

(h) the issuing of certificates, following such assessments, including the form, manner and content of such certificates;

(i) subject to subsection (3), the enforcement authority in relation to the regulations;
(j) subject to subsection (4), the functions of that authority;
(k) the keeping of information and its production to the enforcement authority;
(l) the enforcement of the duties imposed by the regulations;
(m) offences in relation to failures to comply with requirements of the regulations.

(3) The enforcement authority provided for in the regulations is to be such person or body as the Scottish Ministers consider appropriate.

(4) The functions of the enforcement authority may include power to levy charges to recover the reasonable costs incurred by it in exercising its functions under the regulations.

Patrick Harvie

227A As an amendment to amendment 227, line 4, after <assessment> insert <and improvement>

Patrick Harvie

227B As an amendment to amendment 227, leave out line 24

Lewis Macdonald

257 After section 50, insert—

Alterations to buildings: impact on energy performance

(1) The Scottish Ministers must, by regulations, make provision relating to the impact on the energy performance of buildings of building work being carried out, where such work consists of—

(a) an extension of the building;
(b) the provision of any fixed building services;
(c) any increase in the capacity of any fixed building services.

(2) Regulations under subsection (1) must—

(a) include provisions to encourage compliance with relevant guidance documents issued under section 4(1) of the Building (Scotland) Act 2003 (asp 8); and
(b) be laid before the Scottish Parliament no later than 12 months after the day on which this section comes into force.

Alex Johnstone

238 After section 50, insert—

Energy efficiency discounts

Council tax and non-domestic rates: discounts for energy efficiency etc.

(1) In section 79 (council tax discounts) of the Local Government Finance Act 1992 (c.14), after subsection (2), insert—

“(2A) The Scottish Ministers may by regulations prescribe—

7
(a) categories which chargeable dwellings may fall into, based on the levels of energy efficiency and greenhouse gas emissions achieved by those dwellings;

(b) a percentage in relation to each such category.

(2B) Where subsection (2C) applies, the amount of council tax payable in respect of a chargeable dwelling and any day shall be subject to a discount equal to the percentage prescribed in relation to the category of chargeable dwellings into which the chargeable dwelling falls.

(2C) This subsection applies where a resident of a chargeable dwelling shows that the dwelling falls into a category prescribed under subsection (2A)(a).

(2D) Regulations under subsection (2A) may also make provision in relation to how residents may show that a chargeable dwelling falls into a category prescribed under paragraph (a) of that subsection.”.

(2) In section 153 (power to prescribe amount of non-domestic rate) of the Local Government etc. (Scotland) Act 1994 (c.39), in subsection (3)—

(a) the words “whose rateable value exceeds, and those whose rateable value does not exceed, a prescribed figure” become paragraph (a), and

(b) at the end insert—

“(b) whose energy efficiency and greenhouse gas emissions fall into different categories prescribed for the purpose of this paragraph in rules under subsection (1).

(3A) Regulations under this section may make provision in relation to how lands and heritages are to be determined to fall within a category prescribed for the purpose of subsection (3)(b) in rules under subsection (1).”.

Alex Johnstone

258 After section 50, insert—

<Local authority’s power to reduce amount of tax payable

After section 80 (reduced amounts) of the Local Government Finance Act 1992 (c.14), there is inserted—

“80A Local authority’s power to reduce amount of tax payable

(1) Subject to subsection (3), where a person is liable to pay council tax in respect of any chargeable dwelling and any day, the local authority for the area in which the dwelling is situated may reduce the amount which the person is liable to pay as respects the dwelling and the day to such extent as it thinks fit.

(2) The power under subsection (1) above includes power to reduce an amount to nil.

(3) The power under subsection (1) may only be exercised where the local authority is satisfied, by reference to guidance set out in regulations under subsection (4), that investment has been made in the chargeable dwelling for the purpose of improving the energy efficiency of the dwelling.

(4) The Scottish Ministers may, by regulations, set out guidance on how investment in a chargeable dwelling for the purposes of improving energy efficiency under subsection (3) may be demonstrated.”.>
After section 50, insert—

<Energy efficiency discounts

Council tax reductions to promote energy efficiency

(1) The Scottish Ministers must make regulations under section 80 of the Local Government Finance Act 1992 (c.14) to provide that, in respect of a person who—

(a) can demonstrate to a local authority that an energy efficiency improvement has been made, during any qualifying financial year, to a dwelling; and

(b) is liable to pay an amount to that authority in respect of council tax for that dwelling in the next financial year,

the amount that the person is liable to pay for that next financial year shall be reduced (from the amount it would be otherwise than by virtue of this subsection) in accordance with section (Amounts of reductions in council tax).

(2) The regulations made by virtue of subsection (1) must further provide that, in respect of a person who—

(a) is liable to pay an amount to a local authority in respect of council tax for a dwelling;

(b) can demonstrate to that local authority that the dwelling meets a reasonable standard of energy efficiency; and

(c) can demonstrate to that local authority that a system using technologies reliant on renewable sources of energy or heat has been installed in or on the dwelling during any qualifying financial year,

the amount that the person is liable to pay for the next financial year must be reduced (from the amount it would be otherwise than by virtue of this subsection) in accordance with section (Amounts of reductions in council tax).

(3) Subject to subsection (4)—

(a) any reduction made by virtue of either subsection (1) or (2) is without prejudice to any reduction made by virtue of the other of those subsections, whether those reductions apply in the same financial year or in different financial years; and

(b) any reduction made by virtue of subsection (1) is without prejudice to any further reduction made by virtue of that subsection, whether those reductions apply in the same financial year or in different financial years.

(4) The regulations made by virtue of subsection (1) may specify a maximum number of reductions, or a maximum total reduction, in the amount of council tax payable in respect of any one dwelling in any one financial year.

(5) The regulations made by virtue of subsection (1) must include provision for the sort of evidence that a local authority is to accept as demonstrating that—

(a) an energy efficiency improvement has been made to a dwelling;

(b) a dwelling meets a reasonable standard of energy efficiency,

and shall provide that evidence sufficient to demonstrate that specified energy efficiency improvements, or specified combinations of such improvements, have been made to a dwelling is sufficient to demonstrate that the dwelling meets a reasonable standard of energy efficiency.
A draft of a statutory instrument containing the first regulations under subsection (1) must be laid before the Scottish Parliament no later than 31 December 2009.

In this section—

“cogeneration unit” has the same meaning as in the Electricity and Gas (Carbon Emissions Reduction) Order 2008 (S.I. 2008/188);

“energy efficiency improvement” means a significant improvement to the energy efficiency of a dwelling by means of substantially all of one (and only one) of the following measures—

(a) the provision of insulation in any accessible roof space in the dwelling, including the insulation of any cold water tank and any water supply, overflow and expansion pipes in such a space;

(b) the provision of insulation between the internal and external leaves of cavity walls of the dwelling;

(c) improvements to the energy efficiency of any space or water heating system installed in the dwelling;

(d) the provision of draught proofing to or in the dwelling together with additional means of ventilation for any rooms which would otherwise be inadequately ventilated after such provision;

(e) connection to a cogeneration unit or district heating system;

“qualifying financial year” means the financial year beginning on 1 April 2010 or any subsequent financial year.

The Scottish Ministers may, by regulations, amend subsection (7) by adding to the list of measures in the definition of “energy efficiency improvement”.

Sarah Boyack

After section 50, insert—

<Non-domestic rates reductions to promote energy efficiency

After section 25A of the Local Government (Scotland) Act 1966 (c.51), insert—

“25B Reduction in rates for energy efficiency improvements or installation of technologies reliant on renewable sources of energy or heat

(1) Where a rating authority is satisfied that an energy efficiency improvement has been made during any qualifying financial year to qualifying lands or heritages, the rates payable in respect of those lands and heritages in the next financial year shall be reduced (from the amount they would be otherwise than by virtue of this subsection) in accordance with section (Amounts of reductions in non-domestic rates) of the Climate Change (Scotland) Act 2009 (asp 00) (“the 2009 Act”).

(2) Where a rating authority is satisfied that—

(a) qualifying lands and heritages meet a reasonable standard of energy efficiency; and

(b) a qualifying technology reliant on renewable sources of energy or heat system has been installed in or on the lands and heritages during any qualifying financial year,
the rates payable for the next financial year shall be reduced (from the amount they would be otherwise than by virtue of this subsection) in accordance with section (Amounts of reductions in non-domestic rates) of the 2009 Act.

(3) Subject to subsection (4)—

(a) any reduction made by virtue of either subsection (1) or (2) is without prejudice to any reduction made by virtue of the other of those subsections, whether those reductions apply in the same financial year, or in different financial years; and

(b) any reduction made by virtue of subsection (1) is without prejudice to any further reduction made by virtue of that subsection, whether those reductions apply in the same financial year, or in different financial years.

(4) The Scottish Ministers must by regulations specify a maximum number of reductions, or a maximum total reduction, in the amount of rates payable in respect of the same lands and heritages in any one financial year.

(5) The Scottish Ministers must by regulations make provision specifying the sort of evidence that a rating authority is to accept as demonstrating that—

(a) an energy efficiency improvement has been made to qualifying lands and heritages;

(b) qualifying lands and heritages meet a reasonable standard of energy efficiency;

and may provide that evidence sufficient to demonstrate that specified energy efficiency improvements, or specified combinations of such improvements, have been made to lands and heritages is sufficient to demonstrate that the lands and heritages meet a reasonable standard of energy efficiency.

(6) A statutory instrument containing regulations made under this section shall be subject to annulment pursuant to a resolution of the Scottish Parliament.

(7) In this section—

“energy efficiency improvement” and “technologies reliant on renewable sources of energy” have the same meanings given by section (Council tax reductions to promote energy efficiency) of the 2009 Act;

“qualifying financial year” means the financial year beginning on 1 April 2010 or any subsequent financial year;

“qualifying lands and heritages” means such lands and heritages, or such classes of lands and heritages, as are specified in regulations made under this section.”>

Sarah Boyack

261 After section 50, insert—

<Amounts of reductions in council tax

(1) For the purposes of regulations made by virtue of section (Council tax reductions to promote energy efficiency) the reduction in council tax is to be—

(a) in the circumstances referred to in subsection (2)(a), £100; and

(b) in the circumstances referred to in subsection (2)(b), £250.
(2) The circumstances are that the local authority assess the relevant cost of the energy efficiency improvement or the installation of technologies reliant on renewable sources of energy or heat, as the case may be, to be—
   (a) at least £250 but less than £1,000;
   (b) £1,000 or more.

(3) In this section, “relevant cost of energy efficiency improvements” means the amount paid for securing those improvements, minus the amount of any grant received (including a grant made under the Home Energy Efficiency Scheme (Scotland) Regulations 2006 (S.S.I. 2006/570)).

Sarah Boyack

262 After section 50, insert—

<Amounts of reductions in non-domestic rates

(1) For the purposes of section 25B of the Local Government (Scotland) Act 1966 (c.51), the reduction in non-domestic rates is to be—
   (a) in the circumstances referred to in subsection (2)(a), £100; and
   (b) in the circumstances referred to in subsection (2)(b), £250.

(2) The circumstances are that the local authority assess the relevant cost of the energy efficiency improvement or the installation of technologies reliant on renewable sources of energy or heat, as the case may be, to be—
   (a) at least £250 but less than £1,000;
   (b) £1,000 or more.

(3) In this section, “relevant cost of energy efficiency improvements” means the amount paid for securing those improvements, minus the amount of any grant received (including a grant made under the Home Energy Efficiency Scheme (Scotland) Regulations 2006 (S.S.I. 2006/570)).

Sarah Boyack

263 After section 50, insert—

<Review of provision made by virtue of or under sections (Amounts of reductions in council tax) and (Amounts of reductions in non-domestic rates)

(1) The Scottish Ministers must, as soon as practicable after 31 March 2012 and annually thereafter, lay before the Scottish Parliament a report on the operation of—
   (a) the regulations made by virtue of section (Council tax reductions to promote energy efficiency); and
   (b) section 25B of the Local Government (Scotland) Act 1966 (c.51), (“the 1966 Act”),

including an assessment of whether the reductions in council tax or in non-domestic rates, as the case may be, thereby provided for have contributed effectively to promoting energy efficiency improvements and technologies reliant on renewable sources of energy or heat.
(2) Where the Scottish Ministers conclude in a report made under subsection (1) that the provisions referred to in paragraphs (a) and (b) of that subsection would contribute more effectively to energy efficiency improvements and technologies reliant on renewable sources of energy or heat if—

(a) one or both of the amounts referred to in section (Amounts of reductions in council tax)(1) or section (Amounts of reductions in non-domestic rates)(1) were greater;

(b) one or both of the amounts referred to in section (Amounts of reductions in council tax)(2) or section (Amounts of reductions in non-domestic rates)(2) were varied,

they may by regulations increase or, as the case may be, vary the amounts in question.

(3) Where the Scottish Ministers conclude in a report made under subsection (1) that the regulations referred to in that subsection and section 25B of the 1966 Act would contribute more effectively to promoting energy efficiency improvements and technologies reliant on renewable sources of energy if the mechanism prescribed by sections (Amounts of reductions in council tax) and (Amounts of reductions in non-domestic rates) for calculating the amount of reduction in council tax or non-domestic rates, as the case may be, from the relevant cost of energy efficiency improvements or technologies reliant on renewable sources of energy was different from the mechanism for the time being prescribed, they may, by regulations, amend sections (Amounts of reductions in council tax) and (Amounts of reductions in non-domestic rates) to prescribe that different mechanism.

Iain Smith (on behalf of the Economy, Energy and Tourism Committee)

After section 50, insert—

<Energy efficiency discounts
Use of local and national tax incentives to reward investments in energy efficiency or microgeneration

(1) The Scottish Ministers may, by regulations, establish a scheme under which the amount of council tax or non-domestic rates payable in respect of a chargeable dwelling or, as the case may be, any lands and heritages is reduced to take account of the installation of—

(a) an energy efficiency measure;

(b) a microgeneration system.

(2) Regulations under subsection (1) may make such modifications of enactments as are necessary in consequence of or for the purpose of giving full effect to a scheme established under that subsection.

(3) In subsection (1)—

an “energy efficiency measure” is a measure to improve efficiency in the use of energy in the property;

“microgeneration system” has the same meaning as in section 4(9) of the Climate Change and Sustainable Energy Act 2006 (c.19).

Lewis Macdonald

After section 50, insert—
Rateable value of plant and distribution system associated with combined heat and power plants

(1) The Scottish Ministers must bring forward an amendment to the Valuation for Rating (Plant and Machinery) (Scotland) Regulations 2000 (SSI 2000/58).

(2) The amendment required under subsection (1) must specify the circumstances in which combined heat and power district heating equipment which meets the CHPQA standard does or does not fall within the definition of “lands and heritages” in section 42 of the Lands Valuation (Scotland) Act 1854 (c.91).

(3) Regulations making the amendment required under subsection (1) must be laid before the Scottish Parliament no later than 6 months after the day on which this section comes into force.

(4) Before bringing forward the amendment required under subsection (1), the Scottish Ministers must consult, and seek to reach agreement on the contents of the amendment, with organisations which in the opinion of the Scottish Ministers represent relevant business interests, including, in particular, organisations representing the combined heat and power industry.

(5) In this section, “CHPQA” refers to the Combined Heat and Power Quality Assurance Standard, Issue 1, November 2000 originally published by the Department for the Environment, Transport and the Regions (the “Standard”) (including the later of version Final 1.0 or 2.0 of CHPQA Guidance Notes(c) 0 to 4 (including 2(S), 3(S) and 4(S)), 10 to 28 and 30).

Sarah Boyack

After section 50, insert—

Climate change burdens

After section 46 (health care burdens) of the Title Conditions (Scotland) Act 2003 (asp 9), insert—

Climate change burdens

46A Climate change burdens

(1) On and after the day on which this section comes into force, it shall be competent to create a real burden in favour of a public body, or of the Scottish Ministers, for the purpose of reducing greenhouse gas emissions; and any such burden shall be known as a “climate change burden”.

(2) A climate change burden may only consist of an obligation, in the event of the burdened property being developed, for the property to meet specified energy efficiency and sustainability standards.

(3) A climate change burden may not be created after land which would, but for this subsection, be the burdened property has been advertised for sale.

(4) For the purposes of this section, a “public body” means a person or body with functions of a public nature.”.
<Repairing standard>

**Tenanted housing: inclusion of energy efficiency in the repairing standard**

In section 13 (the repairing standard) of the Housing (Scotland) Act 2006 (asp 1)—
(a) in subsection (1)—
   (i) the word “and” immediately following paragraph (e) is repealed; and
   (ii) after paragraph (f), insert “, and
   (g) the house achieves a satisfactory standard of energy efficiency”.
(b) after subsection (5), insert—
   “(6) The Scottish Ministers must, by regulations, define what constitutes a satisfactory standard of energy efficiency for the purposes of subsection (1)(g).
   (7) In drawing up the regulations under subsection (6), the Scottish Ministers must have regard to any guidance they have issued on the energy efficiency of living accommodation.
   (8) The regulations mentioned in subsection (6) must, in particular, include provision about—
      (a) the procedure and methodology for assessing the energy performance of the house, and
      (b) the minimum energy performance standard that must be achieved in relation to the house.”.

<Tolerable standard>

**Amendment of the tolerable standard**

In section 86 (definition of house meeting the tolerable standard) of the Housing (Scotland) Act 1987 (c.26), in subsection (1)(ca), after “thermal” insert “roof and wall”.

<Tenement Management Scheme>

**Tenement Management Scheme: definition of “maintenance”**

In schedule 1 (Tenement Management Scheme) to the Tenements (Scotland Act 2004 (asp 11), in the definition of “maintenance” in rule 1.5, after “replacement,” insert “the installation of insulation,”.
Section 51

Iain Smith (on behalf of the Economy, Energy and Tourism Committee)

In section 51, page 22, line 27, leave out <may> and insert <must>

Iain Smith (on behalf of the Economy, Energy and Tourism Committee)

In section 51, page 22, line 28, leave out <, in particular,> and insert <the preparation and publication of a plan for the promotion of heat produced from renewable sources in Scotland which includes>

Stewart Stevenson

Leave out section 51

After section 51

Sarah Boyack

After section 51, insert—

<Targets for renewable heat

(1) The Scottish Ministers must, not later than three months after this section comes into force—

(a) designate one or more renewable heat targets; and
(b) publish a statement of that fact together with a copy of the target or targets.

(2) The matters to which the Scottish Ministers must have regard in designating a renewable heat target or targets under subsection (1) include—

(a) such target or targets as may have been designated by the Secretary of State under section 4 of the Climate Change and Sustainable Energy Act 2006 (c.19) (“the 2006 Act”) in respect of electricity microgenerating systems installed in Scotland;
(b) the number of renewable heat systems installed in Scotland;
(c) the strategy published under section 82 of the Energy Act 2004 (c.20); and
(d) the results of any research carried out into the effect that designating a target under subsection (1) could be expected to have on the number of renewable heat systems that are installed in Scotland by the target date.

(3) The Scottish Ministers must take reasonable steps to secure that the designated target or targets are met, including by requiring local authorities to set objectives for promoting renewable heat in their areas.

(4) At any time before the target date, the Scottish Ministers may review the target or targets and, if they consider it appropriate, revise it or them (and subsection (2) applies in relation to revising a target as it applies in relation to designating a target under subsection (1)).

(5) If under subsection (4) the Scottish Ministers revise a target—

(a) they must publish a statement of that fact together with a copy of the revised target; and
(b) the revised target is treated for the purposes of subsection (3) as a target designated under subsection (1) (in place of the target which has been revised).

(6) For the purposes of this section, a “renewable heat target” is a target in respect of the number of renewable heat systems installed in Scotland as at a date specified in the target (“the target date”).

Sarah Boyack

271 After section 51, insert—

<Development plans

Development plans: inclusion of greenhouse gas emissions policies

After section 3E of the Town and Country Planning (Scotland) Act 1997 (c.8) insert—

“3F Greenhouse gas emissions policies

A strategic development planning authority, in their strategic development plan, and a planning authority, in any local development plan for land not within a strategic development plan area, must include policies requiring all relevant developments in the strategic development plan area or (as the case may be) local development plan area to be so designed to ensure that all new buildings avoid a specified and rising proportion of their projected operational greenhouse gas emissions, calculated on the basis of the approved design and plans for the specific development, through the installation and operation of low and zero-carbon generating technologies.”.

Sarah Boyack

272 After section 51, insert—

<Annual report on operation of section (Development plans: inclusion of greenhouse gas emissions policies)

(1) The Scottish Ministers shall—

(a) not later than one year after section (Development plans: inclusion of greenhouse gas emissions policies) comes into force; and

(b) annually thereafter,

lay before the Scottish Parliament a report on the operation of the requirement on planning authorities to include policies within development plans under that section, including an assessment of whether those requirements have contributed effectively to the reduction of greenhouse gas emissions from developments.

(2) The fourth and subsequent reports under subsection (1) shall include an assessment of the continuing need or otherwise for the requirement on planning authorities to include policies within development plans; and if the requirement is considered by the Scottish Ministers to be no longer necessary, the Scottish Ministers may by order repeal section (Development plans: inclusion of greenhouse gas emissions policies) and this section.

Sarah Boyack

273 After section 51, insert—
Air source heat pumps and micro wind turbines in domestic properties: permitted development rights

(1) The Scottish Ministers must bring forward an amendment to the Town and Country Planning (General Permitted Development) (Domestic Microgeneration) (Scotland) Amendment Order 2009 (SSI 2009/34).

(2) The amendment required under subsection (1) is to specify the circumstances under which the installation, alteration or replacement of—
   (a) air source heat pump microgeneration equipment; or
   (b) wind turbine microgeneration equipment,
within the curtilage of a dwellinghouse or building containing a flat is considered a permitted development under the meaning of sections 30 and 31 of the Town and Country Planning (Scotland) Act 1997 (c.8).

(3) An order making the amendment required under subsection (1) must be laid in the Scottish Parliament no later than six months after the day on which this section comes into force.

(4) Before making the amendment required under subsection (1), the Scottish Ministers must consult with organisations which, in the opinion of the Scottish Ministers, have relevant business interests and, in particular, organisations representing—
   (a) the energy efficiency industry;
   (b) the renewables industry; and
   (c) the microgeneration industry.

(5) In this section, “microgeneration” has the meaning given in section 82(6) of the Energy Act 2004 (c.20).

Liam McArthur

After section 51, insert—

Microgeneration in non-domestic buildings: permitted development rights

(1) The Scottish Ministers must exercise their powers under sections 30 and 31 of the Town and Country Planning (Scotland) Act 1997 (c.8) so as to make provision of the kind specified in subsection (2).

(2) That provision is provision specifying the circumstances in which the installation, alteration or replacement of microgeneration equipment within the curtilage of a non-domestic building is considered a permitted development within the meaning of those sections of that Act.

(3) The Scottish Ministers must comply with subsection (1) no later than 12 months after the day on which this section comes into force.

(4) Before complying with subsection (1), the Scottish Ministers must consult and seek to reach agreement about the provision to be made by virtue of that subsection with organisations which, in the opinion of the Scottish Ministers, have relevant business interests and, in particular, organisations representing—
   (a) the energy efficiency industry;
(b) the renewables industry; and
(c) the microgeneration industry.

(5) In this section—

“microgeneration” has the meaning given in section 82(6) of the Energy Act 2004 (c.20);
“non-domestic building” has the meaning given in section 50(5).>

Shirley-Anne Somerville

275 After section 51, insert—

CHAPTER
THE SCOTTISH CIVIL ESTATE

Energy performance of new buildings procured for the Scottish civil estate

(1) The Scottish Ministers must, in so far as reasonably practicable, ensure that the energy performance of any newly constructed building that becomes part of the civil estate in Scotland falls within the top quartile of energy performance.

(2) For the purposes of subsection (1), a building becomes part of the civil estate if it is procured or constructed by or on behalf of the Scottish Ministers.>

Shirley-Anne Somerville

276 After section 51, insert—

Report on the Scottish civil estate

(1) The Scottish Ministers must, in respect of each financial year beginning with 2010-2011, lay before the Scottish Parliament a report containing an assessment of the progress made in the year towards improving—

(a) the efficiency; and
(b) the contribution to sustainability,
of buildings that are part of the civil estate in Scotland.

(2) If the energy performance of a building mentioned in subsection (3) does not fall within the top quartile of energy performance, the report must state the reasons why the building has become part of the civil estate.

(3) That building is a building—

(a) to which section (Energy performance of new buildings procured for the Scottish civil estate) applies; and
(b) which becomes part of the civil estate in the financial year to which the report relates.

(4) The report under this section must be laid before the Parliament no later than 31 October next following the end of the financial year to which the report relates.>

Shirley-Anne Somerville

277 After section 51, insert—
Scottish civil estate: supplementary

(1) For the purposes of this section and sections (Energy performance of new buildings procured for the Scottish civil estate) and (Report on the Scottish civil estate)—

(a) “building” means a building that uses energy for heating or cooling the whole or any part of its interior; and

(b) a building is part of the civil estate in Scotland if it—

(i) is used for the purposes of Scottish central government administration; and

(ii) is of a description of buildings for which the Scottish Ministers have responsibilities in relation to efficiency and sustainability.

(2) The Scottish Ministers may, by order, provide—

(a) for buildings of a description specified in the order to be treated as being, or as not being, part of the civil estate;

(b) for uses specified in the order to be treated as being, or as not being, uses for the purposes of Scottish central government administration.

Cathy Peattie

After section 51, insert—

Procurement of public sector buildings

(1) The Scottish Ministers must, when procuring a building for use as an office by—

(a) the Scottish Administration; or

(b) any executive agency or non-departmental public body for which the Scottish Ministers are responsible,

ensure that the building has an energy efficiency rating of A or B, calculated on the basis of information obtained within the previous 12 months, and in accordance with the energy rating system used for the purposes of an energy performance certificate.

(2) In this section—

“energy performance certificate” means a certificate issued in accordance with Regulation 6 of the Energy Performance of Buildings (Scotland) Regulations 2008 (SSI 2008/309);

“procure” means rent, lease, purchase or acquire through a private developer scheme, a public private partnership, private finance initiative or similar arrangement.

Section 52

Elaine Murray

In section 52, page 23, line 26, at end insert—

A draft of a statutory instrument containing the first regulations under subsection (1) must be laid before the Scottish Parliament no later than one year after this Act receives Royal Assent.
After section 52

Elaine Murray

242 After section 52, insert—

<Disposal of waste

Disposal of waste

(1) The Scottish Ministers may, by regulations, require persons responsible for the management of waste disposal facilities to comply with specified rules about the disposal of waste.

(2) The regulations under subsection (1) must—

(a) prohibit the disposal to landfill of—

(i) unsorted household and industrial waste;

(ii) wastes that were selectively collected for the purpose of recovery;

(iii) wastes that can be recovered because of their nature, quantity and homogeneity;

(iv) combustible residues from the sorting of household waste or comparable commercial or industrial waste;

(v) waste pharmaceuticals;

(b) prohibit the disposal to, or treatment by incineration of—

(i) selectively collected wastes that can be recycled;

(ii) unsorted commercial or industrial wastes;

(iii) unsorted household wastes.

(3) The regulations under subsection (1) may in particular also include provision about—

(a) the kinds of waste covered by the regulations;

(b) the kinds of facility covered by the regulations;

(c) the criteria for acceptance of different kinds of waste at different kinds of facility;

(d) derogations from the criteria for waste volumes below specified levels;

(e) temporary derogations from the criteria based on the availability of appropriate alternative treatment capacity;

(f) exemptions from the criteria for high calorific wastes for renewable energy purposes;

(g) the testing of wastes required to establish compliance with the criteria;

(h) the enforcement of the duties imposed by the regulations;

(i) offences in relation to failures to comply with the requirements of the regulations.

(4) The enforcement authority must have regard to any guidance given by the Scottish Ministers to it in relation to the functions conferred on it by the regulations.>

Elaine Murray

242A As an amendment to amendment 242, line 33, at end insert—
A draft of a statutory instrument containing the first regulations under subsection (1) must be laid before the Scottish Parliament no later than one year after this Act receives Royal Assent.

Elaine Murray

279 After section 52, insert—

<Waste reduction schemes

Waste reduction schemes

(1) The Scottish Ministers may, by regulations, establish a waste reduction scheme.

(2) A “waste reduction scheme” is a scheme to reduce the amount of residual domestic waste by providing a financial incentive to—

(a) produce less domestic waste; and

(b) recycle more of what is produced.

(3) The scheme may provide for the financial incentive to be provided—

(a) by means of rebates from council tax or by other payments; or

(b) by means of charges under subsection (4),

or by any combination of those means.

(4) The scheme may include provision for charging by reference to—

(a) the amount of residual domestic waste collected from premises;

(b) the size of receptacles used for the purposes of the collection of residual domestic waste from premises;

(c) the number of receptacles used for such purposes;

(d) the frequency with which residual domestic waste is collected from premises,

or by reference to any combination of those factors.

(5) The regulations must include provision about—

(a) the areas in which the scheme is to operate;

(b) the person or persons by whom any charge is payable;

(c) the manner in which any charge or rebate may be calculated or levied;

(d) the extent and means of notification to persons regarding the implementation, amendment or revocation of such a waste reduction scheme;

(e) the process by which appeals by persons regarding any liabilities for charge or entitlements to rebates under the scheme may be made;

(f) the maintenance of a separate public account of any charges or rebates made under the scheme;

(g) the standards of recycling service which must be provided in areas covered by the scheme;

(h) the measures that must be in place in such areas to prevent, minimise or otherwise deal with the unauthorised deposit or disposal of waste;

(i) the measures to be put in place to ensure that specific groups are not disadvantaged by the scheme.
(6) Regulations may also include provision for—
   (a) the type of domestic premises to which the scheme applies;
   (b) the nature and identification of specified containers for the collection of waste;
   (c) any charges that may be made for the provision or identification of specified containers;
   (d) the payment arrangements for any charge, including whether charges can be paid on account or in instalments;
   (e) any limit that might be imposed on the charge for any premises;
   (f) the means by which unpaid charges may be recovered.

(7) The first regulations under subsection (1) must provide for the scheme to be piloted in one or more specified area for a specified period; and the scheme must be reviewed at the end of that period.

(8) After the review mentioned in subsection (7) has taken place, the Scottish Ministers must—
   (a) revoke the scheme; or
   (b) extend the scheme—
      (i) to such further areas as may be specified; or
      (ii) across Scotland.

(9) In this section—
   “domestic premises” means any building, self-contained part of a building, caravan or moored vessel used wholly for the purposes of providing living accommodation;
   “domestic waste” means household waste from domestic premises;
   “residual domestic waste” means domestic waste that is not waste meeting any conditions in a particular local authority area for collection by the authority as recyclable waste.

Section 53

Elaine Murray

243 In section 53, page 24, line 22, at end insert—

<( ) A draft of a statutory instrument containing the first regulations under subsection (1) must be laid before the Scottish Parliament no later than one year after this Act receives Royal Assent.>

Section 56

Elaine Murray

244 In section 56, page 27, line 6, at end insert—

<( ) A draft of a statutory instrument containing the first regulations under subsection (1) must be laid before the Scottish Parliament no later than one year after this Act receives Royal Assent.>
Section 58

Stewart Stevenson

162 In section 58, page 28, line 3, after <return> insert—

<( ) such articles;
( )>

Stewart Stevenson

163 In section 58, page 28, line 3, after <articles> insert <("returnable packaging"); or

( ) both such articles and such packaging.>

Stewart Stevenson

164 In section 58, page 28, line 6, at end insert—

<( ) accept the return to them of—
(i) such articles;
(ii) returnable packaging; or
(iii) both such articles and such packaging;>

Stewart Stevenson

165 In section 58, page 28, line 7, leave out from <packaging> to end of line 8 and insert <to them—

(i) such articles;
(ii) returnable packaging; or
(iii) both such articles and such packaging;
( ) return such articles to the producers of them;>

Stewart Stevenson

166 In section 58, page 28, line 9, leave out <such> and insert <returnable>

Stewart Stevenson

167 In section 58, page 28, line 12, at end insert—

<( ) accept the return to them of—
(i) such articles;
(ii) returnable packaging; or
(iii) both such articles and such packaging;>

Stewart Stevenson

168 In section 58, page 28, line 13, leave out <packaging to them> and insert <to them—

(i) such articles;
(ii) returnable packaging; or
(iii) both such articles and such packaging>

Stewart Stevenson
169 In section 58, page 28, leave out line 14 and insert—

< ( ) recycle, or have recycled—
(i) such articles;
(ii) returnable packaging; or
(iii) both such articles and such packaging.>

Stewart Stevenson
170 In section 58, page 28, line 15, leave out from <in> to <producers> in line 16 and insert <a “scheme administrator”>

Stewart Stevenson
171 In section 58, page 28, leave out line 18 and insert—

< ( ) accept the return of—
(i) such articles;
(ii) returnable packaging; or
(iii) both such articles and such packaging.>

Stewart Stevenson
172 In section 58, page 28, line 19, leave out <such packaging> and insert—

< (i) such articles;
(ii) returnable packaging; or
(iii) both such articles and such packaging>

Stewart Stevenson
173 In section 58, page 28, line 19, at end insert—

< ( ) return such articles to the producers of them;>

Stewart Stevenson
174 In section 58, page 28, line 20, leave out <such> and insert <returnable>

Stewart Stevenson
175 In section 58, page 28, leave out line 23 and insert—

< ( ) recycle, or have recycled—
(i) such articles;
(ii) returnable packaging; or
(iii) both such articles and such packaging.>  

Elaine Murray  
245 In section 58, page 28, line 26, after <recycling> insert <or reuse>  

Stewart Stevenson  
176 In section 58, page 28, line 31, at end insert—  

<( ) the inclusion, in the sale price of articles, of a non-returnable element to cover the reasonable costs incurred by retailers, producers or a scheme administrator in administering such schemes;  

( ) the articles the return of which entitles persons to payment of sums equal to deposits;  

( ) the methods by which such articles are to be identified;>  

Stewart Stevenson  
177 In section 58, page 28, line 32, leave out from <associated> to <deposits> in line 33 and insert <which is returnable packaging for the purposes of such schemes>  

Stewart Stevenson  
178 In section 58, page 28, line 34, leave out <such> and insert <returnable>  

Stewart Stevenson  
179 In section 58, page 28, line 36, at end insert—  

<( ) the places to which articles can be returned;>  

Stewart Stevenson  
180 In section 58, page 28, line 37, after <which> insert <returnable>  

Stewart Stevenson  
181 In section 58, page 28, line 39, at end insert—  

<( ) the scheme administrator;>  

Alex Johnstone  
185 Leave out section 58  

After section 58  

Stewart Stevenson  
182 After section 58, insert—  

<Deposit and return schemes: designation of scheme administrator  

(1) The Scottish Ministers may, by order, designate—
(a) a body established under section (Power to establish scheme administrator)(1); or
(b) such other person or body as they consider appropriate (an “existing body”),
as a scheme administrator of a deposit and return scheme established by virtue of section 58.

(2) An order under subsection (1)(b) may, in so far as the Scottish Ministers consider it
necessary or expedient to do so, modify the functions of an existing body by—
(a) conferring functions on;
(b) removing functions from; or
(c) otherwise varying the functions of,
the body.

(3) That order may in particular include provision about—
(a) borrowing by the existing body (with the approval of the Scottish Ministers);
(b) the charging by the body, in respect of the exercise of its functions in relation to a
deposit and return scheme, of such reasonable amounts as the Scottish Ministers
consider appropriate.

(4) In exercising functions in relation to a deposit and return scheme, a scheme
administrator must comply with any written directions of a general or specific nature as
the Scottish Ministers may from time to time give to it in relation to those functions.

Stewart Stevenson

183 After section 58, insert—

<Power to establish scheme administrator

(1) The Scottish Ministers may, by order, establish a body to be a scheme administrator of a
deposit and return scheme established by virtue of section 58(1).

(2) A body established under subsection (1) is to be a body corporate.

(3) The body may do anything which appears to it—
(a) to be necessary or expedient for the purpose of, or in connection with, the exercise
of its functions in relation to a deposit and return scheme;
(b) to be conducive to the exercise of those functions.

(4) In particular, the body may—
(a) enter into contracts;
(b) with the agreement of the Scottish Ministers, borrow money;
(c) charge, in respect of the exercise of its functions in relation to a deposit and return
scheme, such reasonable amounts as the Scottish Ministers consider appropriate.

(5) An order under subsection (1) may in particular include provision about—
(a) the status and constitution of the body;
(b) the status of the members and any employees of the body;
(c) the remuneration, allowances and pensions of such members and such employees;
(d) the conferral of functions on the body;
(e) the keeping by the body of accounts and accounting records.>

Stewart Stevenson

184 After section 58, insert—

<Finance of scheme administrator>

(1) The Scottish Ministers may, for the purpose of or in connection with the exercise by a scheme administrator of functions in relation to a deposit and return scheme—

(a) pay grants;

(b) make loans,

to the administrator of such amounts as Ministers may determine.

(2) Any such grant or loan may be paid or, as the case may be, made, on such terms and subject to such conditions (including, in the case of a loan, conditions as to repayment) as the Scottish Ministers consider appropriate.

(3) The Scottish Ministers may, from time to time after any grant or loan is paid or, as the case may be, made, vary the terms and conditions on which it was paid or made.

(4) The Scottish Ministers may guarantee, in such manner and on such conditions as they consider appropriate, the discharge of any financial obligation in connection with any sums borrowed by a scheme administrator for the purpose of, or in connection with, the exercise of its functions in relation to a deposit and return scheme.>

Elaine Murray

246 After section 58, insert—

<Charges for single-use or disposable products>

Charges for single-use or disposable products

(1) The Scottish Ministers may, by regulations, require persons of the kinds specified—

(a) to impose, at the point of sale, a charge under this section for single-use or disposable products of the kinds specified;

(b) to apply the net proceeds raised by such charges to the advancement of environmental protection or improvement or to any other purposes that may be reasonably regarded as analogous.

(2) The regulations may in particular include provision about—

(a) the circumstances in which the requirement applies;

(b) the minimum amount to be charged for each specified single-use or disposable product;

(c) how the net proceeds raised by the charge are to be ascertained;

(d) the purposes to which those net proceeds are to be applied;

(e) subject to section 60—

(i) the enforcement authority in relation to the regulations; and

(ii) the functions of that authority;

(f) the keeping of records and their production to the enforcement authority;
(g) the enforcement of the duties imposed by the regulations;
(h) offences in relation to failures to comply with requirements of the regulations.

(3) The enforcement authority must have regard to any guidance given by the Scottish Ministers to it in relation to the functions conferred on it by the regulations.

Section 59

Des McNulty

Supported by: Angela Constance, Elaine Murray

74 Leave out section 59

After section 61

Elaine Murray

247 After section 61, insert—

<!Civil penalties for waste offences>

(1) The Scottish Ministers may, by regulations, make provision for or in connection with—
(a) the imposition by the enforcement authority of penalty charges in respect of such offences under this Chapter as are specified;
(b) the payment of such charges.

(2) The regulations must include provision specifying the person or persons by whom a penalty charge in respect of an offence is to be paid (who may be or, as the case may be, include a person other than the person who committed the offence).

(3) The regulations must include provision—
(a) prohibiting criminal proceedings in respect of any description of conduct for which a penalty charge may be imposed; or
(b) securing that a penalty charge is not payable or is refunded where the conduct is the subject of criminal proceedings.

(4) The regulations must include provision about the standard of proof required to establish the commission of an offence in respect of which a penalty charge may be imposed and may include other provision for or in connection with evidence and procedure.

(5) The regulations may set different levels of penalty charges in respect of different offences and in respect of the same offences committed in different circumstances.

(6) The regulations may provide for the level of penalty charge to be determined, in specified circumstances, by reference to the turnover of any business involved in the offence in a specified way or to the costs avoided, or income gained, by any such business as a result of the commission of the offence.

(7) The regulations may include provision for and in connection with—
(a) the notification of penalty charges to persons appearing to be liable to pay them;
(b) the enabling and effect of the making of representations to the enforcement authority by persons who are or may be liable to pay those charges;
(c) appeals by those persons against the imposition of those charges.
(8) Before laying a draft of a statutory instrument containing regulations under subsection (1) before the Scottish Parliament, the Scottish Ministers must carry out such consultation with the public on a draft of the regulations as they consider appropriate.

Before section 62

Alison McInnes

248 Before section 62, insert—

<Judicial review

(1) In any application for judicial review relating to or arising out of the provisions of this Act, it will be enough for any party to show sufficient interest in order to satisfy the common law tests of title and interest.

(2) “Sufficient interest” is to be interpreted in accordance with the criteria laid out in Article 9 of the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters signed at Aarhus on 25 June 1998 (“the Aarhus Convention”).

(3) In relation to the expenses associated with any judicial review proceedings under this Act, the court may impose a cap on, or otherwise regulate, the extent of liability for expenses between the parties; and such applications may be competently made at any stage of the proceedings.

(4) When determining an application made under subsection (3) above, the court is to have regard to the need to remove or reduce financial or other barriers to access to justice, in accordance with the principles laid out in Article 9 of the Aarhus Convention.

(5) In any application for judicial review under this Act, the court may competently consider both the substantive and the procedural legality of the decision, act or omission under review.>

Des McNulty

249 Before section 62, insert—

<Sustainable development

(1) The persons mentioned in subsection (2) must, in exercising functions conferred on them by virtue of this Act, take into account the need to do so in a way that contributes to the achievement of sustainable development.

(2) Those persons are—

(a) the Scottish Ministers;

(b) each relevant public body.>

Alison McInnes

249B As an amendment to amendment 249, leave out line 8

Shirley-Anne Somerville

249A As an amendment to amendment 249, line 8, at end insert—

<( ) the advisory body>
Patrick Harvie

280 Before section 62, insert—

<Scottish Executive budget: impact on greenhouse gases

The Scottish Ministers must, at the same time as laying before the Scottish Parliament any document setting out preliminary draft budgets of public expenditure in any financial year, lay before the Scottish Parliament a document describing the impact of that expenditure on greenhouse gas emissions.>

Section 62

Cathy Peattie

228 In section 62, page 30, line 23, at end insert—

<( ) public bodies (as defined in section 36(A2))>

Section 64

Iain Smith (on behalf of the Economy, Energy and Tourism Committee)

229 In section 64, page 31, leave out lines 29 and 30

Alex Johnstone

186 In section 64, page 31, leave out lines 31 to 35

Maureen Watt (on behalf of the Rural Affairs and Environment Committee)

250 In section 64, page 31, line 39, at end insert—

<(9) Before laying a draft of any regulations under sections 52 to 59 (other than regulations mentioned in subsection (7)(d) or (e)) before the Scottish Parliament, the Scottish Ministers must—

(a) lay before the Scottish Parliament—

(i) a copy of the proposed regulations, and
(ii) a statement of their reasons for proposing to make the draft regulations,

(b) publicise the proposed draft regulations in such manner as they consider appropriate, and

(c) have regard to—

(i) any representations about the proposed draft regulations,
(ii) any resolution of the Scottish Parliament about the proposed draft regulations, and
(iii) any report by a committee of the Scottish Parliament about the proposed draft regulations,

made during such period as the Scottish Ministers may specify when laying the proposed draft regulations.

(10) The period so specified must—
(a) be no shorter than 60 days, and
(b) include at least 30 days during which the Scottish Parliament is not dissolved or in recess.

(11) When laying a draft of any regulations to which subsection (9) applies before the Scottish Parliament, the Scottish Ministers must also lay a statement giving details of—

(a) any representations, resolution or report falling within paragraph (c) of that subsection; and

(b) the changes (if any) which in the light of any such representations, resolution or report, the Scottish Ministers have made to what was laid under paragraph (a)(i) of that subsection.

Section 65

Stewart Stevenson
32 In section 65, page 32, line 8, leave out <section 10(2)> and insert <subsection (2) of section 10>

Stewart Stevenson
33 In section 65, page 32, line 9, leave out <subsection (2)(a)> and insert <paragraph (a)>

Stewart Stevenson
34 In section 65, page 32, line 9, at end insert <of that subsection>

Cathy Peattie
230 In section 65, page 32, line 13, leave out from <means> to end of line 14 and insert <has the meaning given by section 36(1A);>

Cathy Peattie
231 In section 65, page 32, line 29, after <body”> insert <(except in Part 4 and section 62)>

Schedule 2

Iain Smith (on behalf of the Economy, Energy and Tourism Committee)
Supported by: Lewis Macdonald
232 In schedule 2, page 39, leave out lines 24 to 26

Section 67

Rob Gibson
233 In section 67, page 33, line 13, after <27> insert <, (Reports on programmes for adaptation)>
Cathy Peattie

234 In section 67, page 33, line 14, after <day> insert <(in the case of sections 36 to 44, being not later than 18 months after this Act receives Royal Assent)>

Rob Gibson

235 In section 67, page 33, line 15, after <27> insert <and (Reports on programmes for adaptation)>

Long Title

Stewart Stevenson

35 In the long title, page 1, line 2, leave out <2030> and insert <2020>

Cathy Peattie

236 In the long title, page 1, line 3, leave out from <confer> to first <to> in line 4 and insert <impose, and confer power on Ministers to further>
Climate Change (Scotland) Bill

3rd Groupings of Amendments for Stage 2

This document provides procedural information which will assist in preparing for and following proceedings on the above Bill. The information provided is as follows:

- the list of groupings (that is, the order in which amendments will be debated). Any procedural points relevant to each group are noted;
- a list of any amendments already debated;
- the text of amendments to be debated on the third day of Stage 2 consideration, set out in the order in which they will be debated. THIS LIST DOES NOT REPLACE THE MARSHALLED LIST, WHICH SETS OUT THE AMENDMENTS IN THE ORDER IN WHICH THEY WILL BE DISPOSED OF.

Groupings of amendments

Promotion of energy efficiency: general duties and targets
222, 223, 252, 232

Contribution of planning and building regulation to reduction of emissions
251, 271, 272

Promotion of renewable heat
154, 155, 155A, 156, 254, 239, 240, 161, 270

District heating
253, 265

Energy generating stations: efficiency guidance
255

Energy efficiency finance scheme
256

Assessment and improvement of energy performance: non-domestic buildings
224, 157, 225, 158, 159, 160, 160A, 226, 229

Assessment of energy performance of living accommodation
227, 227A, 227B

Alterations to buildings: impact on energy performance
257

Council tax and non-domestic rates: energy efficiency discounts
238, 258, 259, 260, 261, 262, 263, 264
Climate change burdens
266

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Climate Change (Scotland) Bill: The Committee considered the Bill at Stage 2 (Day 3).


The following amendments were agreed to (by division)—

255 (For 5, Against 3, Abstentions 0)
259 (For 5, Against 3, Abstentions 0)
261 (For 5, Against 3, Abstentions 0)
263 (For 5, Against 3, Abstentions 0)
273 (For 5, Against 3, Abstentions 0)
274 (For 5, Against 3, Abstentions 0)
250 (For 4, Against 3, Abstentions 1)
230 (For 5, Against 3, Abstentions 0)
231 (For 5, Against 3, Abstentions 0)
234 (For 5, Against 3, Abstentions 0)

The following amendments were disagreed to (by division)—

251 (For 4, Against 4, Abstentions 0; amendment disagreed to on casting vote)
256 (For 2, Against 6, Abstentions 0)
245 (For 0, Against 4, Abstentions 4)
74 (For 4, Against 4, Abstentions 0; amendment disagreed to on casting vote)
The following amendments were moved and, with the agreement of the Committee, withdrawn: 257, 238, 266, 267, 241, 242A, 242, 279, 246, 247, 248 and 280.

The following amendments were not moved: 252, 225, 160A, 226, 227B, 258, 260, 262, 264, 265, 268, 239, 240, 270, 271, 272, 278, 244, 185, 228, 186, 232 and 236.

Sections 48, 49, 50, 53, 58, 64, 65, 67, and the long title were agreed to as amended.

Sections 52, 54, 55, 56, 57, 59, 60, 61, 62, 63, schedule 2, and section 66 were agreed to without amendment.

The Committee completed Stage 2 consideration of the Bill.
The Convener (Patrick Harvie): Good afternoon and welcome to the 16th meeting this year of the Transport, Infrastructure and Climate Change Committee. I remind members and everyone else that all mobile devices should be switched off. We have no apologies to record. I welcome Iain Smith, Sarah Boyack and Lewis Macdonald, and we expect to see Liam McArthur at some point during the meeting. We also welcome to the committee a representative of the Ugandan official report.

The only item on today’s agenda is our continuing stage 2 consideration of amendments to the Climate Change (Scotland) Bill. I welcome once again the Minister for Transport, Infrastructure and Climate Change, Stewart Stevenson, and his officials. They are Fiona Page, who is the Climate Change (Scotland) Bill team leader; Ian Young, who is a depute parliamentary counsel; Norman Macleod and Louise Miller, who are solicitors; Sally Moxham, who is head of the energy efficiency team; and Gavin Peart who is from building standards. Kevin Philpott, the waste regulation team leader, will join us later.

I gather that the minister would like to make one or two brief remarks before we resume consideration of amendments.

The Minister for Transport, Infrastructure and Climate Change (Stewart Stevenson): Thank you very much, convener.

I am sure that members will appreciate the complicated nature of the bill’s provisions on the “relevant body” and the “advisory body”. I would like to take the opportunity to clarify the statement that I made on the matter last week, which might have left some members confused. In all honesty, once I read it in the Official Report, I was among them.

The relevant body is, indeed, recognised in the bill—it is defined in section 5. It is the UK Committee on Climate Change, unless another body is designated under section 19(1) of the bill, in which case the relevant body will be that other body. The other body is the advisory body. "Why,” you ask, “does the bill provide for two bodies to give us advice?” The answer is that, technically, it does not. We will only ever get advice from one body. As we made clear when we introduced the bill, we want initially to get our advice from the UK Committee on Climate Change, but we want to have the facility to use instead an existing Scottish public body, or to set up and use a Scottish committee on climate change. Initially, at any rate, we will request and get advice from the UK Committee on Climate Change—the relevant body. If we subsequently set up a Scottish committee on climate change, we will request and get advice from that body—the advisory body.

I trust that that clarifies the matter. I thank members for their patience, and I thank the convener for allowing me the opportunity to set the record straight.

The Convener: Thank you. Now that that is on the record, we will proceed with our consideration of amendments. Members will be familiar with the process. I repeat what I have said before about occasions on which a casting vote is necessary: my intention will be to vote for the status quo, which is the bill as it stands. At the beginning of each group, the first amendment in the group should be moved. Subsequent amendments will be moved later. Members who do not wish to move their amendments should simply say, “Not moved.”

Section 48—Duty of Scottish Ministers to promote energy efficiency

The Convener: Amendment 222, in the name of Iain Smith, is grouped with amendments 223, 252 and 232.

Iain Smith (North East Fife) (LD): I am pleased to open day 3 of the committee’s stage 2 proceedings. I start by saying that in speaking to most of the amendments in my name this afternoon, I will be speaking on behalf of the Economy, Energy and Tourism Committee, which agreed unanimously to their being lodged at one of its meetings. The amendments in question arose from the stage 1 report that we published on the sections of the bill to do with energy efficiency and renewable heat.

Amendments 222, 223 and 232 relate to the duty on ministers to promote energy efficiency, which the Economy, Energy and Tourism Committee feels would weaken the current legislative position, especially as regards the energy efficiency of living accommodation. The Housing (Scotland) Act 2006 requires ministers to improve the energy efficiency of living accommodation; as it stands, the bill would reduce the requirement to improve the energy efficiency of living accommodation to that of promoting it.
When the Economy, Energy and Tourism Committee took evidence on the matter at stage 1, there was discussion about legislative competence: in my view, if it was within Parliament’s legislative competence in 2006 to provide for improvement in the energy efficiency of living accommodation, that remains the case. There might be an issue to do with the wider promotion of energy efficiency, but there is certainly no case for weakening the current provision on the energy efficiency of living accommodation. The primary purpose of amendment 222 is to make it clear that the requirement to improve the energy efficiency of living accommodation will remain a statutory obligation.

Amendment 223 proposes a requirement to set annual energy efficiency targets and says that the plan for the promotion of energy efficiency in Scotland must “describe how those targets are to be reported on.”

Its purpose is to ensure that Scottish ministers spell out in their energy efficiency plan their goals in relation to energy efficiency and reducing energy consumption. Without clear targets or objectives, it will be hard to assess progress. The committee considered proposing an energy efficiency target in the bill, but it has settled for having that target and the detail of how it will be achieved as part of energy efficiency plans. Ministers have produced no energy efficiency plan, although they have produced an outline plan after lobbying by the Economy, Energy and Tourism Committee.

Amendment 223 is supported by, among others, Elizabeth Leighton of WWF Scotland, who recommended that the action plan “include targets for energy efficiency and that progress is reported, either in the annual report or as part of an emissions reduction plan addressing demand reduction, energy efficiency and renewables.”—[Official Report, Economy, Energy and Tourism Committee, 4 February 2009; c 1561.]

Finally, amendment 232, in my name and on the Economy, Energy and Tourism Committee’s behalf, would remove the provision to repeal section 179 of the Housing (Scotland) Act 2006, which places a duty on Scottish ministers to prepare a strategy for improving the energy efficiency of living accommodation. That repeal is unnecessary and could, as I have said, weaken the legislative position on improving the energy efficiency of living accommodation.

With those comments, I move amendment 222.

The Convener: I welcome the amendments from Iain Smith and the Economy, Energy and Tourism Committee. The emphasis on energy efficiency in recent years has increased slowly but steadily to the point at which broad agreement has been reached—as it was in the Transport, Infrastructure and Climate Change Committee—that a commitment needs to be made to more specific action. The committee has agreed that energy efficiency is a key area for achieving improvements in Scotland’s carbon emissions. We have called for more specific action from the Government, as has the Economy, Energy and Tourism Committee.

Amendment 252 in my name is supported by the Association for the Conservation of Energy, and would specify some energy efficiency targets for the first 10 years or so of the bill’s operation. It would also give ministers the power to define the terms “low carbon” and “zero carbon”, which could be used in the bill.

If the minister were minded to accept the amendments from the Economy, Energy and Tourism Committee, it would help us to have an indication of the targets that he would expect to set and of whether the targets in amendment 252 seem reasonable to the Government. If the Government accepts the principle that there should be targets, that will probably command strong support from throughout the Transport, Infrastructure and Climate Change Committee.

Do other committee members wish to comment?

Des McNulty (Clydebank and Milngavie) (Lab): The committee is in a wee bit of difficulty, because it argued explicitly in its stage 1 report against targets for sectors and said that “indications” should be given for each sector. Notwithstanding that, a case can be made for amendments 222 and 232 from the Economy, Energy and Tourism Committee. I have no problem with those amendments.

Amendment 223 refers to targets. Should we have annual targets, or would it be better to link targets with the periodic review of the energy efficiency plan? We have waited some time for that plan, but I presume that ministers intend to renew it regularly. I have no particular view on whether that should fit in with a profile of annual targets or whether two-year or three-year targets should be set.

Labour members are in favour of amendments 222 and 232. Amendment 252 is perhaps too specific and it is questionable whether the numbers are right. However, I support the convener’s request to the minister to say what energy efficiency improvement targets he expects to set, although I would not want the bill to set out percentages in that regard.
13:45

**Stewart Stevenson:** I am content to support amendments 222 and 223. Amendment 222 would require the Scottish ministers to publish a plan that included provision for “improving the energy efficiency of living accommodation”.

The Scottish ministers are happy to support that principle. Amendment 223 would require the energy efficiency action plan to include annual energy efficiency targets and to describe how the targets should be reported on. The approach is in line with our plans, so I am pleased to support it. Of course, the committee must reach its own conclusions on the matter.

The convener asked where we would get our energy efficiency targets. In previous debates I have said that we would always want our targets to be driven by expert advice. We would not take a different approach to energy efficiency targets. There is no question of the Government producing figures yet. However, I make clear our commitment to accept amendments 222 and 223.

Amendment 252, in the convener’s name, would require the energy efficiency action plan to include a broad range of targets for energy efficiency, microgeneration installations and the reduction of greenhouse gas emissions from new and existing domestic and non-domestic buildings. It is probably too early to set meaningful targets for microgeneration and greenhouse gas reduction in buildings. I expect to have the evidence base to set such targets in the future, but currently there is no solid evidential base on which to set targets in primary legislation. That brings me back to my point about the need for expert advice.

Three of the targets that are proposed in amendment 252 are significantly more demanding than the approach that was recommended by the expert panel that produced the Sullivan report, “A Low Carbon Building Standards Strategy for Scotland”, which recommended that from 2016 all new buildings should be net zero-carbon buildings. Due to building warrant duration, amendment 252 would bring in such a target three years earlier than envisaged in the Sullivan report.

The Sullivan report’s recommendations on the interim emissions reduction targets for non-domestic buildings—to deliver CO₂ savings of 50 per cent and 75 per cent more than current standards in 2010 and 2013 respectively—would apply not only to new buildings, as Sullivan envisaged, but to the entire existing building stock, if amendment 252 were agreed to. Therefore, I cannot support amendment 252.

Amendment 232, to which Iain Smith spoke on behalf of the Economy, Energy and Tourism Committee, would prevent the repeal of section 179 of the Housing (Scotland) Act 2006. We have accepted amendment 222, which would confer on the Scottish ministers a duty to prepare and publish an action plan on “improving the energy efficiency of living accommodation”.

If amendment 222 is agreed to, section 48 of the bill will also cover the matter that is covered by section 179 of the 2006 act. It would be unnecessary to retain section 179 of the 2006 act if the same duty were to be incorporated into the Climate Change (Scotland) Bill and there could be confusion if we were to have legislated for the same purpose in two acts. Furthermore, the Government would potentially be required to produce two action plans on the same topic, because there would be separate duties to do so in two acts. Therefore, the repeal of section 179 remains necessary and I am unable to support amendment 232.

**Iain Smith:** I welcome the minister’s support of amendments 222 and 223. I also listened with care to his comments on amendment 232, which is, it is fair to say, a backstop amendment. If the other amendments are agreed to, my intention is not to move amendment 232.

I will press amendment 222.

**Amendment 222 agreed to.**

**Amendment 223 moved—[Iain Smith]—and agreed to.**

**The Convener:** Amendment 251, in the name of Sarah Boyack, is grouped with amendments 271 and 272.

**Sarah Boyack (Edinburgh Central) (Lab):** The provisions in amendment 251 form part of the member’s bill on which I have been working since 2005. At the outset of speaking to the amendments, I record my thanks to the advocate Morag Ross, who helped me to draft them, and to the steering group. I also thank colleagues, some of whom are here and others of whom are elsewhere in the Parliament, for their fantastic support over the past few years.

The amendments address a key part of the bill. As the committee knows from its evidence taking over the past few months, our buildings are a crucial part of the solution to tackling climate change and reducing our CO₂ emissions. The amendments in the group recognise that. Other countries are ahead of us in making that recognition, but we have a lot of expertise in this field. Scottish community and householder renewables initiative grants have enabled a lot of technology to be tested around the country. However, despite many years of debate and exhortation, we still have no mass application of these technologies in our buildings and they have not yet become mainstream.
In essence, what I have put on the table for discussion today is a development of the position of two years ago in Scottish planning policy 6, in which we introduced our version of the Merton rule. SPP 6 requires developers of major developments of more than 500m² to incorporate planned reductions of CO₂ emissions, calculated on the basis of the predicted CO₂ emissions, to be provided for through renewable energy generated on site. The aim was to reduce CO₂ emissions and to stimulate decentralised energy production and to do the two things together. It could be combined heat and power or ground-source heating in some sort of communal provision, or a specific building-related renewables system, which could be solar or air-source heating in individual units.

SPP 6 has been in place for a couple of years and we have had SCHRI grants for several years, but we have not seen the rapid progress that was hoped for at the time. The critical issue is how to move forward. SPP 6 was drafted in such a way that developers can gain the benefit. If they design a low-carbon development, they can produce slightly less renewable energy to power it and heat it. However, some of that initial objective was lost in the translation into the new planning guidelines.

Crucially, this is not about tying in the requirement to existing building standards, which move over time—they have to be a given for any new development. This is about putting pressure on developers to achieve the lowest carbon emissions for their site and to meet a proportion of the power that is needed for the development on site in a way that reduces carbon emissions.

The amendments can operate whatever the level of building standards that ministers set, so they are not tied to where we are now; ministers can change things. They are also not technology specific; it is left to the judgment of the developer to decide what is most important.

Amendment 251 would require ministers to include a report on how the objectives in their energy efficiency plan will be delivered, which ties the provision into their other work. I hope that that enables clarity. It also highlights the leadership of the Scottish Government on the matter.

I have not specified the level of emissions that will be required. When we first debated SPP 6, we had a long discussion about whether the level should be 15 or 20 per cent. At the time, our expectation was that we would start at a lower level and move higher. That was the approach that the City of Edinburgh Council and Midlothian Council took in setting similar policies. It allows more pressure to be put on every single planning decision that we take.

Research into the amendment of development plans since the introduction of SPP 6 shows the incredibly slow uptake. Although some authorities such as Edinburgh and Midlothian are ahead of the game, most councils have not really engaged. There is a bit of uncertainty in terms of expertise. There is also the sheer fact that it takes ages to review development plans.

Amendment 271 would amend the Town and Country Planning (Scotland) Act 1997. It would be a step forward in that it would provide clarity for all local authorities and require them to review their development plans rather than simply encourage them to do so.

Amendment 272 would require ministers to produce an annual update on the operation of the policy. I have not said that that requirement should be for all time but suggested that it should be for the first four years after the provision comes into force. That ties in well to the Sullivan report’s timescale of 2016. I have not included a sunset clause, so the provision would not fall after four years, but ministers would be required to review its effectiveness.

The key problem that we have had in the past two years is that, although SPP 6 exists, it has not been widely adopted. From talking to ministers over the past few years, I have the impression that they are committed to it, so I have made my proposals to help to move us forward. The planning profession is aware of the challenge and developers are beginning to engage in addressing emissions. Architects, surveyors and building professionals are all beginning to deliver, as we can see in new developments in Edinburgh. I accept that new build is not the whole story, but it can see in new developments in Edinburgh. I accept that new build is not the whole story, but it is crucial if we are to get mass installations of low and zero-carbon generating technologies to stimulate the market and increase the amount of decentralised energy that is available.

My proposals are not technology specific but would leave the judgment on technology to developers and would help to move us on from where we think we are to a better place. They would also remove the current threshold to ensure that we have a more widespread application of this approach.

I move amendment 251.

Stewart Stevenson: I will consider all the amendments in the group, starting with amendment 271. I will then speak to amendment 272, after which I will come to amendment 251. It may be useful to indicate at the outset that, although I will speak to some of the difficulties in amendment 251, we are willing to address them through a stage 3 amendment. I will discuss that further.

Amendments 271 and 272 aim to introduce new legislative requirements to increase the role of development plans and the planning system
generally in securing the installation of low and zero-carbon technologies in all new buildings. That is a perfectly reasonable objective, but we have difficulties with the structure of the amendments. I will run through some of those difficulties in relation to amendment 271.

I understand the intention of the amendment’s first lines. Strategic development plans are expected to operate at a broad-brush level in the four main city regions, which cover 20 of our 32 councils, and would be an inappropriate place for the level of detail that the amendment seeks on specific requirements for new buildings. If anything, the local development plans within those areas would have a role to play. However, section 3E of the Town and Country Planning (Scotland) Act 1997—inserted by the Planning (Scotland) Act 2006—already places a statutory duty on planning authorities to exercise their functions under that act “with the objective of contributing to sustainable development.”

The Scottish ministers’ intention is to supplement that legislative requirement with planning guidance to ensure that development plans facilitate sustainable economic growth.

Amendment 271 is not clear about what “relevant developments” means. The meaning of “specified and rising proportion of … emissions” also remains unclear and raises many questions that would require to be clarified for planning authorities. Moreover, I am advised that it is not possible to predict a building’s “operational greenhouse gas emissions”. Once they are occupied, buildings are subject to the behaviour of residents and domestic or commercial tenants, and the condition of the building will vary hugely.

We have already introduced permitted development rights for many forms of low and zero-carbon generating technologies. Development plans should certainly support the provision of on-site low-carbon and renewable sources of energy in new developments, but seeking to prescribe in legislation how that should be done risks stifling initiative and innovation. In addition, a legislative requirement would become progressively unnecessary as we ramped up efforts to decarbonise electricity and heat.

14:00

Our approach is proportionate. Planning is undergoing significant change at the moment; we want to ensure that the system is simplified and quicker and that it truly focuses on supporting increasing sustainable economic growth. The amendments would not add to the mix; rather, they would simply add further layers of unnecessary and overprescriptive bureaucracy to a planning system that we are trying to streamline so that we can get things moving faster. However, I assure Miss Boyack that the Scottish Government will take the issue seriously in dealing with the new development planning arrangements. For all of those reasons, the reporting arrangements that are proposed in amendment 272 are unnecessary.

Amendment 251 would require that the energy efficiency action plan “must include details of how the Scottish Ministers intend to update planning and building regulations to ensure that all new buildings” demonstrate how “their projected operational greenhouse gas emissions” could be reduced “through the installation and operation of low and zero-carbon generating technologies.”

Again, there is a lack of clarity in expression in the amendment, which would create difficulties. It is important for local authorities to develop opportunities for renewable energy and low-energy delivery, including heat, of course. However, as I have explained, I expect the planning system to play a full yet proportionate role in that field. We support what is proposed in amendment 251 but think that it will be necessary for us to consider lodging an amendment at stage 3 that is cast in a different way to deliver the objectives that Ms Boyack seeks.

Sarah Boyack: If amendment 251 is agreed to, do you intend to lodge an amendment to change some of its terms, although you are happy with its spirit?

Stewart Stevenson: I do not require that the amendment be passed today to lodge an amendment at stage 3. I am in the committee’s hands. However, I make the general comment that it is certainly easier to lodge a new amendment. Of course, we will have to lodge our amendment in advance of members lodging an amendment. If, on viewing the amendment that we have lodged at stage 3, the member thinks that it does not address the relevant issues, she will still, of course, have the opportunity to lodge further amendments to what we propose. Indeed, I am happy to engage with her at the earliest possible moment to enable her to see what we propose. We have not quite formulated an amendment yet.

Sarah Boyack: My difficulty is that I was in with the bricks with the Scottish Government’s original policy, so I have tried to word all my amendments on the basis of our original policy objectives in 2007. We considered projected greenhouse gas emissions, and I understand that we had a
formulation at the time that worked, which SPP 6 was introduced to deliver.

**Stewart Stevenson:** The word that is causing us difficulty is “operational”. I wonder whether the member is confident that previous work addressed that issue in a robust legal way. That is primarily where our difficulty hangs.

**Sarah Boyack:** That is useful.

My main problem with not pressing the matter is that we have not made the progress on planning aspects in the past two years that ministers were looking for in 2007. There is certainly a commitment in the building industry to working on the issues, but things are not happening. That is why I lodged amendment 251 and why I have wanted to amend the planning legislation.

Amendment 271 refers to strategic development planning authorities and local development plans because they may change in the future, as they have done in the past few years when local government and planning arrangements have been reorganised. My proposals cover both the strategic and the local development plan levels. I would expect to see the policies in depth at the local development plan level, but it would be entirely consistent with how the planning system works for them to be mentioned at the strategic level and followed through in detail at the local level. Therefore, I do not see the argument against my proposals in that regard.

Having sustainable development as an objective is not the same as the requirement to reduce carbon emissions in developments. There is a world of difference between a general desire to deliver sustainable development and the practical policies that will deliver that on the ground, which is why amendments 271 and 272 have been put together in this way.

I am more than happy to talk to the minister about the phrase “projected operational greenhouse gas emissions”, which, I should point out, is from SPP 6. I am concerned that if we draw back from the planning policy suite that the Government has inherited, we will reduce the amount of planning policy guidance that local authorities receive and that, in moving from SPP 6, which was not applied widely, to a much smaller suite of planning policy, we will simply cause the issue to disappear. The term “sustainable development” alone will not cover all the issues or ensure that all new developments have some form of decentralised energy built in from the start.

Although I am happy to discuss in detail any amendments that the minister might wish to lodge afterwards, I would much prefer to press my amendments now. I believe that the technical issues that the minister has raised can be bottomed out, and I do not think that he has made a strong case for not taking the approach set out in the amendments.

**The Convener:** The question is, that amendment 251 be agreed to. Are members agreed?

**Members:** No.

**The Convener:** There will be a division.

**FOR**
- Gordon, Charlie (Glasgow Cathcart) (Lab)
- Harvie, Patrick (Glasgow) (Green)
- McNulty, Des (Clydebank and Milngavie) (Lab)
- Peattie, Cathy (Falkirk East) (Lab)

**AGAINST**
- Gibson, Rob (Highlands and Islands) (SNP)
- Johnstone, Alex (North East Scotland) (Con)
- McInnes, Alison (North East Scotland) (LD)
- Somerville, Shirley-Anne (Lothians) (SNP)

**The Convener:** The result of the division is: For 4, Against 4, Abstentions 0. Because, as I indicated earlier, the casting vote is for the status quo, which is the bill as it stands, amendment 251 falls.

Amendment 251 disagreed to.

Amendment 252 not moved.

**The Convener:** Amendment 154, in the name of the minister, is grouped with amendments 155, 155A, 156, 254, 239, 240, 161 and 270.

**Stewart Stevenson:** Amendments 154, 155, 156 and 161 seek to strengthen the bill by introducing a new obligation to produce and update an action plan on renewable heat. At around 1.4 per cent of demand, current renewable heat use in Scotland is minimal and needs to increase significantly if we are to meet our target of producing 20 per cent of Scotland’s total energy consumption from renewable sources by 2020.

We are well aware of the challenge of increasing the uptake of renewable heat in Scotland. However, we are prepared to face up to it and the renewable heat action plan will provide a focus for our various actions to develop, grow and promote the sector. By strengthening the bill in this way, we will ensure that the policy remains under scrutiny during the important period of early growth leading to the expansion that is necessary to meet European 2020 renewable energy targets and to play a part in reducing carbon emissions.

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Turning to Mr Gibson’s amendments, I am content to support amendment 155A, which seeks to introduce a requirement for the renewable heat action plan to set targets and to describe how those targets will be reported on. Amendment 254 seeks to require Scottish ministers to make a statement on the renewable heat action plan when
it is laid before the Parliament. As that is in line with other provisions in the bill, I am content to support it.

Amendments 239 and 240, which have been lodged by Iain Smith on behalf of the Economy, Energy and Tourism Committee, seek to require ministers to prepare a plan about the promotion of renewable heat. I agree that the best way to do that is to put a duty on Scottish ministers to prepare and publish an action plan for the promotion of renewable heat. However, given that our amendments 154, 155, 156 and 161 seek to achieve the same outcome but articulate things in greater detail by, for example, creating stronger links between the energy efficiency and renewable heat action plans, I hope that Mr Smith will recognise that amendments 239 and 240 are probably unnecessary and agree not to move them.

Amendment 270, in the name of Ms Boyack, seeks to require Scottish ministers to introduce renewable heat targets. The targets are defined in the amendment as

"the number of renewable heat systems installed in Scotland"

at a specified date. Subsection (3) of the new section that the amendment would insert requires that Scottish ministers take steps to meet the targets,

"including by requiring local authorities to set objectives for promoting renewable heat in their areas."

Under the Scottish Government’s concordat with local government, it is for local authorities to determine how the money that is made available to them is spent to fulfil their statutory duties and to deliver the agreed outcomes in their single outcome agreements. By focusing on outcomes and removing substantial bureaucracy, that approach simplifies the delivery of government for the benefit of people and communities in Scotland. Amendment 270 runs counter to that by taking a prescriptive approach to local authorities, so I cannot support it.

Ministers agree that a renewable heat target is needed, but we do not agree that it should be set in respect of the number of renewable heat systems that are installed by a specified date. It is better to designate a target share for the contribution of renewable heat to energy consumption from renewables by 2020 than to specify the number of systems that must be installed. That is in line with the European Commission’s commitment to increase the share of renewable energy to 20 per cent of final European Union energy consumption by 2020.

Although we are broadly supportive of what Sarah Boyack seeks to achieve through amendment 270, we believe that amendments 155A and 254, in the name of Rob Gibson, already cover the need for targets and reporting, and that they do so in a way that does not cut across the concordat with local government and local government’s responsibilities. For the reasons that I have set out, I cannot recommend support for amendment 270.

I move amendment 154.

Rob Gibson (Highlands and Islands) (SNP): Amendment 155A, in my name, seeks to increase the clarity of the renewable heat action plan and the scrutiny to which it is subject. The percentage of heat to be produced from renewables must be worked out at some point, when we have a clear idea of what is possible. The level of the target should not appear in the bill; ministers should have discretion to decide it in the action plan. The target could be amended by subsequent modification of the plan.

Amendment 254 allows for greater parliamentary scrutiny and is in line with our preferred approach to the energy efficiency process. There will be regular reports, statements and scrutiny. The organisation that is most involved in delivering renewable heat schemes—Scottish Renewables—is keen that we adopt that approach and supports both the minister’s amendment and my amendments. The amendments will strengthen the bill’s clear goal that there should be a renewable heat action plan and provide Parliament with better opportunities to scrutinise progress. I am happy to support that combination of measures.

Iain Smith: I have lodged amendments 239 and 240 with the unanimous support of the Economy, Energy and Tourism Committee. The minister was right to point out that the proposals in the amendments are largely covered by amendment 155 in his name. We have lodged the amendments as a backstop, in case the Government’s amendments are not agreed to. It is important that it is more than just a possibility that the Government will produce a renewable heat action plan—it is essential that there is a duty on ministers to do so. Heat makes up 50 per cent of Scotland’s energy use; at present, renewable heat sources make up a tiny proportion of that. If we are to meet any of our future targets on climate change and increasing the use of renewables, the Scottish Government and others must make significant progress on the use of renewable heat as a primary source of heating. It is therefore vital that the Government produces a renewable heat action plan, and I agree—as I am sure that the Economy, Energy and Tourism Committee does—with the general principle that that plan should include targets.
I am happy to support the amendments in the name of the minister. If they are agreed to, I will not move the amendments in my name.

14:15

Sarah Boyack: Like Iain Smith, I am glad that the minister has moved amendment 154 on renewable heat, and I support the amendments in Rob Gibson’s name, which take a comprehensive approach. I do not intend to move my amendment, because the minister has now put on the table an amendment that meets the objectives that I was seeking. However, I almost lost my support when he extolled the concordat, which I do not think is a particularly good model with regard to renewable heat.

I will make two points. I understand why there might be a reluctance to focus on the number of renewable heat installations, but I would still like that to be recorded in the minister’s work, and I wonder whether he would agree to do that. It is crucial that we have not only large heat plants but decentralised and local energy at community and household level.

I ask the minister whether he is prepared to examine the role of local authorities, because it is not enough to say that it is not up to ministers to set targets for authorities. Amendment 270 is constructed in such a way that authorities would be required to set their own targets—rather than the minister being centralist and telling authorities what to do. I ask the minister to reflect on that point.

That approach is appropriate, because each local authority will have its own different opportunities in relation to renewable heat. Some local authorities may use community systems, while stand-alone developments would be more appropriate in other authorities. I am prepared not to move my amendment, but I would like the minister to address those two specific points.

Stewart Stevenson: We have had a helpful debate on the subject, and it is clear that we all seek to point in the same direction. I was glad to hear Iain Smith confirm that, as I thought, amendments 239 and 240 are backstops, and I hope that the committee will agree to the amendments in my name.

In response to Sarah Boyack’s comments, I say that the number of installations plays to the agenda of engaging as many people as possible, as well as the localisation of delivery and the ability to take advantage of different opportunities. I associate myself with her remarks about each local authority having different opportunities—that is spot on. It is clear that a rural authority that has local access to significant supplies of wood will have one particular opportunity, while an urban local authority may be able to divert some of its waste into heat and power generation and will therefore have a different set of objectives. It is proper that local authorities have different objectives.

I reassure Ms Boyack that we regularly discuss that subject and a wide range of others with local authorities, and we will continue to do so. There is good faith among local authorities in moving forward on that agenda, and we will certainly help them to do so in a spirit of partnership.

Amendment 154 agreed to.

The Convener: Amendment 253, in the name of Iain Smith, is grouped with amendment 265.

Iain Smith: Amendment 253 is the only amendment in my name that we will consider today that was not lodged on behalf of the Economy, Energy and Tourism Committee. That is because it relates to an issue that the committee did not consider. I should not speak for the committee in this context, but I think that it would probably support amendment 253, given our work on our inquiry on determining and delivering Scotland’s energy future, the report on which will be published later this month.

Heat accounts for 50 per cent of our energy use, but we do not consider how much heat is wasted in the production of energy. Around 60 per cent of heat in the generation process just goes up the chimney or is pumped into the sea or the river Forth as part of the cooling process. That considerable waste of energy and fossil fuels has a considerable impact on the climate, because we burn more fossil fuel than we need for energy use.

I lodged amendment 253 because I was concerned that waste heat does not fall neatly into a particular aspect of the bill and might therefore be missed. The issue does not belong in section 51, “Renewable heat”, because unless the electricity generation is from a renewable source such as biomass, a district heating scheme or combined heat and power scheme will not come under that section. Nor does the issue fit clearly into the sections on energy efficiency, although it is the clearest example of an area in which energy efficiency is needed.

Amendment 253 would make it clear that, in the context of energy efficiency, consideration would be given to how to make best use of surplus heat from electricity generation—and other industrial processes, given that, for example, oil refineries and even whisky distilleries produce a substantial amount of spare heat.

District heating schemes are widely used throughout the continent. The approach is particularly well developed in Denmark, where the Economy, Energy and Tourism Committee visited...
a scheme. We do not use district heating to any extent in Scotland and the United Kingdom; nor do we much use combined heat and power schemes. We should be considering such schemes much more carefully. The purpose of amendment 253 is to encourage the Government to ensure that surplus heat is addressed as part of its energy efficiency plan and other plans under the bill.

I move amendment 253.

Lewis Macdonald (Aberdeen Central) (Lab): I support what Iain Smith said about amendment 253, which reflects findings of the Economy, Energy and Tourism Committee’s inquiry on determining and delivering Scotland’s energy future. In March, the committee visited one of Aberdeen’s combined heat and power schemes, at Seaton in my constituency. Local residents told us about the benefits that the scheme had brought. For tenants of local authority sheltered housing such as Seaview House there were immediate benefits. Bills were reduced and homes and common areas of the high-rise buildings were warmer. Such things matter a great deal to retired people who have modest incomes.

There are wider benefits of CHP schemes. There is reduced demand for electricity from the grid and carbon emissions are reduced. I think that there is a policy consensus in Scotland that we should find ways to enable more such schemes to be developed. However, that is not happening. Aberdeen Heat and Power Company was set up in 2002 by Aberdeen City Council and has connected 850 homes in high-rise buildings, half of which are sheltered accommodation, and two public buildings in the same parts of the city. The company aspires to grow its network. Why have other councils not been able to follow that good example?

Amendment 265 would address a specific obstacle in that regard, which is a difference in the practice of valuation in authorities in different parts of the UK. CHP schemes in Scotland pay business rates on the pipes and risers that carry heat and water to the doors of residents’ flats, including equipment that is inside a high-rise building but not with the individual property. Similar schemes in England do not pay business rates in that way. Amendment 265 would require ministers to put that right.

What would that mean in practice? In Aberdeen, 850 tenants share the burden of the £40,000 that is paid in business rates on domestic heating equipment. Removing that burden would save each of those residents £47 a year—£1 a week, which is a significant sum for people on low incomes. More widely, it would remove one of the obstacles to other public authorities developing similar schemes and would achieve the magic combination of tackling carbon emissions and, at the same time, tackling fuel poverty. That is the basis of amendment 265.

Stewart Stevenson: I will start with Iain Smith’s personal amendment, amendment 253, which I am content to support. It requires the new energy efficiency action plan that will be prepared under section 48 of the bill to cover “surplus heat from electricity generation or other industrial processes for district heating or other purposes”.

Although currently the bill does not mention the use of heat for district heating or other purposes, it has always been the Government’s intention to include that in the energy efficiency action plan. I am happy for that to be made explicit in the bill. I am, therefore, pleased to support amendment 253.

I know about Mr Macdonald’s long-term engagement with and constituency interest in the issue to which amendment 265 relates. I am glad to hear that the residents of Seaview House are so pleased with the outcome of the combined heat and power scheme that has been put in place there. However, if combined heat and power can be developed in Aberdeen, it is not entirely clear to me that legal valuation barriers are stopping that happening elsewhere. In any event, we have specific difficulties with the amendment.

It is not as clear to us as it is to Mr Macdonald that the basis of valuation in Scotland is sufficiently different from that in England to make the kind of differences that he suggests will matter. The advice that I have currently suggests that, if the amendment were agreed to, we could fall foul of European state aid rules, because of the way in which the amendment is constructed. I do not say at the moment that we would fall foul of those rules, as we have not consulted on the matter.

We already exempt much of the plant and machinery that is associated with combined heat and power plants from valuation for rating purposes in Scotland. It is not entirely clear to me what difference the amendment would make, but there is a real difficulty associated with it. If there were financial implications for local government—or central Government, for that matter—we would need to understand those. If local government were deprived of money, the amendment could precipitate reductions in services elsewhere and increases in council tax and non-domestic rates precisely at a time when those are undesirable.

For a range of reasons, I do not recommend that the committee agrees to amendment 265. I ask Lewis Macdonald not to move the amendment.

Iain Smith: In principle, I support the policy intention behind amendment 265, in the name of Lewis Macdonald. There seems to be some difference between how certain parts of the plant
and equipment for combined heat and power are treated in Scotland and how they are treated in the rest of the United Kingdom. We may want to reflect on that point between now and stage 3.

**Stewart Stevenson:** Will the member care to be specific, so that we can examine the issue?

**Iain Smith:** We can provide the detailed information that we received during our visit. I do not have it in front of me at the moment, but I can ensure that it is given to the minister in early course. I think that the issue relates to pipework and connections.

I thank the minister for his support for amendment 253. It is important that we make it clear that district heating and CHP are part of the energy efficiency programme.

**The Convener:** I remind members that if they wish to intervene they should ask the member speaking to give way.

*Amendment 253 agreed to.*

*Section 48, as amended, agreed to.*

**After section 48**

14:30

*Amendment 155 moved—[Stewart Stevenson].*

*Amendment 155A moved—[Rob Gibson]—and agreed to.*

*Amendment 155, as amended, agreed to.*

**Section 49—Laying of plans and reports**

*Amendment 156 moved—[Stewart Stevenson]—and agreed to.*

*Amendment 254 moved—[Rob Gibson]—and agreed to.*

*Section 49, as amended, agreed to.*

**After section 49**

**The Convener:** Amendment 255, in the name of Liam McArthur, is in a group on its own.

All members should be aware that time is moving on and that we have a large number of groups of amendments to get through. Speeches should therefore be reasonably direct and to the point. I am sure that Liam McArthur will be the very spirit of that approach.

**Liam McArthur (Orkney) (LD):** You have not said anything that my colleagues have not already said to me, convener.

I return to an issue that was covered to some extent last week in considering amendment 136 and the requirement to report on the emissions intensity of electricity generation and new generation plants as part of annual reporting. Amendment 255 aims to ensure that decisions that are made about new plants reflect the goals of the bill over the course of the entire period up to 2050.

New or refurbished unabated or even carbon-capture-ready coal-fired power plants exemplify why the cumulative amount of greenhouse gases that are emitted is what matters. Most of the legislative powers that relate to such plants are, of course, reserved to Westminster, but the Scottish ministers currently have administrative responsibility for granting or refusing consents for such plants and establishing guidelines and guidance that set out the conditions under which such decisions are taken. Amendment 255 would require ministers to use those existing powers to set guidance for consents for new and extended plants, including a limit on emissions per megawatt hour of energy generated. It would leave the detail of the levels and scheduling of such a standard to the guidance process, but would ensure that the guidance addressed how heat recovery was accounted for and would allow for different standards for different technologies at different times. That addresses a point that the minister made last week about other amendments. To ensure that the guidance links in with the bill, ministers will be required to take advice from the advisory body before setting it. If they take a different approach than that which is recommended, they must explain why.

The minister will be aware that, as well as being supported by a wide range of non-governmental organisations that work closely in the climate change field, such an approach has recently been proposed in a private member’s bill at Westminster that my Liberal Democrat colleagues and the minister’s Scottish National Party colleagues have supported. The approach has also received support from some Labour MSPs and Lib Dem MSPs and is already in operation in other parts of the world—in California, for example, where it has demonstrated its effectiveness in bearing down on emissions as well as in improving energy security through enhancing investment certainty.

I am conscious of the convener’s remarks and am pleased to move the amendment.

I move amendment 255.

**Stewart Stevenson:** I acknowledge, as Liam McArthur has, that the SNP supports such an approach, as is evidenced by actions that have been taken elsewhere. To give Mr McArthur hope, I can tell him that it is likely that I will commend to the committee his next amendment, which is in another group.
I say that because amendment 255 has difficulties, which I will deal with. We have made it clear that we want to decarbonise the electricity generation sector by 2030. That is consistent with the UK Committee on Climate Change and the overall 80 per cent target in the bill. Our first and most important concern is that the amendment carries the serious risk of being outside the Parliament’s legislative competence—I will say a bit more about that in a moment. Secondly, the amendment could prejudge the outcome of the consultation that the UK Government will undertake this summer on an emissions performance standard.

The amendment would introduce a requirement in relation to how consent is to be granted for the generation of electricity. Members will know that the generation of electricity is a reserved matter under the Scotland Act 1998. The Scottish ministers can exercise the function of granting consent for the construction of electricity generating stations under section 36 of the Electricity Act 1989, but that function was conferred by a transfer of functions order under the 1998 act. That order in no sense increased the Scottish Parliament’s legislative competence; it purely gave us scope to exercise the functions that were given to us.

The requirement that the amendment would impose relates to the generation of electricity per se, which is still reserved. If we agree to the amendment, the danger is that we will risk causing legal debate and referral to the Privy Council, which could delay the bill’s obtaining royal assent, and that we will face other challenges.

I agree that the policy intention to create an emissions performance standard could be consistent with our decarbonisation objective. However, other routes to decarbonising the power sector exist. Members will know of the recent progress that the UK Government made on the matter as part of its budget announcement in April, on which Liam McArthur has previously commented.

If carbon capture and storage is to apply fully in the 2020s, it must be demonstrated in the 2010s. That requires a clear commitment to funding demonstration, which is why the UK budget announcement that funding for up to four demonstrators would be provided through a carbon capture and storage levy is welcome.

Until the UK consultation is concluded later this year, whether the emissions performance standard is the most effective route for progress will not be clear. Given that the electricity market is UK wide, a strong view is in favour of a consistent consenting framework throughout the UK. The competence issue is complex, but we are pretty confident that the amendment would be outwith our competence and could cause difficulties later that none of us would wish to have. On another occasion, we could always seek additional powers, but that is a wider debate for another time.

Liam McArthur: After letting me down gently with a promise of future success, the minister spoiled it all with his final remarks.

The argument that my amendment falls outside the Parliament’s legislative competence is at the heart of the matter. The minister might not accept a countermand from me, but I understand that advice from a senior Queen’s counsel suggests that the Scottish ministers do enjoy powers that would enable the amendment to be agreed to. I do not expect the minister to change his mind now, but perhaps he will reflect on the legal advice and reconsider his position before stage 3.

I will press the amendment.

The Convener: The question is, that amendment 255 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McIlwes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 255 agreed to.

The Convener: Amendment 256, in my name, is in a group of its own. It is intended to require ministers to establish a scheme for providing or arranging the provision of financial assistance to householders in relation to energy efficiency.

In a discussion on an earlier group, Sarah Boyack said that other countries are ahead of Scotland and the UK in several areas, and that is certainly the case with the provision of loans. The German Government invests some €2.6 billion a year in the area and its scheme is estimated to have saved about 1 million tonnes of CO₂ in the first year of operation alone. A country the size of Scotland might not achieve anything on that scale, but that example shows that there are opportunities to provide financial assistance to householders to enable them to improve the energy performance of their homes.
That is happening not only in Germany but at local authority level in the UK. Kirklees Council’s scheme has attracted interest and attention from across the political spectrum. In addition to the free, universal provision of low-cost measures such as loft and cavity wall insulation, a loan scheme based on an equity release model is available to householders for more expensive measures, and the council can recycle the funds that come in from the repayment of those loans to ensure that more householders benefit.

Earlier this year, the Scottish Government indicated its intention to do something along those lines. The Cabinet Secretary for Finance and Sustainable Growth said:

“The Government will ... produce proposals for a significant loan mechanism to improve hard-to-treat properties that do not have lofts or cavity walls that can be insulated.”—[Official Report, 28 January 2009; c 14407.]

He went on to say that the initiative would create valuable employment in every part of the country. That has certainly been the experience in Kirklees, where both economic and environmental benefits have been achieved, including job creation and reduced bills to householders.

As it is nearly half a year since the Government made that commitment, I hope that the minister will give us any details that he can spell out about the operation of the loan scheme that the Government intends to introduce. Amendment 256 would not interfere with that commitment but would reinforce it and give ministers an opportunity to specify by regulations other forms of financial assistance to householders in respect of energy efficiency. I hope that the minister will consider the amendment in a constructive spirit and respond accordingly.

I move amendment 256.

Alison McInnes (North East Scotland) (LD): Amendment 256 has much merit. It would be particularly useful to constituents in my area, which contains many hard-to-heat homes. I wait with interest to hear what the minister says about it.

Stewart Stevenson: Others have suggested that if we treated 80 per cent of Scotland’s homes, that would deliver a total saving of 0.4 million tonnes of CO₂. I do not know whether that helps to inform the committee. I would not put my personal reputation behind that estimate, but the figure seems about right.

I acknowledge the spirit in which amendment 226 was lodged. The convener acknowledged that, as part of our budget, we announced in January that we would make proposals for a significant loan mechanism to help householders who wish to undertake more expensive energy efficiency measures such as solid wall insulation and the installation of renewables technologies. We are undertaking development work for a loan scheme and we will make an announcement about it later in the year. To legislate before the development work has been done would be premature and could be unhelpful.

Ministers already have powers in the Housing (Scotland) Act 2006 to provide financial assistance to persons in connection with the improvement of a house. Works that improve the energy performance of a house would be regarded as improvements for that purpose. I am therefore confident that we have a legislative vehicle. I believe that it is more important for Scottish ministers to focus their energies on developing a scheme for funding the best energy efficiency and renewable energy mechanisms in the most effective way.

Amendment 256 has one or two problems. For example, it does not restrict itself to home owners. The amendment is also not clear about the difference between standard and subsidised loans. In not providing any detail of the scheme about which it seeks to legislate, the amendment creates a number of risks. By comparison, section 71 of the 2006 act, which gives ministers a power to provide financial assistance for housing improvements, contains detailed definitions of key terms and deals with all the practical components to make the system work. Amendment 256 leaves that until later.

The lodging of amendment 256 sets it up in competition with section 71 of the 2006 act, and it could create duplication and conflict, which may make progress difficult with the work that we are undertaking. We will bring forward that work over the course of this year.

I therefore ask the convener to accept my assurances on behalf of the Government that we are making good progress on this issue. We will present details later this year, and the appropriate—

The Convener: Will the minister take an intervention?

Stewart Stevenson: Yes, of course.

The Convener: The minister used the phrase “later this year”, but can he be more specific?

Stewart Stevenson: I will say, later this calendar year.

The Convener: I will take that as a no.

Stewart Stevenson: One moment, convener. I am now being told by my officials that the answer is October—but I will not be bid any further.
The Convener: Did you want to say anything else on amendment 256?

Stewart Stevenson: No, that is it. Thank you.

The Convener: The objections that the minister raises seem to me to be slightly confused. On the one hand, he argues that there are restrictions in the amendment; on the other hand, he argues that there are no restrictions and no details.

Amendment 256 deliberately places a requirement on ministers to establish a scheme. It does not enable ministers to do that, but it places a requirement on them. However, the amendment then leaves it open to ministers to determine the details of the availability of the scheme, the conditions that may be attached, the terms of loans or grants, and so on.

If the committee were to agree to amendment 256, it would not interfere with the work that the Government is committed to—in October or at any other time. However, the amendment would place a clear expectation on Government—I see that the minister is about to ask to intervene.

Stewart Stevenson: Yes, please. I am looking at subsection (5) of the new section that amendment 256 seeks to introduce. It provides a list of what regulations may do. Does the convener agree that such a list could create difficulty, because it may exclude things that ministers may wish to include in the scheme? Agreeing to the amendment may lead to restrictions in the scope of what we will bring forward in October.

The Convener: My response to that is—as I was about to say—to press amendment 256 and to encourage the minister to address at stage 3 any tweaks to the amendment that he feels are necessary.

Stewart Stevenson: May I comment, convener?

The Convener: Very briefly, minister.

Stewart Stevenson: I will not be in a position to identify, in time for stage 3, what would have to be in a list, were one to be included in the bill.

The Convener: That is noted.

I have one final point, on the objection to legislating in advance of work being done. That objection could be raised to this entire bill. The bill is about placing requirements on the statute book to prompt Government and others to take the climate change agenda more seriously. I therefore press amendment 256.

The question is, that amendment 256 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 2, Against 6, Abstentions 0.

Amendment 256 disagreed to.

Section 50—Non-domestic buildings: assessment of energy performance and emissions

The Convener: Amendment 224, in the name of Liam McArthur, is grouped with amendments 157, 225, 158 to 160, 160A, 226 and 229.

Liam McArthur: The minister has taken some of the suspense out of this group with his earlier remarks. He indicated some figures on which he would not like his reputation to hang, but I will give him a figure to which it is already firmly wedded: 17 per cent of annual United Kingdom CO2 emissions can be attributed to non-domestic building stock. That simply illustrates the importance of addressing that concern.

Last summer, the Scottish Government consulted on how best to tackle emissions from non-domestic buildings. The findings of that consultation were interesting: 80 per cent of respondents agreed that current policies and support would not deliver significant carbon reductions. There are probably a number of reasons for that. Building regulations address new build in particular and, therefore, are most effective with only about 1 per cent of the building stock in any given year. Although some of the financial support mechanisms such as the central energy efficiency fund and the energy saving Scotland small business loan scheme have undoubtedly made some mark, they are undermined slightly by the split incentive whereby the people who pay the fuel bills have a great incentive to improve energy efficiency but are seldom the ones who make the investment decisions about installations and adaptations.

The Scottish Government’s amendments 158 and 160 would introduce the power to require building owners to take up energy improvements that were specified in their energy performance certificates, which is welcome. In fact, they helpfully exceed amendments 225 and 160A in my name. Those amendments were not backstops, but that illustrates the risk of acting before one
sees the whites of a minister's eyes. Therefore, I will not move amendments 225 and 160A.

Amendments 224 and 226 pick up the industry's needs for certainty about planning, investment and the best way to ensure that the supply of material and product can fulfil what we hope will be a rising demand. Amendment 226 would provide clarity by setting a clear timetable for ministers to use the powers that they are taking.

I move amendment 224.

Stewart Stevenson: I am perfectly happy to accept amendment 224 in Liam McArthur's name and, indeed, amendment 229 in Iain Smith's name.

On amendments 157 to 160 in my name, we recognise the divergence of views on mandatory versus discretionary improvements to buildings in the responses to the public consultation. Therefore, we have agreed to take forward the implementation of cost-effective energy improvement recommendations to non-domestic buildings on a voluntary basis initially.

We wish to continue to work with business and industry to maximise emissions reductions by allowing voluntary implementation, particularly in the current economic climate. However, we need to make provision in primary legislation to enable improvements to be required through secondary legislation at a future date if voluntary action is not sufficient to make the necessary cuts in greenhouse gas emissions.

Amendments 157 and 158 will allow the Scottish ministers to require the implementation of recommendations that arise from the assessment of buildings. Amendment 160 will enable regulations to include provision about the form of recommendations, the manner of complying with them and the periods allowed to comply with them. It will also enable the setting up of a register for certificates and the disclosure of information in that register. Amendment 159 is a technical amendment that makes it clear that the activities that are referred to are only those carried out in buildings.

In summary, the amendments will make provision in section 50 for the Scottish ministers to require, through secondary legislation, the implementation of improvements to non-domestic buildings arising from the assessments of energy performance and emissions of greenhouse gases.

I turn to amendments 226, 225 and 160A. Amendment 226 aims to place a duty on the Scottish ministers to publish a report, within 12 months of royal assent, on measures that are to be taken to reduce non-domestic building emissions and when provision will be made. I welcome amendment 226, which will allow ministers to demonstrate progress on the implementation of section 50. However, there is a technical flaw as it refers to the date on which royal assent is given to "this Act". Royal assent is the means by which a bill becomes an act, so the amendment should refer to the date on which the bill for the act receives royal assent. I therefore invite Liam McArthur not to move amendment 226. I offer to lodge an amendment in exactly those terms at stage 3. We are in the member's hands on that.

Amendment 225 seeks to make it mandatory for the Scottish ministers to introduce regulations on cost-effective improvements to existing non-domestic buildings. Under such a provision, building owners would not have discretion to implement alternative improvements that could provide a greater improvement in energy performance and reductions in emissions. We absolutely recognise the spirit in which the amendment was lodged, but it would unnecessarily restrict improvements to buildings to those that were cost effective. Respondees to the consultation proposed that there should be flexibility regarding the type of improvements that are implemented. That applies particularly to historic and traditional buildings, for which the application of the term "cost effective" might present a real challenge and restrict opportunities to make changes. Owners, as part of a maintenance programme, might intend to carry out other improvements that could produce greater energy performance and emissions improvements. I therefore invite Mr McArthur not to move amendment 225.

Similarly, amendment 160A would restrict the recommendations that could be included in certificates on the energy performance of buildings and reduction of emissions to those that were cost effective. Again, the Scottish ministers recognise the spirit of the amendment but, for the same reasons, I invite Mr McArthur not to move it.

Iain Smith: I speak on behalf of the Economy, Energy and Tourism Committee. Amendment 229 is fairly straightforward. In our stage 1 report, we recommended that

"all the relevant secondary legislation proposed under sections 48-51 is subject, if they are not already, to affirmative resolution".

Amendment 229 would ensure that regulations under sections 50(1) and 50(4) would require affirmative resolution. I hope that, as the minister has indicated, he will support that amendment.

I welcome the amendments in the group from the minister and Liam McArthur. The Economy, Energy and Tourism Committee was concerned about the lack of clarity on the policy intent behind the assessments of energy performance of non-domestic properties and on how we will assess
whether the system is working and doing what it is intended to do. The amendments will, I hope, address some of those concerns.

Liam McArthur: I welcome the minister’s acceptance of my amendment 224. Initially, I thought that he had raised unfairly my expectations that he was about to accept amendment 226, but I accept the reason why he cannot do so and I welcome the fact that he will lodge a reworded amendment at stage 3. I reiterate what I said earlier on amendments 225 and 160A. If I had had the opportunity to remove them prior to today, I would have done so, but I certainly will not move them.

Amendment 224 agreed to.

Amendment 157 moved—[Stewart Stevenson]—and agreed to.

Amendment 225 not moved.

Amendments 158 and 159 moved—[Stewart Stevenson]—and agreed to.

Amendment 160 moved—[Stewart Stevenson].

Amendment 160A not moved.

Amendment 226 not moved.

Section 50, as amended, agreed to.

The Convener: I am tempted to have a short comfort break. If we are to conclude our business by a reasonable time, it will have to be a short break and perhaps the only one, so make the most of it. Five minutes, please.

15:01
Meeting suspended.

15:06
On resuming—

After section 50

The Convener: Amendment 227, in the name of Iain Smith, is grouped with amendments 227A and 227B.

Iain Smith: I lodged amendment 227 on behalf of the Economy, Energy and Tourism Committee. In our stage 1 report, we noted the calls in evidence for the provisions in section 50 to be extended to the domestic sector. Indeed, amendment 227 has the support of bodies such as the Association for the Conservation of Energy, WWF Scotland and others. Our aim is to apply the assessment of energy performance and emissions for non-domestic buildings under section 50 also to living accommodation. Essentially, the amendment is an enabling provision: if ministers want to do such assessment at some future date, they can do so.

Current efforts to achieve greater energy efficiency in the domestic sector are not well represented in the bill and yet the sector is a crucial part of our economy and society. The Economy, Energy and Tourism Committee’s view is that it must be included. Amendment 227 seeks to ensure that we have a better idea of energy efficiency and performance in the domestic sector and of the greenhouse gas emissions that can be attributed to the sector.

It is important to note that we are gradually improving building standards for new-build domestic accommodation. However, for many years to come, most people will continue to live in existing housing stock. Indeed, it has been estimated that, by 2050, around 85 per cent of people will still be living in houses that were built before the existing building regulations came into force. The timescale for the turnover of housing is such that we need to take action to ensure that existing living accommodation is improved. Opportunities to improve the quality of a property should be taken when there is a change of tenancy in the rented sector or a property sale in the owner-occupier sector. Also, when people make a significant improvement to their homes, we should ensure that they build in energy efficiency measures.

As I said, amendment 227 is an enabling provision. We see it as part of the climate change toolkit that the bill provides to ministers. As such, we hope that the committee will accept the amendment. It is a sensible provision to add to the bill.

I move amendment 227.

The Convener: Amendments 227A and 227B are in my name.

The two amendments to amendment 227 are relatively minor. Amendment 227A simply expands the scope of amendment 227, so that the regulations that Scottish ministers may make under the proposed powers relate not only to the assessment of energy performance and greenhouse gas emissions but to improvements in relation to those two issues. Amendment 227A slightly broadens the scope of the regulations, and I hope that that is seen as helpful.

Amendment 227B simply removes the final element in the list of what the proposed regulations provide for, which is:

“offences in relation to failures to comply with requirements of the regulations.”

I am certainly not arguing that we should not contemplate creating offences; I just have a wee feeling that specifying offences by way of
regulation might be a little bit much, and that it is better to introduce offences through primary legislation, so that they can be subjected to parliamentary scrutiny. I lodged amendment 227B simply to provide the committee with the opportunity to consider that question.

I move amendment 227A.

Stewart Stevenson: In the interests of time, I will simply say that we are content to accept amendments 227 and 227A. I take some issue, however, with the suggestion that amendment 227B is comparatively minor. To remove from the bill the ability of ministers to create offences in this area is quite significant.

When secondary legislation is brought to the Parliament, there is of course a scrutiny process, and there is a period during which the Government undertakes consultation before secondary legislation is laid. I hope that the committee will feel that, in pursuing the objectives of the Climate Change (Scotland) Bill, it is important for ministers to have the necessary powers to hand, to ensure that, over the years, we make the necessary progress. Therefore, we will not respond to the invitation to delete the power to create criminal offences.

Iain Smith: I am at a loss for words, as I do not think that I have ever been in a situation in which an SNP minister has been so generous to me.

Alison McInnes: Make the most of it.

Iain Smith: I will.

I thank the minister for accepting the principle behind amendment 227. I have no difficulty with amendment 227A in principle. Amendment 227 was phrased to mirror section 50, before amendment. As a result of the amendments that have now been made to that section, it may be that further amendments to the provisions that are contained in amendment 227 will be required at stage 3.

Stewart Stevenson: We are conscious that there might be some tidying up to be done at stage 3, and our loins are girded so to do.

Iain Smith: I thank the minister for that assurance.

My main point is that subsection (2)(m) of the new section that amendment 227 would insert, on offences, which amendment 227B seeks to delete, is lifted from the existing provision in the bill, which has not been deleted from section 50 by any amendment. It would seem strange to have that provision in one section but not in the other. I leave it up to the committee’s wise judgment whether it accepts amendment 227B; I intend to press amendment 227 when the time comes.

The Convener: I think that the official reporters will have to be particularly careful in this part of the debate.

I welcome the general sense that amendment 227A offers a helpful suggestion, and I take a reasonable amount of comfort from the comments that the minister made on amendment 227B, in which he indicated that due parliamentary consideration of offences that are created will be provided for.

Amendment 227A agreed to.

Amendment 227B not moved.

Amendment 227, as amended, agreed to.

15:15

The Convener: Amendment 257, in the name of Lewis Macdonald, is in a group on its own.

Lewis Macdonald: Members will know that around half Scotland’s carbon emissions are associated with buildings and that only about 1 per cent of buildings are replaced a year. Therefore, members will agree that intervening in relation to the 2 or 3 per cent a year that are subject to extension or other works is an opportune way to attempt to deal with those emissions and that that approach will deal with them more quickly than simply relying on regulations that affect new buildings. If we want building regulations to make a real difference with regard to climate change, we need to consider how that can be done at the point at which owners are considering investing in and improving their buildings.

Two years ago, the Sullivan report recognised the need for action in this area. It also recognised that any change would have to be carefully framed in order not to create a perverse incentive to operate outwith the law or, indeed, not to improve properties in the first place.

The amendment is designed to bring about amendments to housing regulations to ensure that a proportion of the budget for any improvements or extensions would have to be spent on measures to improve the energy efficiency of the building. The precise requirement is something on which ministers would, no doubt, wish to consult, but the principle of taking action seems clear.

UK ministers have already consulted on similar measures that may well lead to new building regulations in England next year. Amendment 257 gives Scottish ministers the opportunity to take action here as well, and I hope that the minister will tell us today that that is their intention.

I move amendment 257.

Stewart Stevenson: I am absolutely happy to support the principles behind amendment 257.
However, the detail of the amendment presents a couple of challenges.

The amendment would require Scottish ministers to make regulations to encourage compliance with guidance that is voluntary, and offers no powers to compel compliance. It is not entirely clear what, apart from encouraging compliance with guidance, the regulation-making power could do that could not be done more effectively under building regulations. The powers that are proposed by the amendment already exist in the Building (Scotland) Act 2003.

However, we are making progress with a series of building regulation amendments, and we certainly want to address in that process the matters that amendment 257 is concerned with. If Lewis Macdonald were to consider that an inadequate response, I am sure that we could see our way to making some sort of suitable amendment at stage 3. However, I am sure that that would be unnecessary. It is certainly our intention to proceed on the same basis as laid out in the amendment. I hope that that reassures him.

**Lewis Macdonald:** Does the minister intend to consult on such energy efficiency measures in the forthcoming consultation on building regulations?

**Stewart Stevenson:** Yes, we shall do so.

**Lewis Macdonald:** The minister’s assurance clearly meets the aim of the amendment, so I am happy to seek leave to withdraw it.

Amendment 257, by agreement, withdrawn.

**The Convener:** Amendment 238, in the name of Alex Johnstone, is grouped with amendments 258 to 264.

**Alex Johnstone (North East Scotland) (Con):** The commitment that I gave during stage 1 to lodge amendments that would allow the introduction of so-called green council tax rebates has manifested itself in amendment 238, which would introduce a section headed, “Council tax and non-domestic rates: discounts for energy efficiency etc.” I want to put the matter before the committee and the minister for discussion.

I am well aware that the minister, and other ministers in this Government, have previously set themselves against the concept of council tax discounts. The main reason for that is the Government’s desire to remove council tax from Scotland entirely. However, given that the Government has apparently conceded that that is unlikely to happen in the foreseeable future, the opportunity exists for us to take action, whether or not we approve of the council tax, to use the mechanism that the tax provides to give people an incentive to move towards greater energy efficiency in the domestic setting. The amendment seeks to extend that approach to non-domestic rates as well.

I commend to the minister the argument that lies behind amendment 238, and look forward to hearing his views on it.

Amendment 258 does something slightly different. According to correspondence that I have received, particularly from Scottish Gas, it appears that, although carbon emissions reduction target money can be used extensively in local authority areas south of the border to provide support for energy efficiency measures and rebates on council tax, enabling legislation would have to be changed in order for that to happen in Scotland.

Scottish Gas writes:

“We urge changes to be made to allow energy companies to play their part in encouraging better take-up of microgeneration.”

From the correspondence that I have received, it appears that there is some legislative barrier that prevents utility companies from participating with local authorities in Scotland in schemes that are similar to those in which they participate south of the border. Amendment 258 attempts to remove that legislative block, should it exist. I am interested to hear the minister’s opinion on whether legislation needs to be changed in order to implement the proposal in Scotland. I look forward to hearing his comments on whether amendment 258 would achieve that objective.

I move amendment 238.

**Sarah Boyack:** As Alex Johnstone has said, there is an issue about whether Scottish councils can give council tax rebates. Following parliamentary questions to Scottish ministers, I have received the clear answer that, under the current system, councils cannot do that.

I have lodged a series of amendments that concern the proposals that I have been campaigning on for the past five years. I have separated my amendments on council tax from my amendments on business rates for the key reason that, having spoken to members from various parties, I know that people have differing views about those two issues. Separating the two issues will allow them to be debated separately.

Amendment 259 would enable a one-off council tax reduction and would enable people to make energy efficiency improvements and use microgeneration technologies. Crucially, it would also give people the ability to link to district heating systems or co-generation systems. As more sustainable developments take place, the ability to connect to a district heating system will become more important.
The Energy Saving Trust has carried out lots of research that shows that people’s awareness of the council tax is such that council tax rebates would lead to people getting energy efficiency or microgeneration measures. We are all aware of making our council tax payments.

Alex Johnstone summarised the obvious reasons why some people around the table might have been less than keen to support the proposal, but I would say that, over the past few months, the parliamentary mood has shifted. The awareness-raising potential of the proposal cannot be overestimated. If we are trying to reduce people’s overall CO$_2$ emissions, getting them to focus on their own houses is a key way of doing that quickly.

Some 23 per cent of our households in Scotland are now in fuel poverty, as domestic fuel bills have doubled in the past five years. Crucially, many of those people will not be eligible for the new energy efficiency scheme introduced by the Scottish Government and supported by us in the budget earlier this year. The proposal in my amendments would expand the number of people who are able to implement energy efficiency measures.

In England and Wales, 68 local authorities now implement such schemes, and there are established partnerships with utility companies. Scottish Gas is keen to be allowed to do in Scotland what it is allowed to do down south, and Scottish and Southern Energy thinks that we should amend the bill to enable it to take part in such projects. South of the border, British Gas certifies the work, so local authorities do not have to pay to do that. The same would happen here—the scheme would be relatively straightforward for local authorities to administer.

Amendment 261 sets out the size of the council tax reductions that I propose. I have looked into the issue in great depth and have consulted not just environmental organisations, which are keen to support the proposals, but, crucially, the energy efficiency companies and sector, which are involved in delivering existing programmes. I have set two levels. Installation of technologies costing between £250 and £1,000 would qualify someone for a discount of £100; installation of technologies costing more than £1,000 would qualify them for a discount of £250. Those levels reflect the fact that, although many relatively straightforward measures fall within the £250 to £400 range, there are other, much more expensive measures. A discount of £100 would not incentivise people to pursue those.

The amendment recognises the differing costs of the different measures that can be taken. It is appropriate that there should be a one-off council tax discount. I have crafted the amendment in such a way that it does not exclude people from coming back for more, if that is justified. The energy efficiency requirement will apply to those who want to install microgen, as it would be crazy to put microgen on top of an energy-inefficient house that could be improved. The amendment takes into account the need to pursue both microgeneration and energy efficiency.

The amendment would enable council tax reductions to be made. We are still nowhere near having a mass market for microgeneration. The Energy Saving Trust estimates that 2,000 to 3,000 microgen systems have been installed in Scotland, which does not make a mass market—we need to go way beyond that. The Renewables Advisory Board has provided estimates of the amount of microgeneration that it expects to be installed in the UK. If Scotland’s share of the figures is set at 10 per cent, we should be installing 6,000 to 8,000 photovoltaic cell systems, 130,000 solar water heating systems and 150,000 air-source heat pumps. We all know that we will not get them with the current system of grants—we need to add something that complements that.

Amendment 263 is not crucial, but it sets out the process for a review. The Government of the day would examine the levels of council tax and discounts and would report on whether the promotion policy was working.

I have lodged two amendments on business rates, to extend similar provisions to businesses. The vast majority of our businesses are in relatively small premises, of the order of households. They should be encouraged and enabled to take forward both energy efficiency and microgen measures. I hope that colleagues will consider supporting both amendments and will accept that a huge amount of thought has been put into working out the detail of the requirements that they include.

Amendment 264, in the name of Iain Smith, is helpful, because it is along the same track. I accept that there are various ways in which the matter can be pursued and welcome the fact that Alex Johnstone has lodged an amendment on the issue. However, given the amount of work and consultation that has gone into my amendments, I hope that colleagues will consider supporting them.

Iain Smith: Again I speak on behalf of the Economy, Energy and Tourism Committee, which agreed unanimously to lodge an amendment along the lines of amendment 264. The purpose of the amendment is to give ministers the power to consider introducing by regulation the powers to enable local authorities to reduce council tax bills or business rates for anyone who invests in microgeneration or renewable energy. Some parties, including the Liberal Democrats, wish to see an end to the council tax. We were advised, when framing the amendment, that if there were to
be a successor to the council tax the updated provisions that would be necessary could be dealt with in the primary legislation that would be required to replace the council tax.

The amendment was heavily supported by many of the organisations that gave evidence to committees, most of which pointed to the success of similar regimes in other jurisdictions in the United Kingdom. For example, Scottish and Southern Energy said in its submission to Transport, Infrastructure and Climate Change Committee:

“All avenues should be explored, such as using local and national tax incentives to reward energy efficiency or microgeneration.”

Similarly, Elaine Waterson of the Energy Saving Trust told the Economy, Energy and Tourism Committee:

“council tax incentives have, in theory, a big role to play in encouraging consumers to take action.”—[Official Report, Economy, Energy and Tourism Committee, 4 February 2009; c 1571.]

15:30

It is for members of this committee to determine which of the three options that have been proposed it should support. In its stage 1 report, the Economy, Energy and Tourism Committee said:

“The Committee recommends that the Scottish Government investigates and reports back to the Committee, if possible before stage 2, on whether some form of rebate through local taxation systems ... should be introduced”.

The Government responded:

“councils in Scotland do not have the same level of discretionary powers to offer council tax discounts as councils in England. To give Scottish councils similar powers would require primary legislation.”

Amendment 264 would remove that barrier, by giving the Scottish ministers the power to establish a scheme. The amendment does not specify the details of the scheme, which would be subject to further consultation. Members might want the bill to specify what scheme would be implemented, in the way that is envisaged in the amendments in Sarah Boyack’s name and Alex Johnstone’s name. My purpose in lodging amendment 264 on behalf of the Economy, Energy and Tourism Committee was to ensure that the bill is an enabling bill and is part of the climate change toolkit that is available to ministers.

Rob Gibson: I think that I am right in saying that Sarah Boyack’s proposed rebates for energy efficiency would be gauged at current council tax levels, which are frozen. Would the proposed increase in council tax, of which we hear news from the Labour Opposition, negate the rebates?

Can she give us an assurance that the proposed increases that her party suggests for council tax will allow for the proposed rebate for energy efficiency to remain attractive?

Des McNulty: Will you read that last bit again? [Laughter.]

Rob Gibson: Can the member give us an assurance that the proposed increases that her party suggests for council tax will allow for the proposed rebate for energy efficiency to remain an attractive proposition?

The Convener: It is nice to know that we have that word for word. I give Sarah Boyack an opportunity to respond to Rob Gibson.

Sarah Boyack: Thank you. I am not aware of a Labour Party proposal to increase council tax. The amendments in my name would provide for a review mechanism, so ministers would be able to review the levels at which rebates were set. That is the right approach. The key point is that a person would get a discount regardless of what their council tax was.

Stewart Stevenson: I acknowledge the work that Sarah Boyack has done over the past few years to keep the issue of incentivising the uptake of energy efficiency and microgeneration measures to the fore of the debate on practical ways to reduce greenhouse gas emissions. If it were not for her work, I doubt that all parties would be debating the amendments in this group so vigorously.

The chief executive of Scottish and Southern Energy, Ian Marchant, wrote to the Cabinet Secretary for Finance and Sustainable Growth on 16 April, in relation to ideas to which members have referred. In his response of 28 April, the cabinet secretary assured Mr Marchant that “we will, however, consider your proposal further”—the “however” was there because my party, like Iain Smith’s party, wants a fairer system. However, we are where we are, and we have considered the matter further. We have certainly looked at the amendments, to which I will turn in a second.

Before I do so, I should respond to the question whether legislation needs to be changed to allow CERT payments. The answer is no. However, legislation needs to be changed to allow council tax rebates. Although the point might have been clear in members’ minds, it might not have been expressed in those terms.

We have been working on an amendment that, depending on how things go, we will lodge at stage 3. Basically, we want the CERT money that is available from energy generators to leverage in private money for public good. In that respect, our intentions are similar to Alex Johnstone’s
approach in amendment 258, in that we would seek to transpose the English and Welsh provisions into Scots law. We are in the final stages of completing our amendment, but the drafting needs to be tightened up.

Moreover, the Government supports the principles underpinning amendment 259, in the name of Sarah Boyack, and amendment 264, in the name of Iain Smith, so I think that there is a very broad consensus in the room on this matter. That said, the drafting of Sarah Boyack’s amendment in particular poses a number of risks. Although it would be something of a minority sport, I think that if we followed her proposal and provided opportunities for people to come back for more, we would give them almost a perverse incentive to break their improvements down into segments spanning a number of financial years in order to get a number of successive awards. I am sure that she did not seek to introduce such a technical defect, but we feel that the amendment needs to be tightened up.

It should also be made clear that the person who pays the council tax gets the benefit. With the sale of a house, for example, there is almost a perverse incentive for the seller not to make improvements in certain circumstances, given that it will be the buyer who will derive the benefit. I accept that the house price might well be adjusted to reflect such matters, but I think that there are some difficulties to address in that regard.

On amendment 264, the Scottish Government has already acted on microgeneration in relation to non-domestic rates and we believe that we also have the power to act on energy efficiency. As a result, we are not clear that the amendment adds anything to the statutory framework that is available to ministers. In fact, it is likely to be less substantial than the stage 3 amendment that the Scottish Government will lodge—depending, of course, on what happens today.

We are pointing broadly in the same direction, but we have to take care and ensure that we understand all the financial implications. That is a matter for another day, but I point out that, if things were implemented in the wrong way, any such implications could be quite significant. We also have to examine a number of state-aid issues in relation to non-domestic rates to ensure that we are not creating real difficulties for ourselves.

Nevertheless, what has been proposed is useful and helpful, and I think that we have arrived at some kind of consensus. I commend to the committee the amendment that we will lodge; as I said in speaking to a previous group of amendments, we will be required to disclose it at stage 3 while members still have a chance to amend the bill or to resubmit any amendments either in their present form or in a new form. My preference is for the committee not to proceed with the amendments in this group and to allow the Government to lodge its amendment.

Des McNulty: I seek clarification on two points. First, will the costings that are associated with your proposed amendment be incorporated in a revised financial memorandum? Secondly, will your amendment be closer to Alex Johnstone’s proposal, Sarah Boyack’s proposal or Iain Smith’s proposal? I presume that you know what you intend to propose. Will you give us at least some indication of which of the three models, if any, you are most likely to follow?

Stewart Stevenson: We will certainly seek to ensure that the financial memorandum reflects as far as possible the significant changes that are made.

Mr McNulty’s second question is a rather difficult one, and I will inevitably have to give a pretty subjective answer. In essence, with our amendment, which we have not yet signed off internally, we will seek to transpose the provisions that exist in English and Welsh law, which probably align most closely with Alex Johnstone’s proposal.

We will take the sense of today’s debate in coming to our final conclusion, but we picked up the English and Welsh model to ensure that we can leverage private money from the utility companies. We note the approach that has been adopted in England and Wales. Sarah Boyack mentioned that 68 local authorities in England and Wales are using CERT money, and that is the approach that we want to take. However, we will take the sense of everything that has been said and all the amendments that have been lodged at stage 2.

Sarah Boyack: I deliberately did not propose that we should have the same provisions as England and Wales because I wanted us to have more options. The scheme there is great as far as it goes, but we have the opportunity to do more on energy efficiency and, potentially, microgeneration.

The minister hinted that there might be an endless number of applications, because people would split up their applications, but my idea in giving the Scottish ministers the power to produce regulations was that such anomalies would be sorted out there. My amendments would not make it impossible for somebody to receive free energy efficiency measures under other schemes, but if they did so, they would not qualify for a grant. We would expect things to be tidied up in regulations. My amendments do not include specific measures; instead, they set out general principles.

The Convener: If you could finish fairly promptly, minister.
Stewart Stevenson: Clearly, I am in the hands of the committee on the matter. However, I make the point that, as drafted, Ms Boyack’s amendments would create in primary legislation an opportunity for people to break down their improvements into segments. I do not believe that the majority of people would seek to do that, but I would not be able to remove their ability to do so through secondary legislation. However, as I said, it is important that we take the sense of all that has been said—in good faith, on everybody’s part—at stage 2.

Alex Johnstone: My objective in lodging amendment 238 was to ensure that the matter was discussed and to seek the views of the minister and the Government. Although I will not ask the minister any further questions, I will make some sweeping statements, and if he wishes to defer to my judgment, he can simply allow that to happen.

The Government appears to have accepted the principle that underlies my amendment. The minister has undertaken to lodge an amendment at stage 3 that will give effect to the objective that has been expressed by the committee. In doing so, the minister can take advantage of the greater human resources that are available to him. Most members who draft and lodge amendments at stage 2 have to rely on a limited pool of expertise that is vastly overworked at such times, and we are lucky to have that assistance.

In contrast, Sarah Boyack’s amendments are extremely detailed, which is as one would expect from a member who has been preparing proposals for a long time. However, my concern is that they are too detailed, to the extent that some might describe them as prescriptive. When the bill is finally passed, I wish it to contain measures that allow flexibility and give ministers the power at some point in the future to use the legislation to introduce flexible and effective schemes to achieve our objectives. Initially, such measures might resemble closely the proposals introduced by Sarah Boyack, but I am reluctant to see such prescriptive measures in the bill.

If the minister concedes the principle behind amendment 238 and is preparing a stage 3 amendment to give effect to my proposals, I ask leave of the committee to withdraw amendment 238.

15:45

Amendment 238, by agreement, withdrawn.
Amendment 258 not moved.
Amendment 259 moved—[Sarah Boyack].

The Convener: The question is, that amendment 259 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 5, Against 3, Abstentions 0.
Amendment 259 agreed to.
Amendment 260 not moved.
Amendment 261 moved—[Sarah Boyack].

The Convener: The question is, that amendment 261 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 5, Against 3, Abstentions 0.
Amendment 261 agreed to.
Amendment 262 not moved.
Amendment 263 moved—[Sarah Boyack].

The Convener: The question is, that amendment 263 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 5, Against 3, Abstentions 0.
Amendment 263 agreed to.

The Convener: Does Iain Smith intend to move amendment 264?

Iain Smith: On the ground of quitting while I am ahead, I will not move amendment 264.

Amendment 264 not moved.

The Convener: Does Lewis Macdonald intend to move amendment 265?

Lewis Macdonald: The minister expressed uncertainty about the position in England. I can tell him that the Lands Tribunal appeal cases that his officials should look at are RA/60-69/2005 and RA/71-72/2005, between the valuation officer and Mansfield District Council and Bassetlaw District Council. I hope that the minister will do that and consider the evidence before stage 3. He is nodding in assent, so on that basis I will not move amendment 265.

The Convener: That is on the record.

Stewart Stevenson: It could not be more on the record, convener.

Amendment 265 not moved.

The Convener: Amendment 266, in the name of Sarah Boyack, is in a group on its own.

Sarah Boyack: Amendment 266 comes from people in the field looking at how we make the most of our buildings and our assets in relation to climate change objectives. It recognises that large quantities of land and the built environment are owned by the public sector and emit greenhouse gases, and seeks to introduce a new burden, to be called the climate change burden, which would be applicable under the Title Conditions (Scotland) Act 2003. The burden would enable public bodies, at their discretion, to add heightened mitigation or adaptation performance standards to the title deeds of built and land assets that they wish to sell and which could be developed in the future by a purchaser. Those standards would be applied in advance, before land was put up for sale, so it would not be possible to flog a piece of land for a very high price and then say to the developer, “By the way, you will have to do X, Y and Z before you develop this land.”

Amendment 266 seeks to create a further category of personal real burdens that relate to the objectives of the bill. Imposing such burdens would not be mandatory; the amendment seeks to introduce an enabling mechanism that a public body could use if it wished to do so. The mechanism would be available to any public body or agency in Scotland, such as local authorities, the Scottish Environment Protection Agency or Scottish Water. It would enable local authorities to exercise leadership and send a clear signal about expectations to people who want to develop land or buildings.

We are talking, potentially, about a great deal of land. Public bodies have a keen interest in selling their land, and they often negotiate and set conditions when they do so. The provisions in the amendment would allow for a much more up-front approach: the burdens would be specified in advance before somebody indicated that they were interested in buying the land, and developers would be able to assess the cost when negotiating for the land with the public body. A local authority or public body would want to use the burdens only when it clearly fitted its objectives.

The provisions build on the current legal framework in the Title Conditions (Scotland) Act 2003. The act contains several references to “real burdens” and states:

“A real burden is enforceable by any person who has both title and interest to enforce it”

and

“An affirmative burden is enforceable against the owner of the burdened property.”

It also states:

“The holder of a personal real burden is presumed to have an interest to enforce the burden.”

A climate change burden would build on the existing burdens. It would be a new type of burden. The closest comparator is section 45 of the 2003 act, on economic development burdens, which states that it is possible for a public authority “to create a real burden in favour of a local authority, or of the Scottish Ministers, for the purpose of promoting economic development”.

The new burden would be wider in terms of who could exercise it, and would be exercised in relation to climate change.

I move amendment 266.

Stewart Stevenson: I am content with the principle behind amendment 266, and with many of the arguments that Sarah Boyack has deployed, but some drafting issues need to be addressed. In particular, the insertion of the new section into the Title Conditions (Scotland) Act 2003 would offer an opportunity to examine the definitions of some of its terms—for example, there are particular difficulties with the phrase “advertised for sale” in proposed section 46A(3)—but we support the principle behind the amendment, and it could in certain circumstances be a useful piece of armour in the lockers of ministers and public bodies.
Sarah Boyack: I am grateful to the minister for his technical knowledge, which is not my area of expertise as I am not a property lawyer. As the minister says that he entirely supports the spirit of amendment 268, I am happy to withdraw it in the hope that we can come back at stage 3 with something that is fit for purpose.

Amendment 266, by agreement, withdrawn.

The Convener: Amendment 267, in the name of Lewis Macdonald, is grouped with amendments 268 and 269.

Lewis Macdonald: It is almost 25 years since I carried out a number of feasibility studies in disadvantaged areas of Aberdeen, on behalf of the energy advice and insulation agency SCARF. It is striking that many of the things that we found then are still true today.

It is still the case that the private rented sector has a particular burden of energy inefficient homes: almost four times as many homes in that sector are rated as poor in energy efficiency terms. The people who live in that sector are still more than twice as likely as those who live in council housing to suffer from fuel poverty. However, the Scottish housing quality standard, which applies to social rented housing, does not apply in the private rented sector, so landlords need not make the improvements that are required to achieve comparable energy efficiency.

I hope that the minister will recognise the merit in amendment 267, which would apply the standard to the private rented sector. Proposed section 13(7) of the Housing (Scotland) Act 2006 would apply the standard in line with the guidance that is issued in relation to living accommodation. As the Scottish housing quality standard requires council housing and social rented housing to reach a rating of five out of 10 by 2015, the same requirement would be imposed on the private rented sector. That would give landlords—who have access to tax breaks and small business loans—the opportunity to meet the appropriate standard in good time.

Amendment 269 relates to the tenement management scheme. Tenements account for many homes in my area and for many homes in the private rented sector. Whatever the tenure and whatever the sector, tenements are a significant part of the housing stock in our towns and cities. The Tenements (Scotland) Act 2004 allows measures to be taken to improve homes even when one owner or occupier does not wish to participate, because the Parliament recognised the greater public interest in ensuring that such works are done. The amendment would extend that principle to energy efficiency and insulation works and therefore simply recognises the climate change and carbon emissions aspect of our common interest in higher-quality tenement housing, whether in the rented or owner-occupied sectors. I hope that the minister will support the principle behind the amendment.

I move amendment 267.

Cathy Peattie (Falkirk East) (Lab): Amendment 268 is a short probing amendment. The Housing (Scotland) Act 2006 amended the tolerable standard that all homes must meet to include a requirement on thermal insulation. Amendment 268 would include cavity wall insulation in the tolerable standard, but it would not require people whose walls are unsuitable for cavity wall insulation to install costly solid wall insulation. The 2006 act allows the Scottish Government to offer guidance on what constitutes satisfactory wall insulation, which would allow the Government to exclude solid-wall properties from the requirement.

It is important to find ways to make progress and to make it easier for people to install cavity wall insulation. I also support Lewis Macdonald’s amendments.

Stewart Stevenson: The Scottish ministers are comfortable with amendment 269. We align with the principles behind it and we are happy to recommend that the committee support it.

I will talk about amendment 267 in a little more detail. We accept that Lewis Macdonald raises a real issue, but there are some difficulties with the amendment and it does not necessarily provide the way to deal with the issue.

In our recently published review of the private rented sector, we committed to consulting further on measures to reduce emissions from houses, including those in the private rented sector. That consultation should clarify the impact that the proposal in the amendment would be likely to have on the private rented sector and its ability to support housing supply arrangements.

As Lewis Macdonald knows, tenants can experience difficulty in exercising existing powers. That is one reason why I am reluctant to place too much reliance on the difference that the amendment would make. We will have several opportunities later to consider other ways to deal with the matter.

Cathy Peattie helpfully described amendment 268 as a probing amendment. The difficulty with it is that its practical effect would be to narrow the primary legislation’s scope, because the provision that would be amended refers to thermal insulation in general and not simply to roof and wall insulation.
16:00

The tolerable standard is applied by local authorities, which have the discretion to decide what is satisfactory. We are content to explore further the issue through the guidance that we will provide. That will ensure that we address the issues that the member has brought forward. As I said, the effect of amendment 268 is at odds with the member’s stated aim.

In summary, we think that amendment 268 is misplaced, but we are happy to accept amendment 269. On amendment 267, we see an excellent opportunity in the proposed housing bill, which is currently out for consultation, to look at the issue more widely to ensure that we genuinely provide something that gives powers to tenants to get the results that we are looking for, given the real difficulties that they can experience in exercising the existing powers.

Lewis Macdonald: I listened carefully to what the minister said. He indicated an intention to consult on the matter and to include the outcome of the consultation in the proposed housing bill. However, I think that we need to hear more on the issue at stage 3. It is one thing to say that there is a problem, but it is quite another to outline the solution. The minister made one or two points, but—

Stewart Stevenson: I am happy to take further advice from my colleague the Minister for Housing and Communities to ensure that I can make appropriate comments at stage 3.

Lewis Macdonald: That is helpful. I share the minister’s view that we do not want to overburden tenants. However, we need to protect them from the consequences of living in energy-inefficient homes. I hope that we will hear more on that at stage 3.

On that basis, I am content to withdraw amendment 267.

Amendment 267, by agreement, withdrawn.

Amendment 268 not moved.

Amendment 269 moved—[Lewis Macdonald]—and agreed to.

Section 51—Promotion of renewable heat

Amendments 239 and 240 not moved.

Amendment 161 moved—[Stewart Stevenson]—and agreed to.

After section 51

The Convener: Amendment 270, in the name of Sarah Boyack, has been debated with amendment 154.

Sarah Boyack: I will not move amendment 270. I will sweep up the issue in my conversation with the minister on an amendment in another group. On the same basis, I will not move amendments 271 and 272.

Amendments 270 to 272 not moved.

The Convener: Amendment 273, in the name of Sarah Boyack, is grouped with amendment 274.

Rob Gibson: On a point of order, convener, I am sorry to interrupt, but I think that we have passed over a section without agreeing to it.

The Convener: I think we are in order. The committee agreed to amendment 161, which means that we are okay. I thank Rob Gibson for his point; it is important to keep me on my toes.

I call Sarah Boyack to speak to and move amendment 273.

Sarah Boyack: The new section that is proposed in amendment 273 was one of the original sections in my first attempt to present a bill to Parliament. I withdrew the proposal in 2007 because I had been reassured by, I think, three ministers that they would deal with permitted development rights. Two of those reassurances were in writing. I therefore dropped the section from my bill. However, when I saw the draft statutory instrument, I was deeply disappointed, because it included a rather bizarre requirement that people could obtain permitted development rights only if they were at least 100m away from the next house. Technology offers a way of sorting the problem: we can consider the certified performance of equipment rather than the geography.

The final version of the statutory instrument was really not acceptable. Air-source heat pumps and micro wind turbines were both removed and kicked into touch. Nobody in the industry understands why air-source heat pumps disappeared from the agenda. Noise issues arose to do with micro wind turbines, but such issues can be resolved by certification.

Amendment 273 seeks to put pressure on ministers as to when they should come back to Parliament with answers. I have not specified what ministers must put in the statutory instrument, but I have specified a timescale, because people in the renewables industry and householders who are desperately keen to install such technology are now disadvantaged.

Not having permitted development rights does not mean that people cannot seek planning permission, but there would certainly be a lot of red tape. The interpretation of planning authorities is that both air-source heat pumps and micro wind turbines are problematic because they did not go through the statutory instrument. Amendment 273
would require Scottish ministers to amend an amendment order in respect of town and country planning legislation on permitted development rights in relation to these two types of technology. I have not said exactly what ministers must do, but I have said that they must get on with it.

Subsection (4) of the proposed new section is unusual. The organisations that are mentioned are not the only people whom ministers would have to consult, but paragraphs (a), (b) and (c) in the subsection mention industries that were aggrieved at the outcome of the previous statutory instrument, and felt that their views had not been properly listened to. I hope that there will be better dialogue before the next statutory instrument comes out.

I will keep my comments brief, convener, because I know that we are short of time.

I move amendment 273.

Liam McArthur: I echo what Sarah Boyack said about her amendment 273.

Earlier, I quoted the minister in highlighting the impact of emissions from non-domestic buildings, in order to make the case for more timetabled action in relation to energy efficiency. However, non-domestic buildings can also contribute to microgeneration development.

In a written answer to a parliamentary question from Sarah Boyack, the Cabinet Secretary for Finance and Sustainable Growth said:

“Research published in early 2007 recommended that permitted development rights distinguish between domestic and non-domestic buildings ... The research recommended that the same rights apply to all non-domestic buildings.”—[Official Report, Written Answers, 20 March 2009; S3W-21781.]

I certainly accept that there are differences between the categories, and that complexities arise in relation to non-domestic buildings. The Government has made it clear that it wants to prioritise action in relation to permitted developments on domestic buildings.

Sarah Boyack has suggested that there was a failure to stimulate the mass market, which is what SCHRI and other initiatives were attempting to achieve. The value of permitted development rights in relation to promoting take-up and reducing costs, and thereby providing further incentives, is pretty well established and accepted. The benefits to the microgeneration industry are not difficult to see: it could build on robust domestic demand and create the green-collar jobs that we all want to see. Ministers have set their own targets for that.

Amendment 274 provides a degree of flexibility, but the Scottish Government must now consult on a new order, and then bring that forward, building on the research that was commissioned and published by the previous Executive. The research has been accepted by the current cabinet secretary, and the case has been made for proceeding in relation to non-domestic buildings as well.

Des McNulty: I have no issues at all with air-source heat pumps having permitted development rights, but there are one or two caveats relating to micro wind turbines that one might want to highlight. I refer to the definition of the word ‘micro’. I am a former planning minister, and was involved in planning in local authorities before I was a minister. It seems to me that if there are unfettered permitted development rights, there could be problems with installed turbines’ visual obtrusiveness and noise. Such things can be sorted out by regulation, but I would not want us to agree to what has been proposed in principle without highlighting the need for some sort of regulatory framework to protect people. Perhaps we also need to consider neighbour notification in the context of planning regulations. I know that Sarah Boyack and Liam McArthur will have thought of those issues, but people will have practical concerns about what others might do that will affect them by putting up certain types of installation. We need to be careful.

Rob Gibson: I am interested in Liam McArthur’s amendment 274, on microgeneration. I am conscious of a case involving a larger wind turbine that has been proposed in Hatston, which is in his constituency. Does he think that our discussion of permitted development rights ought to be extended to include machines that are larger than micro machines, given what he has just said about the definition of the word “micro”?

Liam McArthur: That is an intriguing question, but it is not necessarily particularly pertinent to microgeneration. I accept the sentiments that Des McNulty articulated. The inappropriate siting of any microgeneration or large-scale device is likely to bring into disrepute what we are seeking to achieve. However, my amendment 274 is not the only people whom ministers would have to consult, but paragraphs (a), (b) and (c) in the subsection mention industries that were aggrieved at the outcome of the previous statutory instrument, and felt that their views had not been properly listened to. I hope that there will be better dialogue before the next statutory instrument comes out.

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I will keep my comments brief, convener, because I know that we are short of time.

I move amendment 273.
The Government responded:

“Following competitive tender, the Government expects to appoint contractors to undertake research over the summer on whether permitted development rights should be extended to domestic wind turbines and air-source heat pumps.”

My response to that was that, rather than spend £25,000 on a contractor, the Government could spend 25 quid to send the minister and an official to Uphall by train—the minister will be pleased that I said that—so that they can stick their ears next to the air-source heat pump at the Mitsubishi factory and find out whether they can hear it. Modern air-source heat pumps make virtually no noise. It is beyond belief that they do not yet have permitted development rights.

I have only one concern about amendment 273. I know how Government officials operate. Subsection (3) of that amendment states:

“No order making the amendment required under subsection (1) must be laid in the Scottish Parliament no later than six months after the day on which this section comes into force.”

That means that, rather than get on with things, Government officials will delay things until the section comes into force, and it might take even longer to get permitted development rights for air-source heat pumps. I hope that the minister will give us more assurances in summing up.

**The Convener:** I have been to the factory that Iain Smith mentioned—by train—in recent weeks, and I endorse and underline the arguments that Sarah Boyack put forward. I am conscious of the improvement in air-source heat pump technology. The noise from such heat pumps is trivial compared with many other noises that people in residential settings happily put up with and barely notice. As well as the increased profile of microrenewables in the political agenda, the improved technology and the work that is being put into continuing its improvement should allow us to move forward with permitted development rights. I hope that the minister will give us more assurances in summing up.

**Stewart Stevenson:** I am reminded that 25 years ago I invested £200 in an air-source heat pump company in West Lothian. I never got the money back and no dividend was ever paid. It was an idea that was ahead of its time: clearly, its time has come. I take tent of members’ references to the silence of the pump at the Mitsubishi factory at Uphall. However, that draws us immediately to the issue of ensuring that people are protected from unnecessary noise. Four miles from where I live, two 3MW wind turbines have just been opened. At the weekend, in a 20 knot wind, I stood immediately under the turbines and, with my eyes shut, I could not hear them at all. However, where I stay here in Edinburgh, I am a greater distance away from a very small wind turbine, but at that wind speed it makes a considerable noise. We should not discount and downplay the problem of noise.

This week, we have received the tender bids for the research. We will open the envelopes next week and decide who will get the work. I clarify that it is officials, not ministers, who do that. We are making the progress that we promised we would make. We should not proceed in the absence of an appropriate regime for certifying the noise limits that should be applied to urban installations. South of the border, difficulties in that regard have been experienced.

We are moving ahead and will receive recommendations through the work that we are undertaking. We should therefore not seek, through amendments 273 and 274, to pre-empt that work, but should instead allow that process to take its course, so the amendments should not be agreed to. We must reinforce the work that we are doing, as well as the work that is being undertaken in conjunction with the UK Government on issues such as feed-in tariffs, which is a more general issue for microgeneration capability. There are a range of issues that will be better progressed without the amendments.

**Sarah Boyack:** Des McNulty’s questions and comments must be taken on board. He is right that there are issues that must be bottomed out properly. That is why the permitted development rights under amendment 273 would not allow people to put up mini wind turbines just anywhere. As is only right, there would be restrictions; for example, in relation to listed buildings, conservation areas and—dare I say it—world heritage sites. That would not automatically mean that people in such areas would not be allowed to use the technology, but it would mean that different requirements would be in place.

The key points are that pressure must be put on the industry to get the certification right, but the Government must also be required to get going with a statutory instrument on permitted development. I want to press amendment 273. It does not tell ministers how to do their job—it tells them to come back to us with a statutory instrument on the table, so that there is clarity and so that the industry can make progress with the right framework and limitations.

**The Convener:** The question is, that amendment 273 be agreed to. Are we agreed?

**Members:** No.

**The Convener:** There will be a division.
FOR
Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For, 5, Against 3, Abstentions 0.

Amendment 273 agreed to.

Amendment 274 moved—[Liam McArthur].

The Convener: The question is, that amendment 274 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

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Gordon, Charlie (Glasgow Cathcart) (Lab)
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The Convener: The result of the division is: For, 5, Against 3, Abstentions 0.

Amendment 274 agreed to.

Shirley-Anne Somerville (Lothians) (SNP):
Amendments 275 to 277 are all about the Scottish Government showing leadership on the energy performance of buildings in the Scottish civil estate.

Amendment 275 would place on ministers a duty to ensure that the energy performance of newly constructed buildings falls within the top quartile of energy performance. Amendment 276 would require ministers to lay before Parliament a report that assessed progress towards improving the efficiency of buildings, and those buildings’ contribution to sustainability. Both amendments would promote good practice and reduce wasted energy in public buildings. My understanding is that, if amendment 277 is agreed to, amendments 275 and 276 will cover not only the core central Government buildings but those of non-departmental public bodies and agencies. That was certainly my intention, but I ask the minister for reassurance that it is also his interpretation.

Amendment 278 is in the name of Cathy Peattie. We are trying to get to the same conclusion, but her amendment contains two competing measurements: the energy performance certificates for office buildings that amendment 278 mentions measure carbon dioxide emissions, not energy efficiency, as the amendment suggests. As my amendment 275 discusses energy performance, I suggest that it will deal better with the problem that Cathy Peattie and I are both trying to alleviate.

I move amendment 275.

Cathy Peattie: I agree with Shirley-Anne Somerville and agree with amendment 275. Amendment 278 seeks to widen the definition of public sector buildings for the purposes of the bill. I am aware that it contains a technical fault, so I will be interested to hear what the minister says on it.

Des McNulty: I presume that the annual report for which Shirley-Anne Somerville is calling would be an update report that would not require an assessment of the estate every year but would be more an indication of what had changed. I ask the minister to reassure me on that point.

Stewart Stevenson: I will not say much, as Shirley-Anne Somerville has made well the points on amendments 275 to 277. I confirm, as she asked me to, that they would cover NDPBs and agencies. To answer Des McNulty’s question, it would be sensible and appropriate to provide a report that says what has changed. The proposals in amendment 276 appear to provide for that.

Cathy Peattie acknowledged that the building energy performance scale from A to G is quite different for buildings other than dwellings, as they are described in the heading on the bit of paper that is before me. Therefore, amendment 278 is inappropriate. Shirley-Anne Somerville’s amendments 275 to 276 cover what is appropriate in the circumstances and I commend them to the committee.

Shirley-Anne Somerville: I have had the reassurance that I was looking for from the minister, so I am content to press amendment 275.

Amendment 275 agreed to.

Amendments 276 and 277 moved—[Shirley-Anne Somerville]—and agreed to.

Amendment 278 not moved.

Section 52—Waste prevention and management plans

The Convener: Amendment 241, in the name of Elaine Murray is grouped with amendments 243 and 244. I welcome Elaine Murray to the committee.
Stewart Stevenson: Before Elaine Murray speaks to her amendments, I indicate as a matter of courtesy that we are changing personnel at the top table. I hope that that is acceptable.

The Convener: Thank you. That is fine.

Elaine Murray (Dumfries) (Lab): I am grateful to Friends of the Earth Scotland and the committee clerks for their invaluable assistance in the preparation of the amendments.

The powers for which section 52 provides are welcome. The establishment and implementation of waste management plans for certain commercial and industrial facilities such as supermarkets and construction sites is a key measure to enable a reduction in commercial and industrial waste volumes. Amendment 241 ensures that those powers will be enacted promptly in order to provide certainty for businesses and to avoid the risk that companies that take voluntary steps to adopt such plans are disadvantaged in comparison with competitors that are making less effort to improve waste management.

The powers for which section 53 provides were widely welcomed. Discussions with witnesses during stage 1 revealed widespread concern about the lack of reliable data on waste and carbon accounting. There are gaps in information about waste, especially in respect of commercial wastes, which hamper effective waste management and waste reduction. Amendment 243 ensures that the powers for which section 53 provides will be enacted promptly to provide certainty for business and to ensure that full and consistent information becomes available to policy makers, regulators and local authorities.

Amendment 244 is similar and refers to section 56, which is welcome. The limited development of markets for recycled materials has led to unnecessary transport of wastes for processing—even export to China, in some cases—and to Scotland’s failing to capture the maximum economic and employment benefits from the development of recycling facilities, and to grasp an opportunity to create green jobs in Scotland. The amendment ensures that the powers for which section 56 provides will be enacted promptly and in a concerted fashion. The critical step towards capturing the economic benefits of recycling is the establishment of a critical mass, in which markets are at a scale that merits the establishment of local processing facilities. That can be achieved only by implementing the powers, not through a voluntary approach.

It is slightly unfortunate that amendment 250, which was proposed by the Rural Affairs and Environment Committee and to which my colleague Maureen Watt will speak later, will be debated later than this group, because amendment 250 seeks to make all the provisions subject to super-affirmative procedure. That will ensure enhanced scrutiny—by both the Transport, Infrastructure and Climate Change Committee and the Parliament—of any regulations that are introduced. I hope that that will be an additional reassurance for the committee.

I will listen carefully to what committee members and the minister have to say. The purpose of all three amendments is to ensure that the provisions in the bill, which were widely welcomed, become intentions, rather than just aspirations.

I move amendment 241.

Stewart Stevenson: I am happy to support amendment 243, in the name of Dr Murray. Information on waste is clearly a prerequisite for establishing effective regimes, so we wish to see such information gathered. I hasten to add that that is not a trivial undertaking, but a substantial one.

In accepting amendment 243, I draw the committee’s attention to an error in its drafting. Like a previous amendment, amendment 243 refers to the “Act” receiving royal assent, when it is the bill that receives royal assent. However, that is a technical matter that can be dealt with without difficulty at stage 3, through a technical amendment. I do not offer the drafting error to the committee as a reason for not agreeing to the amendment.

I welcome the fact that Dr Murray has welcomed what we are trying to do in this regard. It is difficult to proceed with amendments 241 and 244 on a similar timescale, because before we can do so we require the information that we will gather through implementation, over a particular period, of amendment 243. On that basis, I ask the member not to press amendment 241 and not to move amendment 244.

Members have already referred to amendment 250 and its use of super-affirmative procedure. It might be useful to point out that introducing into the process such a procedure, about which I will speak at much greater length later, would add a minimum of seven months to delivery. Given that we are constantly being encouraged to act with greater speed in such matters, I see no clear benefit in the use of super-affirmative procedure. As I say, I will speak later on the issue at greater length but I thought, as it formed part of this debate, that it might be useful to make an early comment.

16:30

Elaine Murray: I am grateful to the minister for accepting amendment 243, but I wonder whether
he can indicate when he expects the provisions in sections 52 and 56 to be enacted. I accept that there might be a problem in bringing them forward without the data that are referred to section 53.

Stewart Stevenson: I am unable to give a specific response, but I am happy to confirm that we regard this part of the bill to be a very important part of the agenda. I think that I am, by accepting the important part in amendment 243, showing willing; we would certainly seek to move at best possible speed, although gathering the data is a necessary prerequisite to understanding the scale of the problem that we will have to engage with in the regulations that are set out in sections 52 and 56. I cannot give the absolute certainty that Elaine Murray seeks, but I hope that she accepts that good will is being shown and that there is the desire to proceed at reasonable speed. In accepting the time limit on data gathering, we are showing—to use a Jim Mather phrase—that we are willing to step up to the plate.

Elaine Murray: I thank the minister for his intervention. I will withdraw amendment 241, but move amendment 243.

The Convener: We will come to that in a moment.

Amendment 241, by agreement, withdrawn.

Section 52 agreed to.

After section 52

The Convener: Amendment 242, in the name of Elaine Murray, is grouped with amendment 242A.

Elaine Murray: I now realise that I was getting a little ahead of myself.

When I lodged these amendments, I was not aware that we would have the opportunity to discuss some of the issues in Parliament this week. However, it is still important to look at what is happening in other parts of Europe, and I know that the Government has reviewed international practice on waste disposal. If Scotland is to meet its European targets for the diversion of waste from landfill and fulfil the Government’s aim of recycling 70 per cent of domestic waste by 2020 as part of a move towards zero waste, we need to look at what is done well elsewhere.

Flanders in Belgium has achieved 70 per cent recycling primarily through selective bans on the waste going to landfill and incineration, which are designed to stimulate the high-quality separated collection of waste for reuse, recycling and, where recycling is not possible, energy recovery. Achieving high levels of waste reduction and recycling is the best way of cutting the greenhouse gas emissions associated with waste disposal and the replacement of the materials in those products. As a result, Stop Climate Chaos Scotland, which represents 60 organisations as diverse as Friends of the Earth Scotland and Unison and whose membership totals 2 million people, fully supports amendment 242, which seeks to set out the framework for regulations to deliver in Scotland the approach taken in Flanders, complete with the same exemptions and derogations to ensure that the necessary facilities are in place before bans come fully into effect.

Ministers have previously indicated that they were exploring the introduction of landfill bans, but they have made no commitment to selective incineration bans. Such bans are an essential complement to landfill bans if we are to maximise the recovery of materials and energy through modern advanced technologies instead of encouraging conventional mass-burn incineration.

Amendment 242 deliberately seeks to embrace industrial and commercial wastes, as well as household waste, because they must be addressed urgently. As they are typically less mixed up to begin with, they have greater potential for effective segregation to maximise recovery. The amendment is drafted in an enabling fashion, and I hope that ministers will support and make use of the framework that it proposes.

Amendment 242A is similar to amendments 241, 243 and 244. It was designed to enable the committee to place a timescale on the introduction of regulations, but I later noted that amendment 242A, as it is written, would not be competent. I have said in amendment 242, “The Scottish Ministers may,” which might make the measures more difficult to bring in, although I am not quite sure.

I will listen to what the minister has to say. I lodged the two amendments in this group in the hope that amendment 250, which we will discuss later, might be agreed to. I am aware that members might have a concern that the provisions were not discussed fully at stage 1 as they were not originally in the bill—as there was no opportunity to discuss the provisions, we have not taken evidence on them in the way that we did for the existing sections of the bill. I hoped that the adoption of the super-affirmative process would allow such a level of consultation, which would compensate for the inability to engage in that level of consultation at this stage of scrutiny of the bill.

I will move my amendment.

The Convener: Could you move both the amendments, please?

Elaine Murray: I will not move the second one, as I am slightly unsure as to whether the wording is correct.
The Convener: Can I ask you to move the amendment and the amendment to the amendment, please?

Elaine Murray: Sorry. I move amendment 242. Obviously, the amendment to it imposes a time restriction—I move amendment 242A.

The Convener: Okay.

Stewart Stevenson: We agree with Elaine Murray that that there are materials that should not be in landfill or incinerated. Fortunately, full powers to ban polluting materials from landfill and incineration already exist, in section 2 of the Pollution Prevention and Control Act 1999. Indeed, those powers have already been exercised, most recently in respect of industrial and automotive batteries, which are banned from landfill and incineration alike by the Waste Batteries (Scotland) Regulations 2009, which the Parliament approved last week.

Disposal by landfill and incineration are at the bottom of the waste hierarchy as set out in the revised waste framework directive, and we have powers under the European Communities Act 1972 to make legislation to prioritise forms of waste management further up that hierarchy.

We are co-operating with other UK Administrations on related work. A UK-wide packaging strategy is launched today, which could lead to the consideration of bans on landfill and incineration. Members may be interested to know that, in any case, we initiated a project, which other UK Administrations have now joined, to examine additional landfill bans. That work is ongoing.

We have always anticipated making any necessary regulations under existing powers. Given that the relevant powers already exist, it is unnecessary to insert them into the bill. Indeed, having duplicate powers could create confusion, since the respective powers would be worded differently. Given all those circumstances, I invite Elaine Murray to withdraw amendments 242A and 242.

Elaine Murray: I welcome the minister’s reference to the revised EU waste framework. It is important that any waste management strategy is developed in line with the waste hierarchy and that incineration, like landfill, is placed at the bottom of that hierarchy. Energy from waste is not—it is classified as recovery. I was pleased to hear the minister refer to the need to comply with the waste framework directive, which will have to be transposed into our law by the end of next year.

Given the minister’s assurances that the powers already exist in legislation, and noting the detail that he has given of the regulations that may be applied, I will be happy to withdraw amendments 242A and 242. However, I will be interested to hear further—in the context of the national waste management plan, which is being consulted on—how some of the issues will be addressed. I hope sincerely that we use those existing powers to tackle waste management and reduce the amount of waste that we produce.

Amendments 242A and 242, by agreement, withdrawn.

The Convener: Amendment 279, also in the name of Elaine Murray, is in a group on its own.

Elaine Murray: Amendment 279 is another amendment intended to promote discussion in committee of some of the issues. It is concerned with waste reduction measures and the introduction of possible pilot schemes. Waste reduction measures are rightly included in the bill. Waste reduction cuts greenhouse gas emissions from waste management—most notably from methane from landfill and carbon dioxide from incineration—and from the processing and manufacture of new products that are avoided or substituted for by reuse or recycling.

Scotland has established an aspiration to move beyond European targets for waste diversion towards zero waste, setting a welcome target of 70 per cent recycling by 2020. The Belgian region of Flanders has already achieved such a target by the use of two principal tools: selective landfill and incineration bans, referred to in amendment 242, and waste charging. Although waste charging is an extremely controversial method, there are ways in which we can use either charging or council tax rebate to encourage behaviours that lead towards waste reduction.

The waste charging route was taken in Flanders, where charges average around €60 per household per year. Amendment 279 would allow waste charges to be established in the form of variable rebates from local taxation, and regulations could allow for the exemption of certain individuals from charges when there are acceptable reasons why more waste is being produced by, for example, certain families or people with medical conditions.

Local authorities are currently experimenting with a variety of methods of trying to encourage residents to cut down on their waste, many of which have been extremely unpopular—including some of those in Dumfries and Galloway. The regulations to establish the pilot include a requirement to establish standards of recycling services to be in place before the pilot is introduced, and the scheme would have to be reviewed after a certain period before decisions could be made about its roll-out.

We have been told that the Scottish Government believes that waste charging is too controversial to merit introducing provisions, and experience in
some areas indicates that the Government is not likely to introduce such provisions. However, the UK Government has introduced such provisions for England and Wales in the Climate Change Act 2008. Amendment 279 is modelled directly on those provisions, albeit leaving much of the detail to the consultation on the regulations.

Amendment 279 provides the Scottish ministers with the powers to establish waste reduction incentive pilot schemes based on Scottish conditions, rather than rely solely on learning from elsewhere.

I move amendment 279.

Cathy Peattie: I normally support Elaine Murray in all that she proposes because of the wisdom that she brings, but I am concerned about the proposal in amendment 279. There are issues around incentives and education to encourage people to handle their waste appropriately and around local authorities and others taking risks to achieve better waste management and waste reduction. The amendment is counterproductive. In my experience, where people are charged for not handling their waste properly, they dump their rubbish wherever. If the intention is to charge people for not using properly their wheelie bins or whatever, I am reluctant for the committee to pass the amendment.

Stewart Stevenson: I thank Elaine Murray for lodging amendment 279 and giving us the opportunity to discuss an important issue. Cathy Peattie’s comment about the risks associated with charging is well made.

We have an ambitious target to achieve a recycling rate of 70 per cent of municipal waste by 2025. We take note of the high-performing parts of Europe, in particular the Government in Flanders, with which we worked recently on issues to do with ferries. The national waste management plan for Scotland will show how we intend to meet our targets. There will be more collections of material, better recycling centres, work on markets and education to raise awareness, in line with what Cathy Peattie said.

16:45

We note the powers that exist south of the border and that no council has yet volunteered to pilot waste charging. I should say in all fairness that it is early days, although I suspect that that is a difficult issue.

There are successes in recycling. In my capacity as minister, I opened the EU’s biggest food recycling facility, which is in my constituency. The facility represents an exciting step forward.

There are practical difficulties to do with how the approach that is proposed in amendment 279 might interface with the council tax. We think that there could be implications for council tax benefit, but more work would be required on that.

If amendment 279 were agreed to, provision could be made for “the means by which unpaid charges may be recovered.” However, the amendment would create no offence or power to create an offence of non-payment, so it would be potentially difficult to proceed with recovery.

The definitions in subsection (9) of the new section that amendment 279 would introduce would create difficulties. For example, “domestic premises” would include hotels, given that hotels are “living accommodation”.

I hope that Elaine Murray will not press amendment 279. We can make progress through the national waste management plan for Scotland.

Elaine Murray: I lodged amendment 279 so that the committee could debate the matter on the record and learn of the Government’s intentions in relation to the national waste management plan. I am concerned about the piecemeal approach that local authorities are taking. Some measures have been counterproductive, such as charging people a lot to use bin bags when their wheelie bins are too full, and charging for the removal of white goods from domestic premises, which has probably led to the dumping of things in lay-bys because people do not want to pay the high charge for disposal.

There might be merit in more systematic experimentation about how to use charges or rebates to encourage people to cut down on waste. I am not certain that amendment 279 offers the best approach, but many different methods of getting people to cut down on waste are currently being used, many of which are not particularly successful. Moreover, my local authority is introducing such measures at the same time as it is proposing to remove recycling points and stop blue bin waste paper collections, which seems counterproductive. I would like more scientific research into how to influence people’s behaviour.

I sense that there is little enthusiasm for the approach that is proposed in amendment 279. I hope that we can continue to discuss the matter and consider how to collate data from throughout Scotland on methods of encouragement that alter people’s behaviour.

Amendment 279, by agreement, withdrawn.

Section 53—Information on waste

Amendment 243 moved—[Elaine Murray]—and agreed to.

Section 53, as amended, agreed to.
Sections 54 and 55 agreed to.

Section 56—Procurement of recyclate
Amendment 244 not moved.

Section 56 agreed to.

Section 57 agreed to.

Section 58—Deposit and return schemes

The Convener: Amendment 162, in the name of the minister, is grouped with amendments 163 to 175, 245, 176 to 181, 185, 182 to 184 and 186. The minister is checking that I have read correctly all the amendments.

Stewart Stevenson: I would not wish to cross you in any dispute, convener.

Amendments 162 to 184 seek to ensure that powers are made available to set up effective deposit and return schemes by means of a clearing-house system. My colleague Richard Lochhead mentioned those schemes in evidence to the Rural Affairs and Environment Committee on 4 February. On 13 February, he wrote to the committee about them in more detail.

In contrast, amendments 185 and 186, in the name of Alex Johnstone, seek to ensure that ministers are given no powers to set up a deposit and return scheme—none at all.

Amendment 245 seeks to ensure that materials that are subject to a deposit and return scheme may be reused as well as recycled.

In the consultation paper on potential measures to implement zero waste, one deposit and return scheme option for which we canvassed consultee response was a clearing-house scheme on the Danish model. Denmark has been operating a successful scheme for some years now. A body, which in the amendments is called the “scheme administrator”, may be required to help retailers and producers by carrying out clearing-house functions on their behalf. The amendments allow ministers to give those functions to either an existing body or a new body that is created for that purpose.

In either case, we need to ensure that the powers that the scheme administrator enjoys are sufficiently wide to operate a successful scheme. The amendments give any new body that ministers establish the power to do things that are necessary or expedient for it to do. They also enable ministers to set out such powers in greater detail in subordinate legislation and to adjust the functions of any existing body that might be selected to run a deposit and return scheme.

Specific mention is made of the powers of borrowing and charging, given that any scheme will have to operate in a quasi-commercial manner and cover its costs. The administrator will need to have access to Government financing, whether by grant or loan, and not only for start-up—there may be need for Government financial intervention thereafter. One example is the need to smooth out financial cycles or gaps between costs that arise and income that is generated. Amendments 170, 173 and 181 to 184 deal with the scheme administrator.

On 4 February, the Rural Affairs and Environment Committee heard in evidence that packaging is not the only material that might be handled by a deposit and return scheme. It was pointed out that consumer articles might also usefully be included. The example suggested was that of low-energy light bulbs, which will be disposed of in increasing numbers as incandescent bulbs are phased out. Separate collection and appropriate recycling is desirable in their case because of the mercury that they contain. The Government accepts that that is a sensible change. Amendments 162 to 169, 171, 172, 174, 175 and 177 to 180 give it effect by extending powers in connection with setting up schemes to cover articles, packaging or both.

Amendment 176 empowers ministers to include provision in the regulations to provide for a non-returnable element in the sale price of articles. That element, which may be regarded as part of the deposit that is paid by the customer, would be used to defray the expenses that are involved in operating the scheme. It would be desirable to cover those expenses in a transparent way rather than leave it to producers to cover them through retail prices. Such a provision might also make consumers think about the environmental consequences of their consumption, which is in keeping with the polluter-pays principle. As the holder of the waste, the consumer is one of the polluters on whom, in terms of article 14(1) of the revised waste framework directive, the costs of waste treatment are to fall.

I turn to amendments 185 and 186, in the name of Mr Johnstone. Two petitions are currently before Parliament in support of deposit and return schemes, and supportive evidence was given at stage 1, but I acknowledge the strong representations from industry against such schemes. Some of those may be dealt with briefly. It is notable that one member of the British Soft Drinks Association, which opposes the measure, is A G Barr, which operates its own deposit and return scheme. It is simply not true to suggest that such schemes do not work, as they work not only in several European countries, such as Sweden and Denmark, but in individual states and provinces of the United States and Canada. Denmark’s experience is particularly instructive, as it is a nation of five million that has a very porous
It is simply unrealistic to suggest, as the BSDA does, that the detail of any such measure should be set out in primary legislation—the statutory instrument that sets out the Danish scheme runs to more than 50 pages—but the matter is not just about length and balance. Successful schemes relate to materials for which there is a market, and prices for recyclate can rise and fall fairly rapidly. It would not help the speed of our reactions to have to change primary legislation every time, which is why we need full powers to make the kind of secondary legislation that I outlined.

In any event, as with other waste provisions in the bill, we have indicated that we do not intend to move to regulation in the current economic circumstances. We will do so only if voluntary efforts fail to achieve the desired results. We are giving time for such efforts, and progress has already been made, such as the reverse vending machines that are in place at some Tesco stores in Scotland—Richard Lochhead opened the facilities at the Tesco store in Shettleston earlier this year. I acknowledge that Mr Johnstone is a strong supporter of the better use of resources, so I am sure that he would wish to encourage those efforts, as I do. However, should those efforts fail, we will need an armoury of measures to improve our resource efficiency and thus mitigate climate change. That is the background to everything that we seek to do through the bill, and the deposit and return provision is one of those measures.

There has been mention of alarming costs—in the BSDA’s version, the costs would be hundreds of millions of pounds. That level was not reflected in our financial memorandum, which was built on the actual experience of the Danish and Norwegian schemes, but in response to a recommendation of the Rural Affairs and Environment Committee we have agreed to set out detailed costings for any scheme at the time of consultation on the new regulations. That committee and others will have plenty of time to discuss those costings. If they showed the levels of expense that the BSDA suggests, Parliament would be able to block the scheme, although I cannot imagine that we would proceed with it in the first place.

I completely agree with the purpose of amendment 245, which is to ensure that it is possible to reuse, as well as recycle, materials that are subject to such schemes, but the amendment is unnecessary as the term “recycling”, as used in chapter 4 of part 5, is defined to include reuse under section 52(4). The amendment would therefore add nothing to the bill.

I invite Mr Johnstone not to move amendments 185 and 186, and I invite Dr Murray not to move amendment 245.

I move amendment 162.

The Convener: In the interests of time, I again ask members to keep their comments reasonably straightforward and brief.

Elaine Murray: Given the restrictions on time, I will speak mainly to amendment 245. The amendment would insert the term “or reuse” after “recycling” in section 58(6). In the revised European waste framework directive, to which the minister referred, reuse is higher up the hierarchy than recycling. We should promote reuse. Although, obviously, not everything can be reused, materials can be reused, particularly those that might be involved in deposit and return schemes.

People can take containers back to be refilled with certain materials, and we should encourage that practice as well as recycling. My purpose in lodging amendment 245 is to tie the provisions into the revised EU directive.

17:00

Alex Johnstone: I will speak exclusively to amendment 185, in my name, which would strike section 58 entirely. I apologise to the minister and members for my amendment’s heavy-handedness. My objective was to reflect the sudden and last-minute lobbying that I experienced in the build-up to stage 2 and particularly the work of the Scottish Beer and Pub Association and several of its constituent members—the papers that I am holding up represent today’s correspondence alone.

The association is concerned about the impact of a deposit and return scheme on the businesses of pub owners—particularly those who find themselves in a marginal position. I ask the minister to justify the scheme’s introduction—he did that effectively in his opening remarks—and to give the assurances that the pub trade will be fully consulted on the form of any such scheme, that the scheme will take into account the impact of potential additional costs on very marginal businesses in some of our marginal communities and that when the efficiency of energy use in the cycle of deposit and return is considered the full cycle’s energy usage will be reflected in the balance of energy efficiency.

I do not oppose the creation of such schemes; in fact, I believe that they have much to contribute. My amendment was lodged to provoke discussion, and I give the minister the undertaking that I will not move it.

Charlie Gordon (Glasgow Cathcart) (Lab): I am prompted to break my 10-hour stage 2 silence.
The Convener: It had to happen.

Charlie Gordon: I was struck by the fact that the minister cited the soft drinks industry but Alex Johnstone cited the beer industry, with which he appears to have well-developed social contacts. If I go way back, we used to take back beer bottles under a deposit and return scheme in the way that we still return Irn-Bru bottles in the city of Glasgow. However, the beer industry and the pub industry withdrew from that approach quite a long time ago.

As a street urchin in Glasgow many years ago, I would have been after empty soft drink bottles—that is the term that I must use—and empty beer bottles. In the days when people were allowed to carry alcohol into football matches, a small army of small boys waited for people to come out of a big football match, so that they could pick up the empty beer bottles that football fans had discarded—the same applies to soft drink bottles.

Over the years, I have seen a cultural change. Children in Glasgow—and in other places, I presume—are now embarrassed to be seen gathering empty bottles and taking them back to the shop. The culture has changed so much that I have seen school playgrounds in which hundreds of 5p pieces have been left on the ground, because children regard picking them up as a badge of shame.

I am making a serious point. Deposit and return schemes for bottles must be driven not by people who are necessarily environmental activists but by those who are interested in getting the money back on the packaging—the bottles. However, a cultural change has occurred—we do not have the thousands of street urchins that we had a generation or two ago to help to keep such litter off the streets.

Alison McInnes: I am not sure whether I should admit that I am old enough to remember collecting ginger bottles—that is what we called them.

Charlie Gordon: That is the generic Glaswegian term.

Alison McInnes: That was a useful way of augmenting pocket money, but things have moved on.

In our stage 1 report, we expressed concern about the lack of detail on section 58. I support the principle, but significant issues need to be addressed. Members have spoken about the impacts and the costs on the drinks industry.

I am interested in hearing from the minister about the impact of such schemes on councils’ well-established kerbside collection schemes. Councils have put significant resources of personnel and capital into those schemes and into creating the markets for them. I am a little concerned that some of the best-quality packaging will be extracted from kerbside collections and about the impact of that on the markets for such items.

Des McNulty: Alex Johnstone apologised for the brutality of his amendment, but he demonstrated that he is a pussycat by offering to withdraw it.

The fact that the minister lodged a substantial number of amendments at stage 2 suggests to me that the scheme was not as well worked as out as it might have been. I listened carefully to the minister’s remarks, and it is clear that the issue is not just about bottles. Deposit and return schemes for other packaging are potentially envisaged in the bill but are not necessarily worked through.

Alex Johnstone has removed the possibility for me to vote down the proposal at stage 2, but we will want some reassurance from the minister before stage 3 about the circumstances in which a scheme might be introduced and the amount of consultation that there would be with the soft drinks industry, the Scottish Beer and Pub Association and other industries that might be subject to the introduction of deposit and return schemes. The last thing that we should do is push on to any of those industries a scheme that has not been properly worked out. However, that is not to say that a scheme could not be properly worked out and introduced.

I do not want to vote down the proposal, but I would like the minister to reassure me that all the wrinkles will be ironed out before a scheme is introduced and that there will be consensus not only that it is in the overall interests of dealing with climate change but that it is a business proposition that will not adversely affect the interests of the industries that are subject to it.

The Convener: Believe it or not, I, too, am old enough to remember collecting empty bottles for extra pocket money. Charlie Gordon might have been an environmental activist without knowing it.

Charlie Gordon: That is the only way I could have been one.

The Convener: The effect is what is important, rather than the motivation.

I reiterate the case for keeping the provisions. If objections were coming from an industry that had made dramatic moves of its own accord to reduce unnecessary packaging, it might be reasonable to take those objections seriously, but during the period of the culture change that Charlie Gordon mentioned, there has also been a dramatic increase in unnecessary packaging, and it is entirely reasonable to take steps to prevent that.

Earlier, we debated an amendment about public engagement. I argue that an approach to public
engagement should also focus on increasing participation in and acceptance of the proposed deposit and return schemes. [Interruption.] I am not sure what the noise pollution is, but I think that we will have to ignore it for the moment.

Rob Gibson: Do not bottle it now.

The Convener: I ask the minister to wind up on the group and indicate whether he wishes to press amendment 162.

Stewart Stevenson: Thank you, convener. I will press amendment 162.

In my concluding remarks on the group, I will address a number of the issues that members raised. It is deeply worrying that the group that engaged and animated the widest cross-section of the committee is the one that involves discussion about the subject of drink, but there we are. I just hope that that is not more widely commented upon outside the room in tomorrow’s papers.

Convener, you made a point about public engagement and the change of behaviours. It is entirely proper for you to make that linkage and I take that point on board.

Charlie Gordon stole my best line when he referred to the intimate association between Mr Johnstone and the Scottish Beer and Pub Association. However, a good line is always worth repeating.

I was asked whether we will consult fully if we bring forward a scheme, and Des McNulty requested that at an early stage we describe the circumstances under which we would envisage doing so. The Government will write to the committee on the matter before stage 3—I hope that the committee is comfortable with that suggestion. I acknowledge that we have a limited window of time in which to do that, so I am not sure that the information will necessarily reach the committee, although we can certainly ensure that it reaches the committee clerks in time for members to receive it—I hope that members understand the formal distinction that I make in that regard.

Mr Johnstone referred to the bill’s impact on the financial viability of marginal pubs, in particular in rural areas and in some urban areas. We want to take account of the matter and ensure that we do not impose onerous duties.

Alison McInnes said that the implementation of deposit and return schemes could disadvantage councils. If councils are operating good systems, it would be perverse of the Administration to require such systems to be supplanted. Any Administration would want actively to consider the existing infrastructure, and the amendments in the Government’s name will allow that to happen.

Mr Johnstone mentioned full cycle energy usage. We want to take account of that.

Charlie Gordon talked about the recycling of beer bottles. I think that some bottles, such as bottles of certain brands of Belgian beer, are still recycled in Scotland. I am familiar with pilots who regularly fly to Brussels and buy beer that is so cheap that the bottle’s recycling cost in Scotland exceeds its purchase price in Belgium. I do not encourage such behaviour as a climate-friendly approach, but at least it shows that beer-bottle recycling is still going on.

Amendment 162 agreed to.

Amendments 163 to 175 moved—[Stewart Stevenson]—and agreed to.

Amendment 245 moved—[Elaine Murray].

The Convener: The question is, that amendment 245 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

AGAINST

Gibson, Rob (Highlands and Islands) (SNP)
Harvie, Patrick (Glasgow) (Green)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

ABSTENTIONS

Gordon, Charlie (Glasgow Cathcart) (Lab)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

The Convener: The result of the division is: For 0, Against 4, Abstentions 4.

Amendment 245 disagreed to.

Amendments 176 to 181 moved—[Stewart Stevenson]—and agreed to.

Amendment 185 not moved.

Section 58, as amended, agreed to.

After section 58

Amendments 182 to 184 moved—[Stewart Stevenson]—and agreed to.

The Convener: Amendment 246, in the name of Elaine Murray, is in a group on its own.

17:15

Elaine Murray: The intention behind amendment 246 is to float some ideas in the context of possible steps to reduce the use of single-use and disposable products.

I support Des McNulty’s amendment 74, which would delete the proposals on carrier bags. Carrier bags have been erroneously singled out as single-
use products. In fact, they are often not single-use products—they are often used again as bags or for other purposes. Less public attention has been paid to a large number of other single-use products, such as plastic cups—the coolers in the Parliament and the coolers in my office have plastic cups, so people pour themselves a glass of water and throw the cup away. I am not sure why we have plastic spoons, forks and knives in the canteen, because we could use the other ones and wash them. Single-use razors and a plethora of other things, such as PVC advertising displays and so on, are used once and thrown away.

If we are to try to reduce the application of single-use and disposable products and to educate the public about the effect on the environment of using those types of disposable products, we must widen the debate a lot further than only plastic bags and we must address other single-use products. There has not been discussion about the issue, so it might be controversial to put the provision into the bill at this point, but I would like there to be consideration of how the education process might be effected and whether, in the future, regulations could be made to apply to, for example, takeaway food and drink shops to cut down the amount of disposable packaging or disposable materials and so on that are used in that context.

I am floating amendment 246 so that we can explore these ideas on the record and in the hope that the national waste plan will look at ways in which we can deter people from the excessive use of single-use and disposable products.

I move amendment 246.

**Stewart Stevenson:** Amendment 246 seeks to give very broad powers to require charges to be paid for a range of goods alongside whatever is the purchase price. Of course, the amendment’s use of the word “disposable” raises a substantial issue as to what that means, since it is possible to argue that everything is, ultimately, disposable; it is very difficult to work out what products would be excluded from any reasonable definition of “disposable”.

The amendment would also, in certain respects, drive against what we are trying to achieve. A banana skin or an orange peel is disposable, but we would wish people to put them on the heap and recycle them into the garden. We would not wish to charge people for them. I say that only to illustrate the genuine difficulties that the amendment would create.

We will find out what the committee’s view is on Mr McNulty’s amendment 74 to delete the proposal on carrier bags. Amendment 246 would, as currently written, reintroduce the carrier bags issue back into the bill. I would be interested to see whether that is something that Mr McNulty, in view of his clear position on carrier bags, would wish to support. The Government certainly encourages the committee not to proceed with amendment 246.

**Elaine Murray:** I wonder whether the minister recognises that there is a problem. I accept his arguments about the amendment, which is an attempt to bring the subject to people’s attention and to explore some of the issues.

**Stewart Stevenson:** I am happy to recognise that there is a genuine problem. We certainly want to minimise the impact of things that are disposed of after light use, but we do not think that the approach outlined in the amendment is one that commends itself. It is an issue that will require further consideration.

**Elaine Murray:** On the basis of that assurance, I am happy to withdraw the amendment.

*Amendment 246, by agreement, withdrawn.*

**Section 59—Charges for supply of carrier bags**

*The Convener: Amendment 74, in the name of Des McNulty, is in a group on its own.*

**Des McNulty:** I know that time is pressing, convener, but I have three arguments to make. The first relates to the consistency of the parliamentary approach. In the previous session, a sustained consultation was undertaken on the Environmental Levy on Plastic Bags (Scotland) Bill, which was introduced by Mike Pringle. Rob Gibson was on the committee that considered the bill. Many committee members were sympathetic to the bill, but the committee rejected it for a range of reasons. The committee heard a substantial amount of evidence from a variety of sources, including witnesses from the packaging industry in Scotland, who would have been directly affected by the proposal. The committee found their arguments convincing. Given the legislative process that was undergone at that time, it seems unfortunate to say the least that the bill that is before us proposes to introduce a similar provision. It may not be exactly the same proposition—the measures in the bill are not confined to plastic bags—but it is substantially the same.

One reason why the committee moved away from Mike Pringle’s approach was that other mechanisms, particularly those that supermarkets and other bodies can undertake voluntarily, may prove to be a more successful way in which to meet the objectives that were set out in the bill. Indeed, that has proved to be the case. Some measures have achieved some of the objectives that were set out at the time. We should not accept into a bill that is a climate change bill a measure that has been defeated in the...
parliamentary process, particularly when that rejection was made on the basis of a substantial amount of evidence.

The second point is to highlight some of the issues that were flagged up in evidence. At the time, much was made of the Irish experience. Some committee members travelled to Ireland as part of the evidence taking—[Interruption.] Unfortunately, Rob Gibson was not part of the trip. The evidence from Ireland showed that the introduction of a tax on plastic bags led to people turning to other forms of packaging that are less climate friendly. The point that the industry made in that regard was telling. We heard that the weight of material in a quantity of plastic bags is about a thirtieth of the amount in the equivalent quantity of paper packaging. The point is that it is possible to do something for the best of reasons that has a worse set of consequences.

Recently, we all received information from Canada about hygiene issues associated with the reuse of plastic bags. I found it captivating. If the provision is to be introduced, it should be explored in greater depth than it is possible for us to do in the context of the bill.

There is also genuinely an issue of employment. A significant number of jobs in Glasgow are in the packaging industry and are associated with the manufacture of plastic bags and other packaging. Those jobs will be adversely affected by the measure. It will affect the Scottish industry’s competitive position. That is something that we should not do lightly or without an appropriate degree of consultation.

The most pressing argument against the provision is that we are dealing with a climate change bill, and the test of any measure in that context is whether it contributes to a reduction in climate change emissions. Plastic bags can be recycled relatively quickly, the material costs of their production are not high and the material that goes into them is an otherwise not useful by-product of the oil industry. The alternatives, which are predominantly paper, have a significant impact on climate change, as chopping down trees has a direct effect on carbon dioxide levels in the atmosphere. We are being asked to support a measure that is perverse in relation to the objectives of the bill. I suggest that the simplest thing to do is delete section 59 from the legislation.

I apologise on behalf of Angela Constance, who has unfortunately had to attend a funeral this afternoon but would otherwise have been here to speak in support of my amendment. I hope that I can persuade members of the committee to strike out section 59, on the basis that the measure has not been properly thought through and is inappropriate in a climate change bill.

I move amendment 74.

The Convener: I will call other members who wish to speak in a moment, but for once I will abuse my position and be the first to speak.

I am speaking against the amendment. It seems that Des McNulty has, in several parts of his argument, mistaken the current proposal in the bill for the previous proposal in Mike Pringle’s bill, which focused specifically on plastic bags. Des McNulty has mentioned several times the disadvantages of substituting paper bags for plastic bags, but the current proposal refers to carrier bags. We have the opportunity to consider other forms of packaging if non-bag packaging is being substituted through the provisions on deposit and return schemes, which can apply to other forms of packaging. The argument about consistency of approach does not hold: the proposal that we are currently considering is different from the one that we rejected, so the arguments that were used to reject that proposal do not apply in this case.

Des McNulty argued that plastic bags are easily recycled or reused. They are easily recycled if there is provision for that, but many people—certainly in my own city of Glasgow—collect a large bag full of bags somewhere in their house and eventually get so sick of the growing pile of bags that they throw them out. The bags must be taken back to a supermarket to be recycled, as the local authority collection does not accept plastic bags. The provision of recycling services throughout Scotland will hopefully improve, but while such provision does not exist, we should recognise that there is not always an opportunity to recycle.

Plastic bags can be reused, but that argument undermines one of Des McNulty’s other arguments with regard to hygiene. I do not often use phrases such as “health and safety gone mad”, but people are having a bit of a funny turn if they think that reusing a bag will lead to a public health epidemic. I reuse plastic bags occasionally, and I try to reuse cloth bags as often as I can. If there is a hygiene issue, it applies to the reuse of any other type of bag as much as to the reuse of plastic bags.

With regard to the relevance of the measure to climate change, there is a cultural factor that relates to public engagement, for which Des McNulty has argued on other occasions. Asking people to make a different choice on a daily basis, and not accepting unnecessary plastic bags, paper bags or any other type of packaging, is a mental trigger. It is very much part of the public engagement on climate change and resource use, which are deeply connected in many ways.
Finally, in response to the argument that voluntary measures have proved to be effective, we can all take a walk down many high streets or shopping streets and see some people—more than perhaps there were five years ago—using their own bags, such as bags for life or cloth bags, but we can also stand at a till in a supermarket and see hundreds of plastic bags being put out every minute of every hour.

It is not true to say that voluntary measures have solved the problem; we still see far too much use of packaging, including plastic and paper bags. The proposal is one way of reducing that, and it seems to me that we should not be prohibiting ministers from coming forward with regulations of this sort by removing section 59 from the bill.

17:30

Rob Gibson: The convener has made many of the arguments for rejecting amendment 74.

When evidence was being taken on Mike Pringle’s bill, it was suggested that people would buy black bin bags and so on as a substitute for the supermarkets’ plastic bags if they were banned. If we keep going down a route that involves people not changing their habits but instead trying to find other polluting means of carrying things around, we will have to take a stand at some point. That is not an argument against the people who make plastic bags, as many kinds of bags are being discussed in this context. Many of us on the greener wing of the debate have collections of cotton bags and other sorts of bags that are handed out freely by organisations to encourage us not to use plastic or paper ones. However, the point is that we need to have a climate change in how people carry their goods about.

In the countryside, we have barbed-wire fences festooned with plastic, and plastic bags are the main reasons for that. As plastic bags can escape and end up in our environment in that way, there must be some means of curbing their use. I do not believe that the voluntary approach works in that regard. I rarely use large supermarkets, but I see people routinely handing out plastic bags in small village shops. I refuse them all the time, if I can.

In the circumstances, we have to keep a provision in the bill that makes it possible for action to be taken. We need to assure people that we are not in any way trying to stop people doing jobs that are legitimate or from making the things that they do. However, we need to recognise that the way in which people must change their behaviour must be asserted in the bill.

Alison McInnes: I was not in the Parliament when Mike Pringle’s bill was dealt with, but I have to say that my colleague was right to raise that debate at that time. I think that the situation has moved on significantly since then. The pace of change might not be as great as we would like it to be, but we have seen what voluntary effort can do.

It was clear at stage 1 of this bill that members have quite strong feelings about this issue, and I have been trying to weigh up the arguments.

It seems to me that there is some benefit to leaving section 59 in the bill, as it is only an enabling power. I am not yet persuaded by the arguments that have been put forward in favour of removing it.

Stewart Stevenson: I was interested that Des McNulty said that he was captivated by unhygienic bags. I would gently make the point that the study to which he referred was funded by the plastic bag industry, which means that one might wish to look again at its terms of reference and the independence of those who conducted it. I should, of course, say that I do not automatically conclude that an industry funding a study is necessarily at it, as it were.

I draw colleagues’ attention to the fact that the UK Government included the power to introduce charges for single-use bags in its Climate Change Bill.

Alex Johnstone: Disgraceful.

Stewart Stevenson: As the member says, that was quite disgraceful. However, the principled argument that was put forward against a similar power being included in our bill is, perhaps, undermined by that.

I also note that my good personal friend—even if she is my political opponent—Jane Davidson, the Minister for the Environment, Sustainability and Housing in the Welsh Assembly Government, has announced that she is planning to implement a levy on plastic bags in Wales. I wish her every success in that.

The voluntary work by retailers that Alex Johnstone rightly praised at stage 1 has delivered some encouraging early results, but it is clear that we cannot rely solely on a voluntary approach to deliver the goods and, therefore, that we should retain the powers in section 59 to exercise them if and when they are required.

Des McNulty: The minister and other members have made much of being driven by the evidence, which inevitably relies on numbers. It seems to me that the evidence against section 59—the numerical argument against taking out plastic bags in particular and allowing their substitution by other materials—

Stewart Stevenson: I hope that Des McNulty will acknowledge that section 59 is not about plastic bags but about bags generally.
Des McNulty: I acknowledge that, but it is likely to be targeted at plastic bags. That is obviously the approach that the minister wants to take. Ministers will need to consider how to implement it, but the presumption behind it is the removal of plastic bags. The reality is that significant consequences are associated with replacing single-use plastic bags with heavier-duty bags that are often plastic coated and much less easily recyclable. It is important that we consider the consequences of substituting something that is relatively light and that can be reused or recycled with something that is intended for reuse but causes a significant amount of additional carbon in its production and is difficult to recycle.

It strikes me that there is a considerable debate to be had about packaging in Scotland and the rest of the UK. Supermarkets provide many goods pre-packaged. The packaging consists of lots and lots of cardboard and exists for the supermarkets’ use, as it allows them to organise their shelves. If we want to tackle packaging, we should start by focusing on how the supermarkets organise themselves rather than on the bags that the consumer uses. That is an easy target for Governments and the industry and there is a considerable anti-consumer aspect to the matter.

There are good arguments against section 59. It is a bad principle to introduce enabling powers for a measure that the Government says it does not have the case for putting into effect. The minister has not made an adequate case for introducing it, especially in the context of previous consideration, and I hope that the committee will support my amendment and remove the section from the bill.

The Convener: The question is, that amendment 74 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

For
Gordon, Charlie (Glasgow Cathcart) (Lab)
Johnstone, Alex (North East Scotland) (Con)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

Against
Gibson, Rob (Highlands and Islands) (SNP)
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 4, Against 4, Abstentions 0.

The casting vote will be for the status quo.

Amendment 74 disagreed to.

Sections 60 and 61 agreed to.

After section 61

The Convener: Amendment 247, in the name of Elaine Murray, is in a group on its own.

Elaine Murray: This is a probing amendment, so I will be brief. I am interested to know whether the Government would be prepared to take civil penalties for waste offences further. At one time, I think, the Scottish Environment Protection Agency hoped to explore such issues.

The current statutory maximum on summary conviction is £10,000, which acts as little disincentive to supermarkets or major developers, but which might be a fairly severe penalty for small businesses such as small shops.

There are several ways in which the penalty could be made proportionate to the size of the business. I know that Bill Wilson’s proposed member’s bill deals with the imposition of equity fines on companies, including for environmental offences. Civil penalties could be used, as happens under certain transport provisions, such as those to do with road works and renewable fuels obligations. Competition law could be used, too, although that would probably fall within the UK Government’s competence.

Amendment 247 suggests a framework for the application of variable civil penalties. The scale of such penalties would be a matter for subsequent regulations and would therefore be subject to consultation and parliamentary approval, but the amendment provides scope for the penalty to vary in relation to the financial turnover of the business concerned,

"or to the costs avoided, or income obtained ... as a result of the commission of the offence."

It would enable effective and fair deterrents to be established by the relevant regulatory body.

I move amendment 247.

The Convener: As no members wish to comment, I invite the minister to respond.

Stewart Stevenson: I will be relatively brief. First, I make the technical point that although the maximum fine for such offences in summary proceedings is £10,000, there is no limit in cases of conviction on indictment, so it would be perfectly possible for substantially greater fines to be imposed on large institutions, albeit that that would probably be relatively uncommon.

The environmental crime directive, directive 2008/99/EC, which was agreed last year, restricts the scope of the use of civil penalties, as it requires a variety of environmental offences, including some that relate to waste management, to be subject to criminal penalties.
There are some practical difficulties with amendment 247, in that the penalties that it seeks to impose are not civil penalties in the strict sense. As the amendment is drafted, they would apply only in respect of what the bill establishes as criminal offences. As the new section that amendment 247 proposes is predicated on criminal offences having been committed, it would lead to the possibility that two forms of proceedings, involving very different standards of proof, would be available to deal with the same act—an act that was a criminal offence. The fact that there are issues of fairness at stake is compounded by the provision in subsection (2) of the proposed new section, under which penalties could be levied on persons who had not committed an offence. There might be European convention on human rights issues associated with that.

Subsection (3) of the proposed new section creates a number of difficulties. For example, prosecution in the courts should be prevented only if a penalty is paid, not merely if it “may” be imposed. As all the triggers for civil penalties are criminal offences, it is difficult to envisage that a situation in which any police investigation led to a charge should not, at least arguably, be the subject of criminal proceedings, but all criminal proceedings are to be banned if a civil penalty may be imposed. That, coupled with the fact that no penalty is stated and no maximum is imposed, means that the Government would have unusually broad powers. I am not wholly opposed to that, but I think that it is probably inappropriate and that it was not the intention behind the amendment, so I invite Dr Murray to withdraw it.

Elaine Murray: I invite the minister to indicate whether the opportunity to make the penalty in such cases proportionate to the offence that has been committed will be investigated at a later date.

Stewart Stevenson: I note that Dr Murray referred to Dr Wilson’s proposed equity fines bill, the progress of which we will watch with interest—I have to put it that way, because I am not quite certain that the Government has yet expressed a position on it. It is clearly an interesting proposal and there are a number of opportunities for pursuing the matter in other areas.

Amendment 247, by agreement, withdrawn.

Before section 62

17:45

The Convener: Amendment 248, in the name of Alison McInnes, is in a group on its own.

Alison McInnes: I am grateful to Stop Climate Chaos Scotland for its support and advice in relation to amendment 248. We should all be keen to support access to justice. The amendment aims to ensure that ministers are fully accountable for the conduct of their duties under the bill. Parliamentary responsibility is established under the bill, although perhaps not as clearly as I would like. Given the 40-year lifespan of the bill, it is right to ensure that appropriate opportunity is established for the courts to be able to enforce its provisions. At stage 1, my colleague Ross Finnie criticised the bill because it did not contain such provisions.

Judicial review is the key process by which such enforcement can be delivered. As is normal, such a procedure does not overturn the decision making of the courts but enables them to quash decisions. The procedure follows the Aarhus convention, which has been ratified in the UK but not completely transposed into European law. The convention says that access to judicial review should be available to the “interested public” in environmental matters, such as those that arise from the bill.

In Scotland, unlike in England, there are uncertainties about the standing of environmental interests and no established provisions to limit the financial risks that are associated with taking a case. The English courts have established the use of protective costs orders. Further, judicial review cases do not typically consider the full range of aspects of substantive and procedural legality that are required by the convention.

Amendment 248 was drafted by a leading QC. It would ensure that, as a minimum—perhaps it would be best to say that a precedent would be set—cases arising under the bill meet the Aarhus standards for access to justice. The amendment deals with the three key issues of standing, affordability and the scope of challenges. As a result, it also provides a valuable backstop to existing accountability provisions in the bill and enhances incentives for all ministers to comply fully with the duties that are set out in the bill. The Aarhus convention was developed under the auspices of the United Nations. It sets out three strands: access to information, public participation and access to justice, which is the strand with which my amendment deals.

I have been heartened by the level of engagement of individual citizens and stakeholders during the bill’s development. Stop Climate Chaos Scotland is a fine example of what should happen in a mature democracy and provides a counterargument to everybody who says that there is so much apathy around and that people are not interested in what is happening.

Amendment 248 acknowledges that proper access to judicial review is part of the toolkit that we should make available to active citizens. I hope that members will support it.
I move amendment 248.

Stewart Stevenson: I start by echoing what Alison McInnes said about Stop Climate Chaos Scotland. We have not found ourselves able to support every stage 2 amendment from that source, but the contribution made by that alliance of third sector bodies and the wider public has been important in setting much of the bill’s agenda. It is important to recognise that.

There is a wide range of difficulties with amendment 248, which Ms McInnes has brought to the committee. Transposition of the Aarhus convention is already reflected in Scots law. Indeed, if that were not the case, we would expect the European Commission to review the situation, and I am not aware of any infraction proceedings. There is no question of Scots law not having been brought into line with the requirements of the convention on title and interest. Therefore, subsections (1) and (2) of the proposed new section that the amendment would insert are simply not necessary. If the concern is that the Court of Session would take a narrow approach, there is no past evidence of that happening.

Subsections (3) and (4) of the proposed new section would create a specific procedure for a party to follow when asking the court to impose a cap on their liability for another party’s expenses. It has been recognised that the Court of Session may make such an order—a protective costs order, as it is described in England—and therefore I cannot see that those subsections would add anything to the court’s existing power. I make the point strongly that court rules are generally set by the Lord President of the Court of Session. Albeit that the orders in question are put to Parliament, they are not made or laid by Scottish ministers. That is an important part of the separation of the Scottish legal system that should continue.

The Lord President is currently considering the issue of protective costs orders with a view to determining whether any changes to court rules are necessary.

Subsection (5) of the proposed new section would make provision regarding the scope of any judicial review. The question of what may or may not be competentely looked at in a judicial review falls to be determined by reference to the case law of the Court of Session. I have not been made aware of any undesirable gaps in the court’s approach.

All in all, I do not believe that amendment 248 is necessary, and I strongly recommend that the committee does not support it.

In any event, we will shortly receive the report of Lord Gill’s wide-ranging review of the Scottish civil courts, which expressly considers issues of court procedure and the cost of litigation to parties. It would, at any rate, be wrong to make piecemeal changes in advance of that report, which might well bring forward more substantial and wide-ranging changes to court procedure.

Alison McInnes: The minister has referred to Lord Gill’s review and seemed to accept the principles and the philosophy behind the amendment. Will he have a discussion with the Lord President to ensure that there are no gaps in this instance?

Stewart Stevenson: My apologies—I got distracted there. Could the member replay that for me, please?

Alison McInnes: Certainly. In the first instance, you seemed to support the philosophy behind amendment 248, and you suggested that the Aarhus convention was already enshrined in Scots law.

Stewart Stevenson: Yes, in essence. I am asserting—to summarise it very concisely—that the provisions are all there already.

Alison McInnes: I wish to ask for two things. Can the minister check before stage 3 that there are no gaps in here, and will he have a discussion with the Lord President about the wider impact?

Stewart Stevenson: Yes.

Alison McInnes: In light of that, I will not press the amendment.

Amendment 248, by agreement, withdrawn.

The Convener: Amendment 249, in the name of Des McNulty, is grouped with amendments 249B and 249A.

Des McNulty: Amendment 249 is intended to require the persons mentioned in it to behave in a way that contributes to the achievement of sustainable development. It continues the approach—which I think I initiated under the Water Industry (Scotland) Act 2002, as a member of the equivalent committee in the first session of the Parliament—of imposing a sustainable development duty. It seems entirely appropriate, in the context of climate change, to require ministers and the various public bodies that will be given duties to operate in a way that is consistent with the principles of sustainable development.

The amendment is also consistent with the approach to duties on public bodies that Cathy Peattie has introduced into the bill. I hope that there is coherence between where we will end up as regards those duties and the idea of a general duty of sustainable development.

I note the amendments to amendment 249, in the names of Alison McInnes and Shirley-Anne Somerville, and I will be interested to hear, and will then respond to, the points that those colleagues
make in speaking to their amendments. It is important, in the context of a climate change bill, to introduce a mechanism to ensure that people operate in a way that contributes to the achievement of sustainable development.

I move amendment 249.

Alison McInnes: I congratulate Des McNulty on bringing the issue of sustainable development into the framework of the bill. I absolutely support that approach. I welcome the wording of the whole of the proposed new section that Des McNulty’s amendment would introduce, except for subsection (2)(b). My reason for lodging amendment 249B is linked to our agreeing, last week, to amendment 198, in the name of Cathy Peattie, which I supported. Amendment 198 set out climate change duties for public bodies and included a reference to acting sustainably. It will be essential that our public bodies make choices that are sustainable.

Given that we agreed to those duties on public bodies, the inclusion in the bill of a differently worded sustainable development duty on public bodies, as set out in amendment 249, could lead to confusion about which standard public bodies should apply in acting sustainably. We certainly do not want anything to cloud the issue and allow people to argue over how such a duty should be implemented.

It is essential that there is clarity on the fulfilment of duties in relation to climate change. I hope that Des McNulty accepts my amendment to his amendment in the spirit in which it is intended. The intention is to add clarity to his worthwhile amendment to ensure that the legislation is consistent and clear and that the sustainable development duty is workable. I also support Shirley-Anne Somerville’s amendment to the amendment. I will listen to the debate, and if Des McNulty can persuade me that both approaches are necessary, I will not press my amendment.

I move amendment 249B.

Shirley-Anne Somerville: I welcome Des McNulty’s amendment, which replicates a similar amendment that I had been working on with the RSPB and the Stop Climate Chaos Coalition for some time. I am pleased that it will—I hope—become part of the bill. I support Alison McInnes’s amendment to his amendment because, regardless of how I voted on the duties on public bodies last week, I am concerned that we should have a working sustainable development amendment that does not lead to any potential clashes and problems. I am pleased that she has lodged that amendment to clarify the matter.

I have lodged a small amendment to Des McNulty’s amendment to ensure that the advice that ministers receive from any advisory body has regard to sustainable development. It simply ensures that another body, which I do not think is included in Des McNulty’s amendment, is included in the bill.

Stewart Stevenson: We are content for all three amendments in the group to be agreed to. Although we remain unconvinced on the subject of duties on public bodies, if the matter is to be included in the bill, it should be included in a proper and orderly fashion.

Des McNulty: I am not 100 per cent sure that there is a clash between the “relevant public body” aspect of my amendment and the amendment that was agreed to last week. It is clear that ministers will want to examine this suite of provisions and perhaps lodge further amendments to tidy it up. In that context, I am happy at present to accede to the amendments in the names of Alison McInnes and Shirley-Anne Somerville. I am sure that if it becomes necessary to put the “relevant public body” duty back in and tweak another part of the bill, we can consider amendments that are lodged by ministers at that time.

Amendment 249B agreed to.

Amendment 249A moved—[Shirley-Anne Somerville]—and agreed to.

Amendment 249, as amended, agreed to.

18:00

The Convener: There is light at the end of the tunnel—there are only a couple of groups to go. Amendment 280, in my name, is in a group on its own.

The amendment relates to the Government’s carbon assessment tool, which is being developed with the intention of assessing the carbon impact of future Scottish Government budgets. We discussed the issue in our stage 1 inquiry, and in paragraph 56 of our report we noted the possibility that the carbon assessment process could form a statutory part of consideration of expenditure projects. The same argument applies to the budget as a whole.

When the Cabinet Secretary for Finance and Sustainable Growth was asked at a previous committee meeting whether he was open to that opportunity, he said that he was willing to consider it. I lodged amendment 280 to explore whether the Government is ready to make the carbon assessment tool a required part of the Scottish budget process. If the minister indicated open-mindedness to the principle but a disagreement with the proposed method, I would find it interesting. However, given that we are being told that the assessment tool will be ready to apply to the next Scottish budget, it would be a positive step to take to lock it in for the future and ensure
that future Scottish budgets are introduced alongside information that allows Parliament to assess carbon implications.

I move amendment 280.

Des McNulty: I am not unsympathetic to the purpose of the amendment, but I question whether it is an appropriate mechanism to put into climate change legislation or whether it should be part of a protocol of agreement between the Finance Committee and the Cabinet Secretary for Finance and Sustainable Growth. It is a question of the mechanisms involved in putting together the budget. Perhaps the minister will be able to cast some light on that.

Stewart Stevenson: We are content with the principle behind the amendment—members knew that because it is in line with the commitments made by the cabinet secretary. It would certainly add to the policy approval process and the hard actions that will result from our delivery plan that will assist in plotting the path to drive down emissions. Overall, we recognise absolutely the spirit in which the amendment was lodged.

There are several difficulties with the drafting of the amendment, which I will address before I respond to Des McNulty’s point. The amendment refers to “expenditure” whereas budget bills use different terminology, which is “resources”. The amendment also refers to the impact on greenhouse gas emissions, but expenditure does not impact on emissions; it is the activities that expenditure buys that impact on greenhouse gas emissions. Those two flaws in the drafting of the amendment prevent me from supporting its specific formulation today.

Des McNulty asked whether the matter would be best dealt with in a protocol between the cabinet secretary and the Finance Committee. I am not sure that I am in a position to comment on that at this stage, although I see clearly why it might be an alternative proposition.

The Convener: Does the minister accept that a protocol—essentially an agreement between the Government and the Parliament—could be subject to change by future Governments, finance secretaries or those carrying out that function on behalf of future Governments, whereas a legal requirement would bind future Governments?

Stewart Stevenson: Although that is manifestly true, the protocol would be a symmetric arrangement that could also be changed at the behest of the Finance Committee. I can see—albeit without having given the matter huge consideration—that there might be advantages for the two key players in the budget process in having the ability to negotiate, as required, what the protocol should be. A protocol would not be simply a get-out-of-jail-free card for the minister; it is a potentially powerful tool for the Finance Committee to insist on the way in which things are done. I do not wish to take a position on that subject now in front of the committee. If the committee wishes me to consult colleagues further, particularly the cabinet secretary, I will be happy to do so.

I return to the substantive issue before us, which is amendment 280 in the convener’s name. I suggest that, in view of its flaws, it would be most appropriate if it were not pressed today.

The Convener: In light of the debate, I wish to consider further the detail of the options that are being explored. I hope that the minister will have a conversation with the cabinet secretary in advance of the stage 3 deadline so that, if a legislative mechanism is proposed and debated at stage 3, there is time for the Government to take a position on whether some variant of what I am proposing now is acceptable.

Amendment 280, by agreement, withdrawn.

Section 62—Equal opportunities
Amendment 228 not moved.
Section 62 agreed to.
Section 63 agreed to.

Section 64—Subordinate legislation
The Convener: I call amendment 229, in the name of Iain Smith, which was previously debated with amendment 224. Does Iain Smith wish to move the amendment?

Iain Smith: Yes—I am still here.
Amendment 229 moved—[Iain Smith]—and agreed to.
Amendment 186 not moved.

The Convener: Amendment 250 is in the name of Maureen Watt, who has been extremely patient—welcome to the committee, Maureen. The amendment is in a group on its own.

Maureen Watt (North East Scotland) (SNP): Thank you, convener. I am aware that you are at the end of a marathon session, so I will be as brief as possible.

Amendment 250 seeks to improve the scope of the parliamentary scrutiny of the secondary legislation that stems from the broad enabling powers of sections 52 to 59 on waste reduction and recycling. As the bill stands, such secondary legislation would be introduced under the affirmative procedure. The Rural Affairs and Environment Committee considers that a number of the policies in those sections are of such importance that, if they are introduced through
subordinate legislation, they could require close parliamentary scrutiny.

During the part of the afternoon that I have been here, members have been making the same point in relation to a number of other amendments, a prime example relating to section 59, which would allow the introduction of charges for carrier bags. When scrutinising those provisions, members considered that the relevant committees should be afforded the time to take evidence from stakeholders, to report on drafts of the legislation and then to recommend necessary changes to the drafting—as opposed to simply being able to vote for or against a motion under the affirmative procedure. The Rural Affairs and Environment Committee concluded that the secondary legislation that stems from such broad enabling powers should therefore be subject to the so-called super-affirmative procedure. Amendment 250 seeks to ensure that that recommendation is reflected in the bill.

The procedure that the amendment outlines would apply to all instruments made under sections 52 to 59, to which it is currently proposed to apply the affirmative procedure. The specific terms of the amendment are relatively clear, so I do not propose to talk through each feature in turn.

I move amendment 250.

Des McNulty: I agree that the amendment is required, especially in view of—I hesitate to say this—the slightly speculative aspects of the bill. Before any measures are introduced, whether under section 59, section 58 or even some of the earlier sections, it is important that there is an appropriate opportunity for people to be properly consulted. That does not just mean parliamentarians; industry is likely to be affected. I broadly support the proposal in the name of Maureen Watt from the Rural Affairs and Environment Committee.

Elaine Murray: I am a member of the Rural Affairs and Environment Committee. Amendment 250 received cross-party support because of the evidence that we received at stage 1.

I referred to amendment 250 in connection with earlier groups of amendments, and the minister expressed a concern that it might delay the introduction or passage of regulations by about seven months. The problem with the affirmative resolution procedure is that instruments must simply be accepted or rejected, and there is no possibility of amending them. If just one part of a set of regulations created a lot of concern, the Parliament’s only option would be to reject the instrument completely and for the Government to bring in further regulations.

Super-affirmative procedure enables amendment and could speed up the process because, if only a part of a set of regulations was a cause for concern but the general principles were acceptable, it would be possible to amend them and produce an acceptable set of regulations. Is that not the case?

Stewart Stevenson: I should explain that seven months is the minimum likely delay; it could be as much as a year. We are being urged to speed and urgency on the bill and, in those circumstances, it would be inappropriate to have such a delay. We have to balance the need to exercise parliamentary scrutiny with market development, and the amendment covers a huge range of the bill. It might cover such issues as a change in prices for and market acceptability of recyclate and force super-affirmative process on to any secondary legislation that was associated with that. We might require to make emergency changes but be unable to do so because of that procedure. In those circumstances, the lead-in would be very painful and inhibit our ability to take necessary action.

I do not wish to turn away the substantive point that is being made, so we must ask what other alternatives are available to the Parliament. There is always a consultation period in advance of the production of any secondary legislation. It is not without precedent for committees, at that stage, to commission their own inquiries and feed into the consultation process. As the opinion of the Parliament is expressed through the subject committees, it would be perverse of any Government—particularly a minority one—to press on if it knew that the legislation would not be passed. That consultation would deliver the same benefit of enhanced scrutiny without restricting the ability of a Government of whatever complexion to respond rapidly and effectively. It would also not involve a 60-day period, which might be substantially longer in calendar terms—possibly as much as 100 days—depending on how a recess fell.

Amendment 250 is the wrong way to solve a problem that I acknowledge.

Des McNulty: I hear what the minister says about delay and I am sure that we would not want any. Nonetheless, does he accept that sections 58 and 59 represent a special case? They are framework proposals that should be subject to super-affirmative resolution. If the amendment were narrowed to those two sections, would he find it more acceptable than he finds the requirement on the whole run of sections, about which he expresses concern?

Stewart Stevenson: I would certainly find it less unacceptable. That change would respond to the generality and breadth of the proposals in amendment 250, but it would leave open the question of how we respond in circumstances in
which there is a degree of urgency. If we put super-affirmative procedure into primary legislation, the Government’s hands would be tied, to be frank, even in circumstances in which the Parliament urged speed upon it. I come back to the point that the consultation period provides the opportunity for the kind of engagement that I think is being sought.

I encourage Maureen Watt, who is promoting the amendment, not to press it and to consider the point that I am making to the committee. At least, I ask her to restrict its scope so that it would not cover all the sections concerned.

Circumstances such as a collapse in the market for recyclates, which is one issue covered in section 58, could well require a degree of urgency of action. I think that we can get the benefits of enhanced scrutiny by another mechanism. I urge the committee not to put the proposed new provisions into the bill at this stage and to consider further the remarks that I have made.

18:15

Maureen Watt: Given what the minister has said about the need to refine amendment 250 so that it applies only to a couple of sections of the bill, I think that it would be in order for me to withdraw it. However, that is not to say that it will not reappear at stage 3 in another form.

The Convener: Maureen Watt wishes to withdraw amendment 250. Is there any objection to that?

Des McNulty: Yes.

The Convener: The question is, that amendment 250 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR

Gordon, Charlie (Glasgow Cathcart) (Lab)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

AGAINST

Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 250 agreed to.

Amendment 230 moved—[Cathy Peattie].

The Convener: The question is, that amendment 230 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR

Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

AGAINST

Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 231 agreed to.

Amendment 231 moved—[Cathy Peattie].

The Convener: The question is, that amendment 231 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR

Gordon, Charlie (Glasgow Cathcart) (Lab)
McInnes, Alison (North East Scotland) (LD)
Peattie, Cathy (Falkirk East) (Lab)

AGAINST

Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 231 agreed to.

Section 65, as amended, agreed to.

Schedule 2

MINOR AND CONSEQUENTIAL MODIFICATIONS

The Convener: I call amendment 232, in the name of Iain Smith, which was previously debated with amendment 222. Are you moving or not moving the amendment, Mr Smith?

Iain Smith: In future, I must be careful not to lodge amendments to schedules on minor and consequential modifications, particularly when I am not moving them.

Amendment 232 not moved.
Schedule 2 agreed to.
Section 66 agreed to.

Section 67—Short title and commencement
Amendment 233 moved—[Rob Gibson]—and agreed to.
Amendment 234 moved—[Cathy Peattie].

The Convener: The question is, that amendment 234 be agreed to. Are we agreed?

Members: No.

The Convener: There will be a division.

FOR
Gordon, Charlie (Glasgow Cathcart) (Lab)
Harvie, Patrick (Glasgow) (Green)
McInnes, Alison (North East Scotland) (LD)
McNulty, Des (Clydebank and Milngavie) (Lab)
Peattie, Cathy (Falkirk East) (Lab)

AGAINST
Gibson, Rob (Highlands and Islands) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)

The Convener: The result of the division is: For 5, Against 3, Abstentions 0.

Amendment 234 agreed to.

Des McNulty: Can we redo amendment 234? I think there is some confusion.

The Convener: On amendment 234, there were five in favour, three against and no abstentions.

Des McNulty: Did you move it, Cathy? I got a bit confused.

Cathy Peattie: I did move it. I got confused between amendment 234 and amendment 228. I am sorry.

The Convener: Amendment 234 was moved and it has been agreed to.

Amendment 235 moved—[Rob Gibson]—and agreed to.
Section 67, as amended, agreed to.

Long title
Amendment 35 moved—[Stewart Stevenson]—and agreed to.
Amendment 236 not moved.

Long title, as amended, agreed to.

Stewart Stevenson: I just want to express thanks to the committee for its positive engagement during stage 2. The Government will consider the timetables and reporting, and I think that we are likely to conclude that we should try to consolidate and align some of the timelines, without seeking to subvert the intentions of the whole range. We have a bill with a wide range of separately described reporting and timelines, which are worthy of further consideration. I thought that it would be useful to give the committee early indication of our plans, which will probably require a substantial set of amendments. However, our intention is not to subvert the decisions that have been made.

The Convener: Thank you. That concludes our agenda for today.

Meeting closed at 18:21.
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Amendments to the Bill since the previous version are indicated by sidelining in the right margin. Wherever possible, provisions that were in the Bill as introduced retain the original numbering.

Climate Change (Scotland) Bill
[AS AMENDED AT STAGE 2]

An Act of the Scottish Parliament to set a target for the year 2050, an interim target for the year 2020, and to provide for annual targets, for the reduction of greenhouse gas emissions; to provide about the giving of advice to the Scottish Ministers relating to climate change; to confer power on Ministers to impose climate change duties on public bodies; to make further provision about mitigation of and adaptation to climate change; to make provision about energy efficiency; to make provision about the reduction and recycling of waste; and for connected purposes.

PART 1
EMISSIONS REDUCTION TARGETS

The 2050 target

1 The 2050 target
(1) The Scottish Ministers must ensure that the net Scottish emissions account for the year 2050 is at least 80% lower than the baseline.
(2) In this Act, the target set out in subsection (1) is known as the “2050 target”.

The interim target

2 The interim target
(1) The Scottish Ministers must ensure that the net Scottish emissions account for the year 2020 is at least 34% lower than the baseline.
(2) In this Act, the target set out in subsection (1) is known as the “interim target”.

2A Modifying the interim target
(1) The Scottish Ministers may, by order, modify the percentage figure mentioned in section 2(1) so as to substitute a higher figure for the one for the time being mentioned there.
(2) If an appropriate Community instrument comes into force, the Scottish Ministers must, before the expiry of the appropriate period, lay a draft of a statutory instrument containing an appropriate order before the Scottish Parliament.
(3) An “appropriate order” means an order under subsection (1) modifying the percentage figure mentioned in section 2(1) so as to substitute a figure of at least 42%.
(4) An “appropriate Community instrument” means a Community instrument—

(a) which contains a commitment to reduce greenhouse gas emissions by at least 30% compared to 1990 levels by 2020; and

(b) which amends the Decision of 26 March 2009 of the European Parliament and of the Council on the effort of Member States to reduce their greenhouse gas emissions to meet the Community’s greenhouse gas emission reduction commitments up to 2020 in the manner envisaged in Article 8(2) of the Decision.

(5) The “appropriate period” means the period of 3 months beginning with the day on which the appropriate Community instrument comes into force.

(6) If a draft of an appropriate order is not laid before the expiry of the appropriate period, the Scottish Ministers must lay the draft as soon as reasonably practicable afterwards.

3 Annual targets

(1) The Scottish Ministers must—

(a) for each year in the period 2010-2050, set a target for the maximum amount of the net Scottish emissions account;

(b) ensure that the net Scottish emissions account for each year in that period does not exceed the target set for that year.

(2) The target—

(a) for 2010, must be set at an amount that is less than the estimated net Scottish emissions account for 2009;

(b) for each year in the period 2011-2019, must be set at an amount that is consistent with a reduction over time of the net Scottish emissions account which would allow the interim target to be met;

(c) for each year in the period 2020-2050, must be set at an amount that is at least 3% less than the target for the preceding year.

(3) In this Act—

(a) an “annual target” for any year means the target for the maximum amount of the net Scottish emissions account set for that year in accordance with this section and section 4;

(b) references to an annual target being met are references to the net Scottish emissions account for a year not exceeding the annual target for that year (and cognate expressions are to be construed accordingly).

4 Setting annual targets

(1) The Scottish Ministers must, by order, set the annual targets for each year in the periods mentioned in paragraphs (a) to (g) of subsection (2).

(2) The Scottish Ministers must set the annual targets for each year—

(a) in the period 2010-2022, no later than 1 June 2010;

(b) in the period 2023-2027, no later than 31 October 2011;

(c) in the period 2028-2032, no later than 31 October 2016;
(d) in the period 2033-2037, no later than 31 October 2021;
(e) in the period 2038-2042, no later than 31 October 2026;
(f) in the period 2043-2047, no later than 31 October 2031;
(g) in the period 2048-2050, no later than 31 October 2036.

(3) The Scottish Ministers must, when setting annual targets, have regard—
(a) in relation to each year in the period 2010-2020, to the achievement of the interim target and the 2050 target;
(b) in relation to each year in the period 2021-2050, to the achievement of the 2050 target.

(4) The Scottish Ministers must, when setting annual targets, also have regard to the following matters (the “target-setting criteria”)—
(a) scientific knowledge about climate change;
(b) technology relevant to climate change;
(c) economic circumstances, in particular the likely impact of the target on—
   (i) the Scottish economy;
   (ii) the competitiveness of particular sectors of the Scottish economy;
   (iii) small and medium-sized enterprises;
   (iv) jobs and employment opportunities;
   (d) fiscal circumstances, in particular the likely impact of the target on taxation, public spending and public borrowing;
   (e) social circumstances, in particular the likely impact of the target on those living in poorer or deprived communities;
   (f) the likely impact of the target on those living in remote rural communities and island communities;
   (g) energy policy, in particular the likely impact of the target on energy supplies, the renewable energy sector and the carbon and energy intensity of the Scottish economy;
   (ga) environmental considerations and, in particular, the likely impact of the targets on biodiversity;
   (h) European and international law and policy relating to climate change.

(5) If annual targets for a period are not set by the corresponding date mentioned in paragraphs (a) to (g) of subsection (2), the Scottish Ministers must set the annual targets as soon as reasonably practicable afterwards.

5 Advice before setting annual targets

(1) The Scottish Ministers must, before laying a draft of a statutory instrument containing an order under section 4(1) before the Scottish Parliament, request and publish advice from the relevant body.

(1A) When providing advice under this section, the relevant body must—
(a) express a view as to whether the annual targets are appropriate; and
(b) explain that view by reference to the target-setting criteria.

(2) As soon as reasonably practicable after laying such a draft, the Scottish Ministers must publish a statement setting out in respect of the annual targets set by the order—

(a) the reasons for setting those annual targets at those levels;

(b) the extent to which those targets take account of the target-setting criteria.

(3) If the order under section 4(1) makes provision different from that recommended by the relevant body, the Scottish Ministers must publish a statement setting out the reasons why.

(4) Advice requested under subsection (1) or a statement under subsection (2) or (3) may be published in such manner as the Scottish Ministers consider appropriate.

(5) In this Part, the “relevant body” means—

(a) where no order has been made under section 19(1) designating a person or body as the advisory body, the UK Committee on Climate Change; or

(b) where such an order has been made, the advisory body.

(6) In subsection (5)(a), the “UK Committee on Climate Change” means the Committee on Climate Change established under section 32 of the Climate Change Act 2008 (c.27) (the “2008 Act”).

6 Modifying annual targets etc.

(1) The Scottish Ministers may, by order, modify—

(a) the percentage figure mentioned in section 3(2)(c);

(b) an annual target set by virtue of section 4(1);

(c) any date mentioned in paragraphs (a) to (g) of section 4(2);

(d) the target-setting criteria in section 4(4).

(1A) The Scottish Ministers must, at the same time as laying a draft of a statutory instrument containing an order under subsection (1)(a) before the Scottish Parliament, lay before the Parliament a report explaining why the modification is being proposed.

(1B) The Scottish Ministers must, as soon as reasonably practicable after laying a report before the Scottish Parliament under subsection (1A), and in so far as reasonably practicable, make a statement to the Parliament relating to the report.

(2) The Scottish Ministers may make an order under subsection (1)(a) only if they consider that it is no longer necessary for annual targets to be set by reference to that percentage figure.

(3) The Scottish Ministers may make an order under subsection (1)(b) only if they consider that it is appropriate to do so as a result of—

(a) a modification of the interim target; or

(b) another significant change to the basis on which the annual target was set.

(4) The Scottish Ministers may make an order under subsection (1)(c) or (d) only if they consider it appropriate to do so.

(5) The power in subsection (1)(a) may not be exercised so as to substitute a percentage of less than zero.
(6) The power in subsection (1)(b)—
   (a) may be exercised only before the beginning of the year to which the target relates;
   (b) may not be exercised if the effect of doing so would be that the target for the year
       would be greater than the target for the preceding year.

7 **Advice before modifying annual targets etc.**

   (1) The Scottish Ministers must, before laying a draft of a statutory instrument containing
       an order under section 6(1) before the Scottish Parliament, request advice from the
       relevant body.

   (2) If the order under section 6(1) makes provision different from that recommended by the
       relevant body, the Scottish Ministers must lay before the Scottish Parliament a report
       setting out the reasons why.

   (3) The Scottish Ministers must, as soon as reasonably practicable after laying a report
       before the Scottish Parliament under subsection (2), and in so far as reasonably
       practicable, make a statement to the Parliament relating to the report.

7A **Achievement of annual targets: domestic effort target**

   (1) The Scottish Ministers must ensure that reductions in net Scottish emissions of
       greenhouse gases account for at least 80% of the reduction in the net Scottish emissions
       account in any target year.

   (2) In this Act, the target set out in subsection (1) is known as the “domestic effort target”.

   (3) The Scottish Ministers may, by order, modify the percentage figure mentioned in
       subsection (1) so as to substitute a higher figure for the one for the time being mentioned
       there.

   (4) Before making an order under subsection (3) the Scottish Ministers must request advice
       from the relevant body.

   (5) If the order under subsection (3) makes provision different from that recommended by
       the relevant body, the Scottish Ministers must publish a statement setting out the reasons
       why.

   (6) A statement under subsection (5) may be published in such manner as the Scottish
       Ministers consider appropriate.

30 **Advice on progress**

8 **Progress towards targets**

   (1) The Scottish Ministers must in each year, beginning with the year 2011, request the
       relevant body to prepare a report setting out that body’s views on—

       (a) progress towards achievement of—

           (i) annual targets;

           (ii) the interim target;

           (iii) the 2050 target;

       (b) whether the annual targets, the interim target or the 2050 target are likely to be
           achieved;
(c) any further effort which may be necessary to achieve annual targets, the interim target or the 2050 target.

(2) No later than the end of the second year following a year for which an annual target has been set (a “target year”), the Scottish Ministers must request the relevant body to prepare a report setting out that body’s views on—

(a) whether the annual target for the target year was met;

(aa) whether the domestic effort target was met in that target year;

(b) the ways in which those targets were or were not met;

(c) the action taken by the Scottish Ministers to reduce net Scottish emissions during that year.

(3) The Scottish Ministers must lay a response to the relevant body’s report under this section before the Scottish Parliament as soon as reasonably practicable after they receive that body’s report.

Greenhouse gases

(1) In this Act, a “greenhouse gas” means—

(a) carbon dioxide;

(b) methane;

(c) nitrous oxide;

(d) hydrofluorocarbons;

(e) perfluorocarbons;

(f) sulphur hexafluoride.

(2) The Scottish Ministers may, if they consider it appropriate to do so, by order, modify subsection (1) so as to—

(a) add a gas;

(b) modify the description of a gas.

(3) The power in subsection (2)(a) may be exercised only if it appears to the Scottish Ministers that an agreement or arrangement at European or international level recognises that the gas to be added contributes to climate change.

(4) The Scottish Ministers must, before laying a draft of a statutory instrument containing an order under subsection (2) before the Scottish Parliament, request advice from the relevant body.

(5) If the order makes provision different from that recommended by the relevant body, the Scottish Ministers must publish a statement setting out the reasons why.

(6) A statement under subsection (5) may be published in such manner as the Scottish Ministers consider appropriate.
Baseline

10 The baseline

(1) In this Act, the “baseline” means the aggregate amount of—
   (a) net Scottish emissions of carbon dioxide for 1990; and
   (b) net Scottish emissions of each of the greenhouse gases other than carbon dioxide
       for the year that is the baseline year for that gas.

(2) The baseline years for greenhouse gases other than carbon dioxide are—
   (a) for methane, 1990;
   (b) for nitrous oxide, 1990;
   (c) for hydrofluorocarbons, 1995;
   (d) for perfluorocarbons, 1995;
   (e) for sulphur hexafluoride, 1995.

11 Baselines for additional greenhouse gases

(1) This section applies where the Scottish Ministers have made an order under section
    9(2)(a) adding a greenhouse gas.

(2) In this section, such a gas is referred to as an “additional greenhouse gas”.

(3) The Scottish Ministers may, by order, make provision as to the manner of determining,
    in the case of an additional greenhouse gas, the amount of net Scottish emissions for the
    baseline year.

(4) An order under subsection (3) may in particular—
    (a) designate a year as the baseline year for the additional greenhouse gas;
    (b) provide for the amount of net Scottish emissions of the gas for that year to be
        treated for the purposes of this Act as the amount of net Scottish emissions of that
        gas for that baseline year.

Supplementary

12 The net Scottish emissions account

(1) The net Scottish emissions account means the aggregate amount of net Scottish
    emissions of greenhouse gases—
    (a) reduced by the amount of carbon units credited to the net Scottish emissions
        account for the period in accordance with regulations under subsection (2); and
    (b) increased by the amount of carbon units that, in accordance with such regulations,
        are to be debited from the net Scottish emissions account for the period.

(1A) The net amount of carbon units credited to the net Scottish emissions account for a year
     for which an annual target has been set (a “target year”) must not exceed the allowable
     amount.

(1B) The “allowable amount” is—
(a) the amount equal to the limit, set by virtue of section 18A(1), on the net amount of carbon units that may be credited to net Scottish emissions accounts during the period which includes the target year; or
(b) where a net amount of carbon units has been credited to the net Scottish emissions account for any other target year in that period, the balance (if any) remaining of the amount referred to in paragraph (a).

(1C) In subsections (1A) and (1B), the “net amount of carbon units” has the meaning given by section 18A(3).

(2) The Scottish Ministers may, by regulations, make provision about—
(a) the circumstances in which carbon units may be credited to the net Scottish emissions account for a period;
(b) the circumstances in which such units may be debited from that account for a period;
(c) the manner in which this is to be done.

(3) The regulations must contain provision for ensuring that carbon units that are credited to the net Scottish emissions account for a period cease to be available to offset other greenhouse gas emissions.

12A Restriction on use in 2010-2012 of carbon units purchased by Scottish Ministers
(1) The Scottish Ministers may not, where subsection (2) applies, credit to the net Scottish emissions account for a year in the period 2010-2012 any carbon units purchased by them.
(2) This subsection applies provided the percentage figure mentioned in section 2(1) is 34%.

13 Attribution of emissions to Scotland
For the purposes of section 15(1), emissions of a greenhouse gas are attributable to Scotland if—
(a) they are emitted from sources in Scotland;
(b) they are attributed to Scotland by virtue of an order under section 14(1).

14 Scottish share of emissions from international aviation and international shipping
(1) The Scottish Ministers may, by order, make provision regarding the emissions of greenhouse gases from international aviation and international shipping that are attributable to Scotland.
(2) An order under subsection (1) may make provision—
(a) as to the period or periods (whether past or future) in which emissions of a greenhouse gas are to be taken into account as Scottish emissions of that gas;
(b) as to the manner in which such emissions are to be taken into account in determining Scottish emissions of that gas for the year that is the baseline year for that gas.
(2A) A draft of a statutory instrument containing the first order under subsection (1) must be laid before the Scottish Parliament no later than 1 June 2010.
(2B) If a draft of the first order is not laid by the date mentioned in subsection (2A), the Scottish Ministers must lay the draft as soon as reasonably practicable afterwards.

(3) The Scottish Ministers must, before laying a draft of a statutory instrument containing an order under subsection (1) before the Scottish Parliament, request advice from the relevant body.

(4) If the order makes provision different from that recommended by the relevant body, the Scottish Ministers must publish a statement setting out the reasons why.

(5) A statement under subsection (4) may be published in such manner as the Scottish Ministers consider appropriate.

15 Scottish emissions and removals

(1) In this Act—

“emissions”, in relation to a greenhouse gas, means emissions of that gas into the atmosphere that are attributable to human activity;

“Scottish emissions”, in relation to a greenhouse gas, means emissions of that gas which are attributable to Scotland;

“Scottish removals”, in relation to a greenhouse gas, means removals of that gas from the atmosphere due to land use, land-use change or forestry activities in Scotland;

“the net Scottish emissions” for a period, in relation to a greenhouse gas, means the amount of Scottish emissions of that gas for the period reduced by the amount of Scottish removals of that gas for the period.

(2) The Scottish Ministers may, if they consider it appropriate to do so, by order, modify the definition of Scottish removals in subsection (1).

(3) The amount of Scottish emissions and Scottish removals of a greenhouse gas for a period must, in so far as reasonably practicable, be determined consistently with international carbon reporting practice.

16 Measurement of emissions etc.

(1) For the purposes of this Act, greenhouse gas emissions, reductions of such emissions and removals of greenhouse gases from the atmosphere are measured or calculated in tonnes of carbon dioxide equivalent.

(2) A “tonne of carbon dioxide equivalent” means one metric tonne of carbon dioxide or an amount of any other greenhouse gas with an equivalent global warming potential (calculated consistently with international carbon reporting practice).

17 International carbon reporting practice

In this Act, “international carbon reporting practice” means accepted practice in relation to reporting for the purposes of—

(a) the protocols to the United Nations Framework Convention on Climate Change;

(b) such other agreements or arrangements at European or international level as the Scottish Ministers may, by order, specify.
18 Carbon units and carbon accounting

(1) The Scottish Ministers may, by regulations, make provision for a scheme—
(a) for registering or otherwise keeping track of carbon units;
(b) for establishing and maintaining accounts in which carbon units may be held, and
between which they may be transferred, by the Scottish Ministers.

(2) Regulations under subsection (1) may, in particular, provide for an existing scheme to
be adapted for these purposes.

(3) The regulations may also include provision—
(a) designating a person or body to administer the scheme;
(b) establishing a person or body for that purpose and making such provision in
relation to the appointment of members, staffing, expenditure, procedure and
otherwise of the person or body as the Scottish Ministers consider appropriate;
(c) conferring power on the Scottish Ministers to give guidance or directions to the
person or body administering the scheme;
(d) conferring power on the Scottish Ministers to delegate the performance of any of
the functions conferred on them by the regulations;
(e) requiring the payment by persons using the scheme of such charges as are
reasonably required to cover the reasonable costs incurred in operating the
scheme.

(4) In this Act, a “carbon unit” means a unit of a kind specified in regulations made under
subsection (1) and which represents—
(a) a reduction in an amount of greenhouse gas emissions;
(b) the removal of an amount of greenhouse gas from the atmosphere;
(c) an amount of greenhouse gas emissions allowed under a scheme or arrangement
imposing a limit on such emissions.

18A Limits on use of carbon units

(A1) The Scottish Ministers may only credit to the net Scottish emissions account for a year
in the period 2013-2017 carbon units purchased by them up to a limit of 20% of the
reduction in the amount of the net Scottish emissions account planned for that year.

(1) The Scottish Ministers must, by order, set a limit on the net amount of carbon units that
may be credited to net Scottish emissions accounts during the periods mentioned in
paragraphs (a) to (i) of subsection (2).

(2) The Scottish Ministers must set the limit—
(a) for the period 2010-2012, no later than 1 June 2010;
(c) for the period 2018-2022, no later than 31 December 2016;
(d) for the period 2023-2027, no later than 31 December 2021;
(e) for the period 2028-2032, no later than 31 December 2026;
(f) for the period 2033-2037, no later than 31 December 2031;
(g) for the period 2038-2042, no later than 31 December 2036;
(h) for the period 2043-2047, no later than 31 December 2041;
(i) for the period 2048-2050, no later than 31 December 2046.

(3) The “net amount of carbon units” means C minus D, where—
   “C” is the amount of carbon units credited to net Scottish emissions accounts
during the period in accordance with regulations under section 12(2);
   “D” is the amount of carbon units debited from net Scottish emissions accounts
during the period in accordance with such regulations.

(4) An order under subsection (1) may provide that carbon units of a description specified in
the order do not count towards the limit.

(5) If the limit for a period is not set by the corresponding date mentioned in paragraphs (a)
to (i) of subsection (2), the Scottish Ministers must set the limit as soon as reasonably
practicable afterwards.

18B Modifying limits on use of carbon units etc.

(1) The Scottish Ministers may, by order, modify—
   (a) a limit on the use of carbon units set by virtue of section 18A(1);
   (b) any date mentioned in paragraphs (a) to (i) of section 18A(2).

(2) The Scottish Ministers may make an order under subsection (1)(a) only if they consider
that it is appropriate to do so as a result of—
   (a) a modification of the interim target; or
   (b) another significant change to the basis on which the limit on the use of carbon
      units was set.

(3) The Scottish Ministers may make an order under subsection (1)(b) only if they consider
it appropriate to do so.

(4) An order under subsection (1)(a) may provide that carbon units of a description
specified in the order do not count towards the limit.

18C Advice before setting or modifying limits on use of carbon units etc.

(1) The Scottish Ministers must, before laying a draft of a statutory instrument containing
an order under section 18A(1) or 18B(1) before the Scottish Parliament, request advice
from the relevant body.

(2) If the order under section 18A(1) or 18B(1) makes provision different from that
recommended by the relevant body, the Scottish Ministers must publish a statement
setting out the reasons why.

(3) A statement under subsection (2) may be published in such manner as the Scottish
Ministers consider appropriate.
**PART 2**

**ADVISORY FUNCTIONS**

**19 Meaning of advisory body**

Advisory body

(1) The Scottish Ministers may, by order, designate—

(a) a body established under section 20(1); or

(b) such other public body as they consider appropriate,

to exercise the functions mentioned in subsection (3) (the “advisory functions”).

(2) In this Act, the body designated by virtue of subsection (1) is the “advisory body”.

(3) The advisory functions are—

(a) the function of providing advice, analysis, information and other assistance to the Scottish Ministers in respect of Ministers’ duty under section 2 and functions under sections 5, 7, 8 and 9(4);

(b) the functions conferred on the advisory body by sections 22 to 27; and

(c) such other functions relating to advice on climate change as the Scottish Ministers may confer by an order under subsection (1).

(4) An order under subsection (1) may in particular provide—

(a) for the conferral of functions on the advisory body relating to advice on climate change;

(b) for the information that advice must contain;

(c) for the factors to which the body is to have regard in giving that advice;

(d) for the period within which the body must give that advice;

(e) as to whom that advice is to be given;

(f) for the form and manner in which that advice is to be published and laid before the Scottish Parliament.

(5) In subsection (1)(b), a “public body” means a person or body with functions of a public nature.

**Scottish Committee on Climate Change**

**20 Scottish Committee on Climate Change**

(1) The Scottish Ministers may, by order, establish a body for the purpose of exercising the advisory functions.

(2) The body established by virtue of subsection (1) is to be known as the Scottish Committee on Climate Change (the “Committee”).

(3) Schedule 1 makes further provision about the Committee.

(4) An order under subsection (1) may in particular provide—

(a) for the conferral of functions on the Committee relating to advice on climate change;
(b) in relation to the status, constitution and proceedings of the Committee as the Scottish Ministers consider appropriate;
(c) for the information that the Committee’s advice must contain;
(d) for the factors to which the Committee is to have regard in giving that advice;
(e) for the period within which the Committee must give that advice;
(f) as to whom that advice is to be given;
(g) for the form and manner in which that advice is to be published and laid before the Scottish Parliament.

21 **Application of sections 22 to 27**

(1) Sections 22 to 27 and 45C have effect only from—

(a) the date when an order made by the Scottish Ministers under section 19(1) comes into force; or
(b) such later date or dates as the Scottish Ministers may specify in an order under that section.

(2) When an order under section 19(1)—

(a) bringing section 24 into effect comes into force, subsection (3) of section 8 ceases to have effect;
(b) bringing section 45C into effect comes into force, subsection (4) of section 45B ceases to have effect.

22 **Advice on annual targets etc.**

(1) When requested to do so by the Scottish Ministers, the advisory body must provide the Scottish Ministers with advice as regards—

(a) annual targets Ministers propose to set under section 4;
(b) a modification Ministers propose to make under section 6.

(2) When providing advice under subsection (1)(a), the advisory body must—

(a) express a view as to what annual targets are appropriate; and
(b) explain that view by reference to the target-setting criteria.

(3) When providing advice under subsection (1)(a), the advisory body must also express a view as to—

(a) the extent to which the annual targets should be met—
(i) by taking action to reduce net Scottish emissions;
(ii) by the use of carbon units that in accordance with section 12(1A) and regulations under section 12(2) may be credited to the net Scottish emissions account;
(b) the respective contributions towards meeting the annual targets and the domestic effort target that should be made—
(i) by the traded sector of the Scottish economy;
(ii) by the other sectors of the Scottish economy;
(ba) the respective contributions towards meeting the annual targets that should be made by—

(i) energy efficiency;
(ii) energy generation;
(iii) land use;
(iv) transport.

(4) The advisory body must provide advice under this section within such period as the Scottish Ministers may reasonably request.

(5) In subsection (3)(b)(i), “traded sector” means the sectors of the Scottish economy which are covered by trading schemes within the meaning of section 44 of the 2008 Act.

23 Reporting on progress towards targets

(1) The advisory body must, in each year beginning with the specified year, prepare a report setting out that body’s views on—

(a) progress towards achievement of—

(i) annual targets;
(ii) the interim target;
(iii) the 2050 target;

(b) whether the annual targets, the interim target or the 2050 target are likely to be achieved;

(c) any further effort which may be necessary to achieve annual targets, the interim target or the 2050 target.

(2) In subsection (1), the “specified year” means such year as the Scottish Ministers may, by order, specify.

(3) A report prepared in a relevant year must also set out the advisory body’s views on the matters mentioned in subsection (3C).

(3A) In subsection (3), the “relevant year” means such year as the Scottish Ministers may, by order, designate in accordance with subsection (3B).

(3B) The year which may be designated under subsection (3A) is the first year following a year for which an annual target has been set (a “target year”) or the second year following a target year.

(3C) The matters referred to in subsection (3) are—

(a) whether the annual target for the target year was met;

(aa) whether the domestic effort target was met in that target year;

(b) the ways in which those targets were or were not met;

(c) the action taken by the Scottish Ministers to reduce net Scottish emissions during that year.

(4) The advisory body must lay a report under this section before the Scottish Parliament no later than—

(a) 31 January in the third year following the target year; or
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(b) such other date as the Scottish Ministers may, by order, appoint.

24 Scottish Ministers’ response to reports on progress
(1) The Scottish Ministers must lay before the Scottish Parliament a response to a report laid by the advisory body before the Parliament under section 23.

(2) The response to the advisory body’s report must be laid before the Parliament no later than—
   (a) 31 March in the third year following the year for which an annual target has been set; or
   (b) such other date as the Scottish Ministers may, by order, appoint.

25 Duty of advisory body to provide advice or other assistance
When requested to do so by the Scottish Ministers, the advisory body must provide advice, analysis, information or assistance as regards—
   (a) the exercise of the Scottish Ministers’ functions under this Act;
   (b) the exercise of Ministers’ functions in relation to climate change other than under this Act;
   (c) other matters relating to climate change.

26 Guidance to advisory body
(1) The advisory body must have regard to any guidance given by the Scottish Ministers to it in relation to the exercise of its functions under this Act.

(2) The Scottish Ministers may not give the advisory body guidance as to the content of any advice or report.

(3) The power to give guidance under subsection (1) includes power to vary or revoke the guidance.

27 Power to give directions to advisory body
(1) The Scottish Ministers may, if they consider it appropriate to do so, give the advisory body directions as to the exercise of its functions under this Act.

(2) The Scottish Ministers may not direct the advisory body as to the content of any advice or report.

(3) The power to give directions under subsection (1) includes power to vary or revoke the directions.

(4) The advisory body must comply with any directions given under subsection (1).
PART 3
REPORTING DUTIES

28 Reports on annual targets

(1) The Scottish Ministers must lay before the Scottish Parliament a report in respect of each year in the period 2010-2050 for which an annual target has been set (a “target year”).

(2) The report must state whether the annual target for the target year has been met.

(3) If the annual target has not been met, the report must explain why.

(3A) The report must also state whether the domestic effort target has been met in the target year to which the report relates.

(3B) If the domestic effort target has not been met, the report must explain why.

(4) The report must also contain the information mentioned in section 29.

(5) The report under this section must be laid before the Parliament no later than 31 October in the second year after the target year.

29 Reports on annual targets: content

(1) In respect of each greenhouse gas, the report must—
   (a) state the amount of net Scottish emissions for the baseline year;
   (b) state the amount of net Scottish emissions for the target year;
   (c) state whether the amount of net Scottish emissions represents an increase or decrease compared to the equivalent amount for the previous target year;
   (d) identify the methods used to measure or calculate the amount of net Scottish emissions (including in particular any change to those methods).

(2) The report must also set out the aggregate amount for the target year of net Scottish emissions.

(3) The report must also—
   (a) state the amount of the net Scottish emissions account for the target year;
   (aa) state the proportion of the reduction in the net Scottish emissions account which is accounted for by reductions in net Scottish emissions;
   (b) state the total amount of carbon units—
      (i) that have been credited to or debited from the net Scottish emissions account for the target year;
      (ii) that have been purchased in the target year;
      (iii) that have been held and not surrendered in the target year;
   (c) give details of the number and type of those carbon units.

(4) The report must also—
   (a) state the amount of Scottish gross electricity consumption for the target year;
   (b) state the amount of Scottish electricity generation for the target year;
(c) state the average greenhouse gas emissions per megawatt hour of electricity generated in Scotland in the target year;

(d) state the average greenhouse gas emissions per megawatt hour, and the estimated lifetime cumulative emissions, of any new electricity generation capacity greater than 50 megawatts approved in Scotland in the target year.

(4A) The report for each year in the period 2011-2050 must—

(a) state the amount of the net Scottish emissions account for each preceding target year;

(b) state the cumulative amount of the net Scottish emissions account for the target year and all preceding target years.

(5) If the method of measuring or calculating net Scottish emissions changes and that change is such as to require adjustment of an amount for an earlier target year, the report must specify the adjustment required and state the adjusted amount.

(6) An adjustment under subsection (5) must, in so far as reasonably practicable, be made in accordance with international carbon reporting practice.

(6A) If the amount of the net Scottish emissions account for an earlier target year requires to be adjusted, the report must—

(a) explain why the adjustment is required;

(b) specify the adjustment required; and

(c) state the adjusted amount.

(7) The report may contain such other information as the Scottish Ministers consider appropriate and, in particular, may state the amount of Scottish electricity generation from each source for the target year.

30 Reports on proposals and policies for meeting annual targets

(1) As soon as reasonably practicable after making an order under section 4(1) setting annual targets, the Scottish Ministers must lay before the Scottish Parliament a report containing the following information.

(2) The report must, in particular, set out—

(a) the Scottish Ministers’ proposals and policies for meeting the annual targets;

(b) how those proposals and policies are expected to contribute towards the achievement of the interim target, the 2050 target and, in each target year, the domestic effort target;

(c) the timescales over which those proposals and policies are expected to take effect.

(3) The report must also explain how the proposals and policies set out in the report are expected to affect different sectors of the Scottish economy.

(4) The second and each subsequent report under this section—

(a) must contain an assessment of the progress towards implementing proposals and policies set out in earlier reports;

(b) may make such adjustments to those proposals and policies as the Scottish Ministers consider appropriate.
31 Reports on proposals and policies where annual targets not met

(1) This section—
(a) applies if the Scottish Ministers lay a report under section 28 which states that an
annual target has not been met or that the domestic effort target has not been met
in the target year to which the report relates;
(b) does not apply if that report relates to the annual target for 2050.

(2) As soon as reasonably practicable after the report referred to in subsection (1)(a) has
been laid, the Scottish Ministers must lay a report before the Scottish Parliament setting
out proposals and policies to compensate in future years for the excess emissions.

31A Reports on emissions attributable to Scottish consumption of goods and services

(1) The Scottish Ministers must lay before the Scottish Parliament a report in respect of
each year in the period 2010-2050 containing the following information.

(2) The report must, in so far as reasonably practicable, set out the emissions of greenhouse
gases (whether in Scotland or elsewhere) which are produced by or otherwise associated
with the consumption and use of goods and services in Scotland during that year.

(3) The report may also contain such other information as the Scottish Ministers consider
appropriate.

31B Report on progress towards meeting the interim target

(1) The Scottish Ministers must, no later than 31 December 2015, lay before the Scottish
Parliament a report on progress towards meeting the interim target.

(2) The report must, in particular, state the progress that has been made in reducing
emissions and indicate whether this progress is consistent with a reduction over time of
the net Scottish emissions account which would allow the interim target and the 2050
target to be met.

32 Report on the interim target

(1) The Scottish Ministers must lay before the Scottish Parliament a report containing the
following information in respect of the year 2020.

(2) The report must state whether the interim target has been met.

(3) If the interim target has not been met, the report must explain why.

(4) In respect of each greenhouse gas, the report must state the amount of net Scottish
emissions for 2020.

(5) The report must also—
(a) state the amount of the net Scottish emissions account for 2020;
(aa) state the cumulative amount of the net Scottish emissions account for the period
2010-2020;
(b) state the total amount of carbon units—
(i) that have been credited to or debited from the net Scottish emissions
account for 2020;
(ii) that have been purchased in 2020;
(iii) that have been held and not surrendered in 2020;
(c) give details of the number and type of those carbon units.

(6) In subsections (4) and (5), the amount means the amount set out in the report for 2020 made under section 28.

(7) The report may contain such other information as the Scottish Ministers consider appropriate.

(8) The report under this section must be laid before the Parliament no later than 31 October 2022.

33 Report on the 2050 target

(1) The Scottish Ministers must lay before the Scottish Parliament a report containing the following information in respect of the year 2050.

(2) The report must state whether the 2050 target has been met.

(3) If the 2050 target has not been met, the report must explain why.

(4) In respect of each greenhouse gas, the report must state the amount of net Scottish emissions for 2050.

(5) The report must also—
   (a) state the amount of the net Scottish emissions account for 2050;
   (aa) state the cumulative amount of the net Scottish emissions account for the period 2010-2050;
   (b) state the total amount of carbon units—
      (i) that have been credited to or debited from the net Scottish emissions account for 2050;
      (ii) that have been purchased in 2050;
      (iii) that have been held and not surrendered in 2050;
   (c) give details of the number and type of those carbon units.

(6) In subsections (4) and (5), the amount means the amount set out in the report for 2050 made under section 28.

(7) The report may contain such other information as the Scottish Ministers consider appropriate.

(8) The report under this section must be laid before the Parliament no later than 31 October 2052.

34 Reports: provision of further information to the Scottish Parliament

(1) Where the Scottish Ministers lay a report mentioned in subsection (2) before the Scottish Parliament, they must—

   (a) immediately send a copy of the report to the persons who convene and chair such committees of the Scottish Parliament as are for the time being appointed by virtue of standing orders; and
   (b) as soon as reasonably practicable after doing so, and in so far as reasonably practicable, make a statement to the Parliament relating to the report.
(2) Those reports are reports under—
(a) section 28(1) (report on annual target);
(b) section 30(1) (report on proposals and policies for meeting annual targets);
(c) section 31(2) (report on proposals and policies to compensate for excess emissions);
(d) section 32(1) (report on interim target);
(e) section 33(1) (report on 2050 target).

(3) Where the Scottish Ministers lay a report referred to in subsection (2)(a), they must also, as soon as reasonably practicable after doing so, and in so far as reasonably practicable, attend, if invited, the proceedings of any such committees of the Scottish Parliament as are for the time being appointed by virtue of standing orders, for the purposes of giving evidence on the report.

(4) The Scottish Ministers must have regard to any resolution or report of, or of any committee of, the Scottish Parliament made following the laying of a report mentioned in subsection (2) as regards the contents of the report and any future reports.

35 Further provision about reporting duties

(1) The Scottish Ministers may, if they consider it appropriate to do so, by order, make further provision imposing duties on themselves to report to the Scottish Parliament.

(2) An order under subsection (1) may in particular—
(a) provide for the information to be provided under the duties;
(b) provide for the period in relation to which that information is to be provided;
(c) provide for the period within which that information is to be provided.

36 Duties of public bodies relating to climate change

(A1) A public body must, in exercising its functions, act—
(a) in the way best calculated to contribute to the delivery of the targets set in or under Part 1 of this Act;
(b) in the way best calculated to help deliver any programme laid before the Scottish Parliament under section 45;
(c) in a way that it considers is most sustainable.

(A2) In this Part, a “public body” means a Scottish public authority within the meaning of section 3(1)(a) of the Freedom of Information (Scotland) Act 2002 (asp 13).

(1) The Scottish Ministers may, if they consider it appropriate to do so, by order, make further provision relating to the imposition on public bodies of duties relating to climate change.
(1A) The duties imposed by subsection (A1) and any duty imposed by virtue of an order under subsection (1) are referred to in this Act as “climate change duties”.

(2) In this Part, a public body which has climate change duties under subsection (A1) or by virtue of subsection (1) is a “relevant public body”.

(3) An order under subsection (1) may in particular—

(a) impose climate change duties on—
   (i) all public bodies;
   (ii) public bodies of a particular description;
   (iii) individual public bodies;

(b) impose different climate change duties on different public bodies or descriptions of public body;

(c) remove climate change duties.

(4) Before laying a draft of a statutory instrument containing an order under subsection (1) before the Scottish Parliament, the Scottish Ministers must consult, in so far as reasonably practicable, the persons mentioned in subsection (5).

(5) Those persons are—

(a) such associations of local authorities; and

(b) such other persons,

as the Scottish Ministers consider appropriate.

(6) The Scottish Ministers must co-operate with a relevant public body to help that body comply with its climate change duties.

37 Guidance to relevant public bodies

(1) The Scottish Ministers must give guidance to relevant public bodies in relation to climate change duties and those bodies must have regard to such guidance.

(2) Before giving guidance under subsection (1), the Scottish Ministers must consult, in so far as reasonably practicable, the persons mentioned in subsection (3).

(3) Those persons are—

(a) such associations of local authorities; and

(b) such other persons,

as the Scottish Ministers consider appropriate.

(4) The Scottish Ministers may vary or revoke guidance given under this section and where guidance is varied to a substantial extent, subsections (2) and (3) apply.

(5) The Scottish Ministers must publish any guidance given under this section.

38 Reporting on climate change duties

(1) The Scottish Ministers may, by order, make provision—

(a) requiring relevant public bodies to prepare reports on compliance with climate change duties;
(aa) requiring any relevant public body found, following an investigation under section 40, to be failing to comply with its climate change duties, to prepare a report on the actions it is taking to secure future compliance with those duties;

(b) subject to subsection (1A), setting out what information reports must contain;

(c) setting out the form and manner of reports;

(d) setting out the period within which reports must be sent to the Scottish Ministers.

(2) An order under subsection (1) may in particular—

(a) require two or more relevant public bodies to prepare a joint report in relation to compliance with one or more climate change duties; and

(b) require those bodies to co-operate with each other for the purpose of preparing that report.

Monitoring body

39 Appointment of monitoring body

(1) The Scottish Ministers may, by order, designate one or more persons or bodies to monitor whether relevant public bodies are—

(a) complying with climate change duties;

(b) having regard to any guidance given under section 37.

(2) In this Part, a person or body designated under subsection (1) is the “monitoring body”.

Investigations

40 Investigations

(1) The monitoring body may carry out an investigation into—

(a) a relevant public body’s compliance with climate change duties;

(b) whether a relevant public body is having regard to guidance given under section 37.

(2) The monitoring body must carry out an investigation if the Scottish Ministers direct it to do so.

41 Investigations: investigators’ powers

(1) In this section an “investigator” means—

(a) the monitoring body;

(b) a person authorised by the monitoring body for the purpose of carrying out investigations.

(2) An investigator may use the powers set out in subsections (3) to (5) if the investigator considers that it is necessary to do so for the purposes of or in connection with an investigation.

(3) An investigator may, by notice in writing, require any relevant public body to provide any relevant document or relevant information in the possession, or under the control, of the relevant public body.
(4) An investigator may require any person who possesses or controls any document or information referred to in subsection (3) to provide an explanation of the document or information.

(5) An investigator may take copies of, or extracts from, any document or information produced in accordance with subsection (3).

(6) Nothing in this section authorises an investigator to require the disclosure of anything which a person would be entitled to refuse to disclose on grounds of confidentiality in proceedings in the Court of Session.

42 Reporting by monitoring body

(1) The Scottish Ministers may direct the monitoring body to prepare a report relating to—
   (a) the monitoring body’s activities under this Part;
   (b) investigations carried out by the monitoring body;
   (c) its use of resources in carrying out its functions under this Part;
   (d) any other matters the Scottish Ministers may direct.

(2) The report may include information relating to a continuing investigation only if the Scottish Ministers direct that information to be included.

(3) The monitoring body must send the report to the Scottish Ministers.

(4) The Scottish Ministers must lay the report before the Scottish Parliament.

43 Guidance to monitoring body

(1) The monitoring body must have regard to any guidance given by the Scottish Ministers to it in relation to the exercise of its functions under this Part.

(2) Before giving guidance under subsection (1), the Scottish Ministers must consult, in so far as reasonably practicable, the persons mentioned in subsection (3).

(3) Those persons are—
   (a) the monitoring body; and
   (b) such other persons, as the Scottish Ministers consider appropriate.

(4) The Scottish Ministers may vary or revoke guidance given under this section and where guidance is varied to a substantial extent, subsections (2) and (3) apply.

(5) The Scottish Ministers must publish any guidance given under this section.

44 Power to direct monitoring body

(1) The Scottish Ministers may give directions to the monitoring body relating to the exercise of its functions under this Part.

(2) The Scottish Ministers may vary or revoke a direction given under this section.

(3) The monitoring body must comply with a direction given under this section.
PART 5
OTHER CLIMATE CHANGE PROVISIONS

CHAPTER 1
ADAPTATION

Adaptation programmes

45 Programmes for adaptation to climate change

(1) This section applies where the Secretary of State lays a report under section 56 of the 2008 Act (report on impact of climate change) before Parliament.

(2) The Scottish Ministers must lay a programme before the Scottish Parliament—

(b) setting out—

(i) their objectives in relation to adaptation to climate change;

(ii) their proposals and policies for meeting those objectives;

(iia) the arrangements for involving employers, trade unions and other stakeholders in meeting those objectives;

(iib) the mechanisms for ensuring public engagement in meeting those objectives;

(iii) the period within which those proposals and policies will be introduced; and

(c) otherwise addressing the risks identified in the report under section 56 of the 2008 Act.

(3) Where the report laid under section 56 of the 2008 Act is a subsequent report (within the meaning of subsection (3) of that section), the programme must contain an assessment of the progress made towards implementing the objectives, proposals and policies set out in the previous programme.

(4) The Scottish Ministers must lay each programme as soon as reasonably practicable after they receive the copy of the Secretary of State’s report.

45A Reports on progress towards implementation of programmes for adaptation

(1) This section applies where the Scottish Ministers lay a programme under section 45(2) before the Scottish Parliament.

(2) The Scottish Ministers must lay before the Scottish Parliament reports setting out their assessment of the progress made towards implementing the objectives, proposals and policies set out in the programme.

(3) The first report under this section must be laid before the Scottish Parliament no later than the expiry of the period of 12 months beginning with the day on which the programme is laid.

(4) The second and subsequent reports under this section must be laid before the Scottish Parliament no later than the expiry of each subsequent period of 12 months.
45B  Progress towards implementation of programmes for adaptation

(1) This section applies where—

(a) the Scottish Ministers lay a programme under section 45(2) before the Scottish Parliament;

(b) the Secretary of State lays a second or subsequent report under section 56 of the 2008 Act before Parliament.

(2) Where subsection (1)(a) applies, the Scottish Ministers must, before the expiry of the period of 2 years beginning with the day on which the programme is laid, request the relevant body to prepare a report setting out its assessment of the progress made towards implementing the objectives, proposals and policies set out in that programme.

(3) Where subsection (1)(b) applies, the Scottish Ministers must, as soon as reasonably practicable after receiving the copy of the report laid, request the relevant body to prepare a further report setting out its assessment of the progress made towards implementing the objectives, proposals and policies set out in the most recent programme laid by the Scottish Ministers under section 45(2).

(4) The Scottish Ministers must, as soon as reasonably practicable after receiving the relevant body’s report under subsection (2) or, as the case may be, a further report under subsection (3), lay it before the Scottish Parliament.

45C  Reports on programmes for adaptation

(1) This section applies where—

(a) the Scottish Ministers lay a programme under section 45(2) before the Scottish Parliament;

(b) the Secretary of State lays a second or subsequent report under section 56 of the 2008 Act before Parliament.

(2) Where subsection (1)(a) applies, the advisory body must, before the expiry of the period of 2 years beginning with the day on which the programme is laid, prepare a report setting out its assessment of the progress made towards implementing the objectives, proposals and policies set out in that programme.

(3) Where subsection (1)(b) applies, the advisory body must, as soon as reasonably practicable after the report is laid, prepare a further report setting out its assessment of the progress made towards implementing the objectives, proposals and policies set out in the most recent programme laid by the Scottish Ministers under section 45(2).

(4) The advisory body must, as soon as reasonably practicable after preparing a report under subsection (2) or, as the case may be, a further report under subsection (3), lay it before the Scottish Parliament.

Land use strategy

45D  Duty to produce a land use strategy

(1) The Scottish Ministers must, no later than 31 March 2011, lay a land use strategy before the Scottish Parliament.

(2) The strategy must, in particular, set out—
(a) the Scottish Ministers’ objectives in relation to sustainable land use;
(b) their proposals and policies for meeting those objectives; and
(c) the timescales over which those proposals and policies are expected to take effect.

(3) The objectives, proposals and policies referred to in subsection (2) must contribute to—

(a) achievement of the Scottish Ministers’ duties under section 1, 2 or 3(1)(b);
(b) achievement of the Scottish Ministers’ objectives in relation to adaptation to climate change, including those set out in any programme produced by virtue of section 45(2); and
(c) sustainable development.

(4) Before laying the strategy before the Scottish Parliament, the Scottish Ministers must publish a draft strategy and consult with such bodies as they consider appropriate and also with the general public.

(5) The strategy must be accompanied by a report setting out—

(a) the consultation process undertaken in order to comply with subsection (4); and
(b) the ways in which views expressed during that process have been taken account of in finalising the strategy (or stating that no account has been taken of such views).

(6) The Scottish Ministers must, no later than—

(a) five years after laying a strategy before the Scottish Parliament under subsection (1); and
(b) the end of every subsequent period of five years,
lay a revised strategy before the Scottish Parliament; and subsections (2) to (5) apply to a revised strategy as they apply to a strategy laid under subsection (1).

Muirburn

46 Variation of permitted times for making muirburn

After section 23 of the Hill Farming Act 1946 (c.73) (prohibition of muirburn at certain times), insert—

“23A Power to vary permitted times for making muirburn

(1) The Scottish Ministers may, by order, modify section 23 so as to substitute for any of the dates for the time being mentioned in subsection (1), (2) or, as the case may be, (3) of that section such other dates as they consider appropriate as the dates before which or after which it is lawful to make muirburn in any year.

(3) The Scottish Ministers may make an order under subsection (1) only if they consider it necessary or expedient to do so in relation to climate change.

(3A) An order under subsection (1) may not modify any of the dates for the time being mentioned in section 23 if the modification would result in a period during which it is lawful to make muirburn in any year being shorter than the corresponding period which applied immediately before the coming into force of section 46 of the Climate Change (Scotland) Act 2009 (asp 00).

(4) The power conferred by subsection (1) is exercisable by statutory instrument.
(5) No statutory instrument containing an order under subsection (1) may be made unless a draft of the instrument has been laid before, and approved by resolution of, the Scottish Parliament.”.

CHAPTER 2

FORESTRY

47 Power to modify functions of Forestry Commissioners

(1) The Scottish Ministers may, by order, modify the functions of the Forestry Commissioners in or as regards Scotland.

(2) The Scottish Ministers may make an order under subsection (1) only where they consider it necessary or expedient to do so—

(a) in order to comply with their duty under section 1, 2 or 3(1)(b); or

(b) otherwise in relation to climate change.

(3) An order under subsection (1) may in particular include provision enabling the Forestry Commissioners to—

(a) form, or participate in the forming of, a body corporate;

(b) invest in a body corporate;

(c) provide loans;

(d) establish a trust;

(e) act, or appoint a person to act, as—

(i) an officer of a body corporate; or

(ii) a trustee of a trust.

(3A) Any body corporate formed, trust established or person appointed by the Forestry Commissioners by virtue of an order under subsection (1) is a public body or office holder for the purposes of section 1 of the Nature Conservation (Scotland) Act 2004 (asp 6).

CHAPTER 3

ENERGY EFFICIENCY

Promotion of energy efficiency

48 Duty of Scottish Ministers to promote energy efficiency

(1) The Scottish Ministers must prepare and publish a plan for—

(a) promoting energy efficiency; and

(b) improving the energy efficiency of living accommodation, in Scotland.

(2A) The plan must set annual energy efficiency targets and describe how those targets are to be reported on.
(3) The plan prepared under subsection (1) must be published no later than 12 months after the day on which this section comes into force.

(4) The Scottish Ministers—
   (a) may, from time to time; and
   (b) must, before the end of the period mentioned in subsection (5),
       review the plan prepared and published under this section.

(5) The period referred to in subsection (4)(b) is the period of 3 years beginning with the date on which—
   (a) the plan is first published; or
   (b) the plan was last reviewed under subsection (4).

(6) Where, following a review under subsection (4), the Scottish Ministers vary the plan,
    they must, as soon as reasonably practicable after so doing, publish the plan as so varied.

(7) In preparing or varying the plan, the Scottish Ministers must have regard to the contributions which improvements to buildings and changes in building standards can make to the delivery of energy efficiency and to the reduction of greenhouse gas emissions.

(8) In this section—
   “energy efficiency” includes the use of—
   (a) technologies (other than those used for the production of heat) reliant on renewable sources of energy;
   (b) materials the manufacture or use of which produces or involves lower emissions of greenhouse gases than other materials; and
   (c) surplus heat from electricity generation or other industrial processes for district heating or other purposes;
   “fossil fuel” means—
   (a) coal;
   (b) lignite;
   (c) peat;
   (d) natural gas (within the meaning of the Energy Act 1976 (c.76));
   (e) crude liquid petroleum;
   (f) petroleum products (within the meaning of that Act);
   (g) any substance produced directly or indirectly from a substance mentioned in paragraphs (a) to (f);
   “renewable sources” means sources other than fossil fuel and nuclear fuel.

48A Duty of Scottish Ministers to promote renewable heat

(1) The Scottish Ministers must prepare and publish a plan for the promotion of the use of heat produced from renewable sources.
(1A) The plan must, in particular—

(a) set—

(i) targets for the percentage of heat to be produced from renewable sources; and

(ii) in relation to each target, the date by which it should be met; and

(b) describe how those targets are to be reported on.

(2) The plan prepared under subsection (1) must be published no later than 12 months after the day on which this section comes into force.

(3) The Scottish Ministers—

(a) may, from time to time; and

(b) must, before the end of the period mentioned in subsection (4), review the plan prepared and published under this section.

(4) The period referred to in subsection (3)(b) is the period of 2 years beginning with the date on which—

(a) the plan is first published; or

(b) the plan was last reviewed under subsection (3).

(5) Where, following a review under subsection (3), the Scottish Ministers vary the plan, they must, as soon as reasonably practicable after so doing, publish the plan as so varied.

(6) In this section, “renewable sources” has the same meaning as in section 48(8).

49 Laying of plans and reports

(1) The Scottish Ministers must, as soon as reasonably practicable after publishing a plan under section 48(1) or (6) or section 48A(1) or (5), lay it before the Scottish Parliament.

(2) The Scottish Ministers must, before the end of the period mentioned in subsection (3), lay before the Parliament a report on what steps have been taken in implement of the plan.

(3) The period referred to in subsection (2) is the period of 12 months beginning with the date on which—

(a) the plan is first published; or

(b) a report was last laid under subsection (2).

(4) Where the Scottish Ministers lay a plan mentioned in subsection (1) or a report mentioned in subsection (2) before the Parliament, they must, as soon as reasonably practicable after doing so, and in so far as reasonably practicable, make a statement to the Parliament relating to the plan or, as the case may be, report.
Emissions performance standard for new or extended energy generating stations

49A  Energy generating stations: efficiency guidance

(1) The Scottish Ministers must provide or revise existing guidance under section 36 of the Electricity Act 1989 (c.29) setting out the conditions subject to which consent will be granted for the construction of new, or for the extension of existing, energy generating stations of a capacity greater than 50 megawatts.

(2) The guidance required under subsection (1) must set out—
   (a) the maximum greenhouse gas emissions permitted per megawatt hour of energy generated; and
   (b) how heat energy produced from combined heat and power stations is to be included when calculating levels of emissions.

(3) The guidance required under subsection (1) may include provision for different maximum greenhouse gas emissions to be permitted in respect of—
   (a) different dates;
   (b) different technologies.

(4) The Scottish Ministers must comply with subsection (1) no later than 12 months after the day on which this section comes into force.

(5) The Scottish Ministers must, before providing such guidance, request advice from the advisory body regarding the total cumulative emissions budget available for electricity generation in the period 2010-2050 and, in particular—
   (a) an appropriate total lifetime greenhouse gas budget per megawatt of generating capacity;
   (b) the appropriate initial levels of greenhouse gas emissions per megawatt hour of energy generated.

(6) If, in relation to the matters mentioned in subsection (5), the guidance under subsection (1) differs from that which is recommended by the advisory body, the Scottish Ministers must publish a statement setting out the reasons why.

Energy performance of non-domestic buildings

50  Non-domestic buildings: assessment of energy performance and emissions

(1) The Scottish Ministers must, by regulations—
   (a) provide for the assessment of—
      (i) the energy performance of non-domestic buildings;
      (ii) the emission of greenhouse gases produced by or otherwise associated with such buildings or with activities carried out in such buildings;
   (b) require owners of such buildings to take steps, identified by such assessments, to—
      (i) improve the energy performance of such buildings;
      (ii) reduce such emissions.

(2) The regulations may in particular include provision about—
(a) the circumstances in which the regulations apply;
(b) the non-domestic buildings to which the regulations apply;
(c) the persons who may be required to have assessments carried out;
(d) the periods within which such assessments must be carried out;
(e) the procedure and methodology for assessing the energy performance of
buildings;
(f) the procedure and methodology for assessing the greenhouse gas emissions
produced by or otherwise associated with buildings or activities carried out in
buildings;
(g) the persons who may carry out such assessments;
(h) the issuing of certificates following such assessments, including the form, manner
and content of such certificates;
(ha) the form of any recommendations, contained in such certificates, as to the
improvement of the energy performance of buildings and the reduction of
emissions produced by or otherwise associated with buildings or activities carried
out in buildings;
(hb) the manner in which and periods within which persons must take steps to comply
with any recommendations contained in such certificates;
(hc) the registration of such certificates;
(hd) the disclosure of information which is entered in the register;
(i) subject to subsection (3), the enforcement authority in relation to the regulations;
(j) subject to subsection (4), the functions of that authority;
(k) the keeping of information and its production to the enforcement authority;
(l) the enforcement of the duties imposed by the regulations;
(m) offences in relation to failures to comply with requirements of the regulations.

(3) The enforcement authority provided for in the regulations is to be—

(a) a local authority; or
(b) such other person or body as the Scottish Ministers consider appropriate.

(4) The functions of the enforcement authority may include power to levy charges to
recover the reasonable costs incurred by it in exercising its functions under the
regulations.

(5) In this section, “non-domestic building”—

(a) means a building other than a dwelling;
(b) does not include—

(i) any yard, garden, outbuilding or other land or buildings;
(ii) any common areas,
associated with such a dwelling.
50A  **Living accommodation: assessment of energy performance and emissions**

(1) The Scottish Ministers may, by regulations, make provision relating to the assessment and improvement of—

(a) the energy performance of living accommodation;

(b) the emission of greenhouse gases produced by living accommodation.

(2) The regulations may in particular include provision about—

(a) the circumstances in which the regulations apply;

(b) the living accommodation to which the regulations apply;

(c) the persons who may be required to have assessments carried out;

(d) the periods within which such assessments must be carried out;

(e) the procedure and methodology for assessing the energy performance of living accommodation;

(f) the procedure and methodology for assessing the greenhouse gas emissions produced by the living accommodation;

(g) the persons who may carry out such assessments;

(h) the issuing of certificates, following such assessments, including the form, manner and content of such certificates;

(i) subject to subsection (3), the enforcement authority in relation to the regulations;

(j) subject to subsection (4), the functions of that authority;

(k) the keeping of information and its production to the enforcement authority;

(l) the enforcement of the duties imposed by the regulations;

(m) offences in relation to failures to comply with requirements of the regulations.

(3) The enforcement authority provided for in the regulations is to be such person or body as the Scottish Ministers consider appropriate.

(4) The functions of the enforcement authority may include power to levy charges to recover the reasonable costs incurred by it in exercising its functions under the regulations.

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50B  **Council tax reductions to promote energy efficiency**

(1) The Scottish Ministers must make regulations under section 80 of the Local Government Finance Act 1992 (c.14) to provide that, in respect of a person who—

(a) can demonstrate to a local authority that an energy efficiency improvement has been made, during any qualifying financial year, to a dwelling; and

(b) is liable to pay an amount to that authority in respect of council tax for that dwelling in the next financial year,
the amount that the person is liable to pay for that next financial year shall be reduced (from the amount it would be otherwise than by virtue of this subsection) in accordance with section 50C.

(2) The regulations made by virtue of subsection (1) must further provide that, in respect of a person who—

(a) is liable to pay an amount to a local authority in respect of council tax for a dwelling;

(b) can demonstrate to that local authority that the dwelling meets a reasonable standard of energy efficiency; and

(c) can demonstrate to that local authority that a system using technologies reliant on renewable sources of energy or heat has been installed in or on the dwelling during any qualifying financial year,

the amount that the person is liable to pay for the next financial year must be reduced (from the amount it would be otherwise than by virtue of this subsection) in accordance with section 50C.

(3) Subject to subsection (4)—

(a) any reduction made by virtue of either subsection (1) or (2) is without prejudice to any reduction made by virtue of the other of those subsections, whether those reductions apply in the same financial year or in different financial years; and

(b) any reduction made by virtue of subsection (1) is without prejudice to any further reduction made by virtue of that subsection, whether those reductions apply in the same financial year or in different financial years.

(4) The regulations made by virtue of subsection (1) may specify a maximum number of reductions, or a maximum total reduction, in the amount of council tax payable in respect of any one dwelling in any one financial year.

(5) The regulations made by virtue of subsection (1) must include provision for the sort of evidence that a local authority is to accept as demonstrating that—

(a) an energy efficiency improvement has been made to a dwelling;

(b) a dwelling meets a reasonable standard of energy efficiency,

and shall provide that evidence sufficient to demonstrate that specified energy efficiency improvements, or specified combinations of such improvements, have been made to a dwelling is sufficient to demonstrate that the dwelling meets a reasonable standard of energy efficiency.

(6) A draft of a statutory instrument containing the first regulations under subsection (1) must be laid before the Scottish Parliament no later than 31 December 2009.

(7) In this section—

“cogeneration unit” has the same meaning as in the Electricity and Gas (Carbon Emissions Reduction) Order 2008 (S.I. 2008/188);

“energy efficiency improvement” means a significant improvement to the energy efficiency of a dwelling by means of substantially all of one (and only one) of the following measures—
(a) the provision of insulation in any accessible roof space in the dwelling, including the insulation of any cold water tank and any water supply, overflow and expansion pipes in such a space;

(b) the provision of insulation between the internal and external leaves of cavity walls of the dwelling;

(c) improvements to the energy efficiency of any space or water heating system installed in the dwelling;

(d) the provision of draught proofing to or in the dwelling together with additional means of ventilation for any rooms which would otherwise be inadequately ventilated after such provision;

(e) connection to a cogeneration unit or district heating system;

“qualifying financial year” means the financial year beginning on 1 April 2010 or any subsequent financial year.

(8) The Scottish Ministers may, by regulations, amend subsection (7) by adding to the list of measures in the definition of “energy efficiency improvement”.

50C Amounts of reductions in council tax

(1) For the purposes of regulations made by virtue of section 50B the reduction in council tax is to be—

(a) in the circumstances referred to in subsection (2)(a), £100; and

(b) in the circumstances referred to in subsection (2)(b), £250.

(2) The circumstances are that the local authority assess the relevant cost of the energy efficiency improvement or the installation of technologies reliant on renewable sources of energy or heat, as the case may be, to be—

(a) at least £250 but less than £1,000;

(b) £1,000 or more.

(3) In this section, “relevant cost of energy efficiency improvements” means the amount paid for securing those improvements, minus the amount of any grant received (including a grant made under the Home Energy Efficiency Scheme (Scotland) Regulations 2006 (S.S.I. 2006/570)).

50D Review of provision made by virtue of or under sections 50C and (Amounts of reductions in non-domestic rates)

(1) The Scottish Ministers must, as soon as practicable after 31 March 2012 and annually thereafter, lay before the Scottish Parliament a report on the operation of—

(a) the regulations made by virtue of section 50B; and

(b) section 25B of the Local Government (Scotland) Act 1966 (c.51), (“the 1966 Act”),

including an assessment of whether the reductions in council tax or in non-domestic rates, as the case may be, thereby provided for have contributed effectively to promoting energy efficiency improvements and technologies reliant on renewable sources of energy or heat.
(2) Where the Scottish Ministers conclude in a report made under subsection (1) that the provisions referred to in paragraphs (a) and (b) of that subsection would contribute more effectively to energy efficiency improvements and technologies reliant on renewable sources of energy or heat if—

(a) one or both of the amounts referred to in section 50C(1) or section (Amounts of reductions in non-domestic rates)(1) were greater;

(b) one or both of the amounts referred to in section 50C(2) or section (Amounts of reductions in non-domestic rates)(2) were varied,

they may by regulations increase or, as the case may be, vary the amounts in question.

(3) Where the Scottish Ministers conclude in a report made under subsection (1) that the regulations referred to in that subsection and section 25B of the 1966 Act would contribute more effectively to promoting energy efficiency improvements and technologies reliant on renewable sources of energy if the mechanism prescribed by sections 50C and (Amounts of reductions in non-domestic rates) for calculating the amount of reduction in council tax or non-domestic rates, as the case may be, from the relevant cost of energy efficiency improvements or technologies reliant on renewable sources of energy was different from the mechanism for the time being prescribed, they may, by regulations, amend sections 50C and (Amounts of reductions in non-domestic rates) to prescribe that different mechanism.

Tenement Management Scheme

50E Tenement Management Scheme: definition of “maintenance”

In schedule 1 (Tenement Management Scheme) to the Tenements (Scotland) Act 2004 (asp 11), in the definition of “maintenance” in rule 1.5, after “replacement,” insert “the installation of insulation,”.

Permitted development rights

51A Air source heat pumps and micro wind turbines in domestic properties: permitted development rights

(1) The Scottish Ministers must bring forward an amendment to the Town and Country Planning (General Permitted Development) (Domestic Microgeneration) (Scotland) Amendment Order 2009 (SSI 2009/34).

(2) The amendment required under subsection (1) is to specify the circumstances under which the installation, alteration or replacement of—

(a) air source heat pump microgeneration equipment; or

(b) wind turbine microgeneration equipment,

within the curtilage of a dwellinghouse or building containing a flat is considered a permitted development under the meaning of sections 30 and 31 of the Town and Country Planning (Scotland) Act 1997 (c.8).

(3) An order making the amendment required under subsection (1) must be laid in the Scottish Parliament no later than six months after the day on which this section comes into force.
(4) Before making the amendment required under subsection (1), the Scottish Ministers must consult with organisations which, in the opinion of the Scottish Ministers, have relevant business interests and, in particular, organisations representing—

(a) the energy efficiency industry;
(b) the renewables industry; and
(c) the microgeneration industry.

(5) In this section, “microgeneration” has the meaning given in section 82(6) of the Energy Act 2004 (c.20).

Permitted development rights

51B Microgeneration in non-domestic buildings: permitted development rights

(1) The Scottish Ministers must exercise their powers under sections 30 and 31 of the Town and Country Planning (Scotland) Act 1997 (c.8) so as to make provision of the kind specified in subsection (2).

(2) That provision is provision specifying the circumstances in which the installation, alteration or replacement of microgeneration equipment within the curtilage of a non-domestic building is considered a permitted development within the meaning of those sections of that Act.

(3) The Scottish Ministers must comply with subsection (1) no later than 12 months after the day on which this section comes into force.

(4) Before complying with subsection (1), the Scottish Ministers must consult and seek to reach agreement about the provision to be made by virtue of that subsection with organisations which, in the opinion of the Scottish Ministers, have relevant business interests and, in particular, organisations representing—

(a) the energy efficiency industry;
(b) the renewables industry; and
(c) the microgeneration industry.

(5) In this section—

“microgeneration” has the meaning given in section 82(6) of the Energy Act 2004 (c.20);

“non-domestic building” has the meaning given in section 50(5).

CHAPTER 3A

The Scottish civil estate

51C Energy performance of new buildings procured for the Scottish civil estate

(1) The Scottish Ministers must, in so far as reasonably practicable, ensure that the energy performance of any newly constructed building that becomes part of the civil estate in Scotland falls within the top quartile of energy performance.

(2) For the purposes of subsection (1), a building becomes part of the civil estate if it is procured or constructed by or on behalf of the Scottish Ministers.
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Chapter 4—Waste reduction and recycling

51D Report on the Scottish civil estate

(1) The Scottish Ministers must, in respect of each financial year beginning with 2010-2011, lay before the Scottish Parliament a report containing an assessment of the progress made in the year towards improving—
   (a) the efficiency; and
   (b) the contribution to sustainability,
   of buildings that are part of the civil estate in Scotland.

(2) If the energy performance of a building mentioned in subsection (3) does not fall within the top quartile of energy performance, the report must state the reasons why the building has become part of the civil estate.

(3) That building is a building—
   (a) to which section 51C applies; and
   (b) which becomes part of the civil estate in the financial year to which the report relates.

(4) The report under this section must be laid before the Parliament no later than 31 October next following the end of the financial year to which the report relates.

51E Scottish civil estate: supplementary

(1) For the purposes of this section and sections 51C and 51D—
   (a) “building” means a building that uses energy for heating or cooling the whole or any part of its interior; and
   (b) a building is part of the civil estate in Scotland if it—
      (i) is used for the purposes of Scottish central government administration; and
      (ii) is of a description of buildings for which the Scottish Ministers have responsibilities in relation to efficiency and sustainability.

(2) The Scottish Ministers may, by order, provide—
   (a) for buildings of a description specified in the order to be treated as being, or as not being, part of the civil estate;
   (b) for uses specified in the order to be treated as being, or as not being, uses for the purposes of Scottish central government administration.

CHAPTER 4

WASTE REDUCTION AND RECYCLING

Waste prevention and management plans

52 Waste prevention and management plans

(1) The Scottish Ministers may, by regulations, require persons of the kinds specified—
   (a) to prepare plans for the prevention, reduction, management, recycling, use and disposal of waste produced by or otherwise associated with their activities;
   (b) to comply with those plans.
(2) The regulations may in particular include provision about—

(a) the circumstances in which plans must be prepared, including when more than one plan must be prepared;

(b) the kinds of waste in relation to which plans must be prepared;

(c) the periods—

(i) to which plans relate;

(ii) within which plans must be prepared;

(d) the content of plans;

(e) subject to section 60—

(i) the enforcement authority in relation to the regulations; and

(ii) the functions of that authority, including the approval by it of plans prepared under the regulations;

(f) the keeping of plans and other information and their production to the enforcement authority;

(g) the enforcement of the duties imposed by the regulations;

(h) offences in relation to failures to comply with requirements of the regulations.

(3) The enforcement authority must have regard to any guidance given by the Scottish Ministers to it in relation to the functions conferred on it by the regulations.

(4) In this Chapter—

"recycling", in relation to any waste, includes recovery and re-use (whether or not the waste is subjected to any process) (and cognate expressions are to be construed accordingly);

"specified" means specified in regulations (and cognate expressions are to be construed accordingly);

"waste" has the meaning given by section 75(2) of the Environmental Protection Act 1990 (c.43) (the “1990 Act”).

Waste data

53 Information on waste

(1) The Scottish Ministers may, by regulations, require persons of the kinds specified to provide SEPA with information on the waste produced by or otherwise associated with such persons’ activities.

(2) The regulations may in particular include provision about—

(a) the circumstances in which information must be provided;

(b) the information required to be provided, including the periods to which the information relates;

(c) the form and manner in which information must be provided;

(d) the periods within which information must be provided;

(e) the functions of SEPA in relation to the regulations;
(f) the keeping of information and its production to SEPA;

(g) the enforcement of the duties imposed by the regulations;

(h) offences in relation to failures to comply with requirements of the regulations.

(3) The power to make regulations under this section is without prejudice to section 34(5) of the 1990 Act and any other enactment to the same effect as that section; and any duty imposed on any person by regulations under this section is without prejudice to any duty to provide information on waste imposed by regulations under that section or by virtue of any other such enactment.

(4) SEPA may give guidance to persons to whom the regulations apply on how to comply with the requirements of the regulations.

(4A) A draft of a statutory instrument containing the first regulations under subsection (1) must be laid before the Scottish Parliament no later than one year after this Act receives Royal Assent.

(5) In this section and in section 60, “SEPA” means the Scottish Environment Protection Agency.

Deposit of recyclable waste etc.

54 Recyclable waste: facilities for deposit etc.

(1) The Scottish Ministers may, by regulations, require—

(a) persons of the kinds specified to provide facilities for the deposit of waste;

(b) authorised persons—

(i) to collect waste deposited by virtue of paragraph (a);

(ii) to ensure, in so far as reasonably practicable, that such waste collected by or transferred to them (whether in accordance with section 34 of the 1990 Act or otherwise) is recycled.

(2) The regulations may in particular include provision about—

(a) the circumstances in which facilities must be provided, including the places at which they must be provided;

(b) the persons for whom facilities must be provided;

(c) the kinds of waste for which facilities must be provided;

(d) the circumstances in which authorised persons must collect waste, including which authorised persons must do so;

(e) the charging by authorised persons for collecting waste, for recycling waste and for otherwise ensuring waste is recycled;

(f) subject to section 60—

(i) the enforcement authority in relation to the regulations; and

(ii) the functions of that authority;

(g) the keeping of records and their production to the enforcement authority;

(h) the enforcement of the duties imposed by the regulations;
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(i) offences in relation to failures to comply with requirements of the regulations.

(3) The enforcement authority must have regard to any guidance given by the Scottish Ministers to it in relation to the functions conferred on it by the regulations.

(4) The Scottish Ministers may not, by regulations under this section, impose requirements on persons to provide facilities for the deposit of waste in circumstances in relation to which regulations under section 55 may be made.

(5) In this section and in section 55, “authorised person” has the same meaning as in section 34(3) of the 1990 Act.

55 Recyclable waste: facilities for deposit at events etc.

(1) The Scottish Ministers may, by regulations, confer power on local authorities to issue notices requiring—

(a) persons responsible for organising temporary events open to the public to provide facilities for the deposit of waste by persons attending those events;

(b) authorised persons to—

(i) collect waste deposited by virtue of paragraph (a);

(ii) ensure, in so far as reasonably practicable, that such waste collected by or transferred to them (whether in accordance with section 34 of the 1990 Act or otherwise) is recycled.

(2) The regulations may in particular include provision about—

(a) the events in relation to which notices can be issued;

(b) the circumstances in which facilities must be provided, including the places at which they must be provided;

(c) the persons for whom facilities must be provided;

(d) the kinds of waste for which facilities must be provided;

(e) the persons to whom notices can be issued;

(f) the content of notices;

(g) the form of and manner in which notices can be issued, including the times at which notices can be issued;

(h) appeals against notices;

(i) the circumstances in which authorised persons must collect waste, including which authorised persons must do so;

(j) the charging by authorised persons for collecting waste, recycling waste and otherwise ensuring waste is recycled;

(k) subject to section 60—

(i) the enforcement authority in relation to notices; and

(ii) the functions of that authority;

(l) the keeping of records by persons to whom notices are issued and their production to the enforcement authority;

(m) the enforcement of duties imposed by notices;
(n) offences in relation to failures to comply with requirements of notices.

(3) Local authorities must have regard to any guidance given by the Scottish Ministers to them in relation to the functions conferred on them by the regulations.

(4) The enforcement authority must have regard to any guidance given by the Scottish Ministers to it in relation to the functions conferred on it by the regulations.

**Procurement of recyclate**

56 **Procurement of recyclate**

(1) The Scottish Ministers may, by regulations, require persons of the kinds specified to comply with the requirement in subsection (2).

(2) That requirement is to ensure that things procured or constructed by or on behalf of such persons—

(a) comprise of; or

(b) include or contain a certain proportion of, recyclate.

(3) The regulations may in particular include provision about—

(a) the circumstances in which the requirement applies;

(b) the kinds of things in relation to which the requirement applies;

(c) the proportion of recyclate that such things must include or contain;

(d) how such proportions are to be determined;

(e) the circumstances in which a person may apply to the Scottish Ministers to have the requirement disapplied;

(f) subject to section 60—

(i) the enforcement authority in relation to the regulations; and

(ii) the functions of that authority;

(g) the keeping of records and their production to the enforcement authority;

(h) the enforcement of the duties imposed by the regulations;

(i) offences in relation to failures to comply with requirements of the regulations.

(4) The enforcement authority must have regard to any guidance given by the Scottish Ministers to it in relation to the functions conferred on it by the regulations.

(5) Persons to whom the regulations apply must have regard to any guidance given by—

(a) the Scottish Ministers;

(b) the enforcement authority,

to them in relation to the requirements imposed by the regulations.

(6) In this section, “recyclate” means waste that has been recycled.
Reduction of packaging

57 Targets for reduction of packaging etc.

(1) The Scottish Ministers may, by regulations—

(a) set targets—

(i) for the reduction of packaging;

(ii) for the reduction of greenhouse gas emissions produced by the manufacture of or otherwise associated with packaging;

(b) require persons of the kinds specified to comply with those targets.

(2) The regulations may in particular include provision about—

(a) the circumstances in which the requirement in subsection (1)(b) applies;

(b) the kinds of packaging in relation to which targets may be set;

(c) the targets in relation to such packaging (including how targets may be set);

(d) the methods of determining whether targets have been met;

(e) subject to section 60—

(i) the enforcement authority in relation to the regulations; and

(ii) the functions of that authority;

(f) the keeping of records and other information and their production to the enforcement authority (including the periods to which records or information must relate and within which it must be produced to the authority);

(g) the enforcement of the duties imposed by the regulations;

(h) offences in relation to failures to comply with requirements of the regulations.

(3) The enforcement authority must have regard to any guidance given by the Scottish Ministers to it in relation to the functions conferred on it by the regulations.

(4) In this section and in section 58, “packaging” has the meaning given by Article 3 of Directive 94/62/EC of the European Parliament and of the Council on packaging and packaging waste.

Deposit and return

58 Deposit and return schemes

(1) The Scottish Ministers may, by regulations, establish deposit and return schemes.

(2) A “deposit and return scheme” is a scheme under which—

(a) the sale price of articles includes a returnable element (a “deposit”);

(b) persons who return—

(i) such articles;

(ii) the packaging associated with such articles (“returnable packaging”); or

(iii) both such articles and such packaging,

are entitled to be paid a sum equal to that deposit.
(3) Retailers may be required, under a deposit and return scheme, to—

   (a) include a deposit in the price of articles placed on the market by them;

   (aa) accept the return to them of—

      (i) such articles;

      (ii) returnable packaging; or

      (iii) both such articles and such packaging;

   (b) pay a sum equal to the deposit to persons who return to them—

      (i) such articles;

      (ii) returnable packaging; or

      (iii) both such articles and such packaging;

   (ba) return such articles to the producers of them;

   (c) return returnable packaging to the producers of it or of the articles with which it is associated.

(4) Producers may be required, under a deposit and return scheme, to—

   (a) include a deposit in the price of articles placed on the market by them;

   (aa) accept the return to them of—

      (i) such articles;

      (ii) returnable packaging; or

      (iii) both such articles and such packaging;

   (b) pay a sum equal to the deposit to retailers who return to them—

      (i) such articles;

      (ii) returnable packaging; or

      (iii) both such articles and such packaging;

   (c) recycle, or have recycled—

      (i) such articles;

      (ii) returnable packaging; or

      (iii) both such articles and such packaging.

(5) A deposit and return scheme may also provide for a person or body (a “scheme administrator”) to—

   (a) ensure that deposits are included in the price of articles placed on the market;

   (b) accept the return of—

      (i) such articles;

      (ii) returnable packaging; or

      (iii) both such articles and such packaging;

   (c) pay sums equal to deposits to persons who return—

      (i) such articles;
Climate Change (Scotland) Bill
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(ii) returnable packaging; or
(iii) both such articles and such packaging;

(ca) return such articles to the producers of them;
(d) return returnable packaging to the producers of it or of the articles with which it is associated;
(e) recover sums equal to deposits from such producers;
(f) recycle, or have recycled—
   (i) such articles;
   (ii) returnable packaging; or
   (iii) both such articles and such packaging.

(6) The Scottish Ministers may make regulations under this section only where they consider it necessary or expedient to do so for the purpose of promoting or securing an increase in the recycling of materials.

(7) The regulations may in particular include provision about—

  (a) the persons who are retailers and producers for the purposes of deposit and return schemes;
  (b) the articles to which such schemes apply;
  (c) the deposits to be included in the price of such articles;
  (ca) the inclusion, in the sale price of articles, of a non-returnable element to cover the reasonable costs incurred by retailers, producers or a scheme administrator in administering such schemes;
  (cb) the articles the return of which entitles persons to payment of sums equal to deposits;
  (cc) the methods by which such articles are to be identified;
  (d) the packaging which is returnable packaging for the purposes of such schemes;
  (e) the methods by which returnable packaging is to be identified;
  (f) information on the operation of schemes (including notices on premises where articles are offered for sale and the content of such notices);
  (fa) the places to which articles can be returned;
  (g) the places to which returnable packaging can be returned;
  (h) the registration of retailers and producers to whom schemes apply (including the reasonable fees payable in relation to such registration);
  (ha) the scheme administrator;
  (i) subject to section 60—
      (i) the enforcement authority in relation to the regulations; and
      (ii) the functions of that authority;
  (j) the keeping of records and other information and their production to the enforcement authority;
(k) the enforcement of the duties imposed by the regulations;
(l) offences in relation to failures to comply with requirements of the regulations.

58A Deposit and return schemes: designation of scheme administrator

(1) The Scottish Ministers may, by order, designate—

(a) a body established under section 58B(1); or
(b) such other person or body as they consider appropriate (an “existing body”), as a scheme administrator of a deposit and return scheme established by virtue of section 58.

(2) An order under subsection (1)(b) may, in so far as the Scottish Ministers consider it necessary or expedient to do so, modify the functions of an existing body by—

(a) conferring functions on;
(b) removing functions from; or
(c) otherwise varying the functions of,
the body.

(3) That order may in particular include provision about—

(a) borrowing by the existing body (with the approval of the Scottish Ministers);
(b) the charging by the body, in respect of the exercise of its functions in relation to a deposit and return scheme, of such reasonable amounts as the Scottish Ministers consider appropriate.

(4) In exercising functions in relation to a deposit and return scheme, a scheme administrator must comply with any written directions of a general or specific nature as the Scottish Ministers may from time to time give to it in relation to those functions.

58B Power to establish scheme administrator

(1) The Scottish Ministers may, by order, establish a body to be a scheme administrator of a deposit and return scheme established by virtue of section 58(1).

(2) A body established under subsection (1) is to be a body corporate.

(3) The body may do anything which appears to it—

(a) to be necessary or expedient for the purpose of, or in connection with, the exercise of its functions in relation to a deposit and return scheme;
(b) to be conducive to the exercise of those functions.

(4) In particular, the body may—

(a) enter into contracts;
(b) with the agreement of the Scottish Ministers, borrow money;
(c) charge, in respect of the exercise of its functions in relation to a deposit and return scheme, such reasonable amounts as the Scottish Ministers consider appropriate.

(5) An order under subsection (1) may in particular include provision about—

(a) the status and constitution of the body;
(b) the status of the members and any employees of the body;
(c) the remuneration, allowances and pensions of such members and such employees;
(d) the conferral of functions on the body;
(e) the keeping by the body of accounts and accounting records.

58C Finance of scheme administrator

(1) The Scottish Ministers may, for the purpose of or in connection with the exercise by a scheme administrator of functions in relation to a deposit and return scheme—

(a) pay grants;
(b) make loans,

to the administrator of such amounts as Ministers may determine.

(2) Any such grant or loan may be paid or, as the case may be, made, on such terms and subject to such conditions (including, in the case of a loan, conditions as to repayment) as the Scottish Ministers consider appropriate.

(3) The Scottish Ministers may, from time to time after any grant or loan is paid or, as the case may be, made, vary the terms and conditions on which it was paid or made.

(4) The Scottish Ministers may guarantee, in such manner and on such conditions as they consider appropriate, the discharge of any financial obligation in connection with any sums borrowed by a scheme administrator for the purpose of, or in connection with, the exercise of its functions in relation to a deposit and return scheme.

Carrier bag charges

59 Charges for supply of carrier bags

(1) The Scottish Ministers may, by regulations, require suppliers of goods—

(a) to charge for carrier bags supplied at the place where the goods are supplied for the purpose of enabling the goods to be taken away or delivered;
(b) to apply the net proceeds raised by such charges to the advancement of environmental protection or improvement or to any other purposes that may be reasonably regarded as analogous.

(2) The regulations may in particular include provision about—

(a) the circumstances in which the requirement applies;
(b) the suppliers to whom the requirement applies;
(c) the carrier bags to which the requirement applies;
(d) the minimum amount to be charged for each carrier bag;
(e) how the net proceeds raised by the charge are to be ascertained;
(f) the purposes to which those net proceeds are to be applied;
(g) subject to section 60—

(i) the enforcement authority in relation to the regulations; and
(ii) the functions of that authority;
(h) the keeping of records and their production to the enforcement authority;
(i) the enforcement of the duties imposed by the regulations;
(j) offences in relation to failures to comply with requirements of the regulations.

(3) The enforcement authority must have regard to any guidance given by the Scottish Ministers to it in relation to the functions conferred on it by the regulations.

General provision

60 Enforcement authorities

(1) This section applies to any regulations made under this Chapter other than under section 53.

(2) The enforcement authority provided for in the regulations is to be—
(a) SEPA;
(b) a local authority; or
(c) such other person or body as the Scottish Ministers consider appropriate.

(3) The regulations may provide for the functions of the enforcement authority in relation to the regulations to be exercised by two or more such authorities and about the functions of each such authority.

(4) The regulations may also provide for enforcement authorities to levy charges to recover the reasonable costs incurred by them in exercising their functions under the regulations.

61 Penalties

(1) A person who commits an offence under regulations made under this Part is liable to such penalties, not exceeding those mentioned in subsection (2), as are provided for in the regulations.

(2) Those penalties are—
(a) on summary conviction, a fine not exceeding the statutory maximum;
(b) on conviction on indictment, a fine.

PART 6

GENERAL AND MISCELLANEOUS

61A Sustainable development

(1) The persons mentioned in subsection (2) must, in exercising functions conferred on them by virtue of this Act, take into account the need to do so in a way that contributes to the achievement of sustainable development.

(2) Those persons are—
(a) the Scottish Ministers;
(b) the advisory body.
62 Equal opportunities

(1) The persons mentioned in subsection (2) must exercise their functions under this Act in a manner which encourages equal opportunities and in particular the observance of the equal opportunities requirements.

(2) Those persons are—

(a) the Scottish Ministers;
(b) the advisory body.

(3) In this section, “equal opportunities” and the “equal opportunities requirements” have the same meanings as those expressions have in section L2 of Part 2 of Schedule 5 to the Scotland Act 1998 (c.46).

63 Crown application

(1) This Act and any orders and regulations made under it bind the Crown.

(2) No contravention by the Crown of any provision made by virtue of this Act makes the Crown criminally liable.

(3) But the Court of Session may, on the application of any public body or office-holder having responsibility for enforcing that provision, declare unlawful any act or omission of the Crown which constitutes such a contravention.

(4) Despite subsection (2), any provision made by virtue of this Act applies to persons in the public service of the Crown as it applies to other persons.

64 Subordinate legislation

(1) Any power conferred by this Act on the Scottish Ministers to make orders or regulations is exercisable by statutory instrument.

(2) Any such power—

(a) may be exercised so as to make different provision for different cases or descriptions of case or for different purposes;
(b) includes power to make such consequential, incidental, supplementary, transitory, transitional or saving provision as the Scottish Ministers consider appropriate.

(3) An order or regulations under this Act may modify any enactment (including this Act).

(4) Subject to subsections (5) to (8), no statutory instrument containing an order or regulations under this Act (other than an order under section 67(2)) may be made unless a draft of the instrument has been laid before, and approved by resolution of, the Scottish Parliament.

(5) A statutory instrument containing an order mentioned in subsection (6) or regulations mentioned in subsection (7) is subject to annulment in pursuance of a resolution of the Scottish Parliament.

(6) Those orders are orders under—

(a) section 17(b);
(b) section 38(1);
(c) paragraph 2(2) of schedule 1.

(7) Those regulations are—
(a) the second or subsequent regulations under section 12(2) (other than regulations which make provision altering the amount by which a carbon unit credited or debited to the net Scottish emissions account for a period reduces or, as the case may be, increases the net Scottish emissions account for that period);

(b) the second or subsequent regulations under section 18(1) (other than regulations which make provision specifying a carbon unit of a kind not previously specified in regulations under that section);

(d) regulations under section 58(1) which make provision about one or more of the following matters only—

(i) the deposits mentioned in section 58(7)(c);

(ii) the form and content of notices mentioned in section 58(7)(f);

(iii) setting the registration fees mentioned in section 58(7)(h);

(c) regulations under Chapter 4 of Part 5 which make provision about the matter mentioned in section 60(4) only.

(8) Subsection (5) does not apply to an order or regulations which includes provision modifying an Act or an Act of the Scottish Parliament.

(9) Before laying a draft of any regulations under sections 52 to 59 (other than regulations mentioned in subsection (7)(d) or (e)) before the Scottish Parliament, the Scottish Ministers must—

(a) lay before the Scottish Parliament—

(i) a copy of the proposed regulations; and

(ii) a statement of their reasons for proposing to make the draft regulations;

(b) publicise the proposed draft regulations in such manner as they consider appropriate; and

(c) have regard to—

(i) any representations about the proposed draft regulations;

(ii) any resolution of the Scottish Parliament about the proposed draft regulations; and

(iii) any report by a committee of the Scottish Parliament about the proposed draft regulations,

made during such period as the Scottish Ministers may specify when laying the proposed draft regulations.

(10) The period so specified must—

(a) be no shorter than 60 days; and

(b) include at least 30 days during which the Scottish Parliament is not dissolved or in recess.

(11) When laying a draft of any regulations to which subsection (9) applies before the Scottish Parliament, the Scottish Ministers must also lay a statement giving details of—

(a) any representations, resolution or report falling within paragraph (c) of that subsection; and
(b) the changes (if any) which in the light of any such representations, resolution or report, the Scottish Ministers have made to what was laid under paragraph (a)(i) of that subsection.

65 Interpretation

In this Act—

“additional greenhouse gas” has the meaning given by section 11(2);
“advisory body” has the meaning given by section 19(2);
“advisory functions” has the meaning given by section 19(3);
“annual target” has the meaning given by section 3(3);
“authorised person” has the meaning given by section 54(5);
“baseline” has the meaning given by section 10(1);
“baseline year” means—

(a) in relation to a greenhouse gas mentioned in subsection (2) of section 10, the year mentioned in paragraph (a), (b), (c), (d) or, as the case may be, (e) of that subsection;

(b) in relation to an additional greenhouse gas, any year designated by virtue of section 11(3);
“carbon unit” has the meaning given by section 18(4);
“climate change duties” has the meaning given by section 36(1A);
“Committee” means the Scottish Committee on Climate Change;
“deposit and return scheme” means a scheme established by virtue of section 58(1);
“emissions” has the meaning given by section 15(1);
“energy efficiency” has the meaning given by section 48(8);
“greenhouse gas” has the meaning given by section 9(1);
“interim target” has the meaning given by section 2(2);
“international carbon reporting practice” has the meaning given by section 17;
“local authority” means a council constituted under section 2 of the Local Government etc. (Scotland) Act 1994 (c.39);
“monitoring body” has the meaning given by section 39(2);
“net Scottish emissions” has the meaning given by section 15(1);
“net Scottish emissions account” has the meaning given by section 12(1);
“packaging” has the meaning given by section 57(4);
“public body” (except in Part 4 and section 62) has the meaning given by section 19(5);
“relevant body” has the meaning given by section 5(5);
“relevant public body” has the meaning given by section 36(2);
“recycling” has the meaning given by section 52(4);
“renewable sources” has the meaning given by section 48(8);
“Scottish Committee on Climate Change” has the meaning given by section 20(2);
“Scottish emissions” has the meaning given by section 15(1);
“Scottish removals” has the meaning given by section 15(1);
“SEPA” has the meaning given by section 53(5);
“target year” means a year for which an annual target has been set;
“target-setting criteria” means the matters mentioned in section 4(4)(a) to (h);
“the 1990 Act” means the Environmental Protection Act 1990 (c.43);
“the 2008 Act” means the Climate Change Act 2008 (c.27);
“the 2050 target” has the meaning given by section 1(2);
“UK Committee on Climate Change” has the meaning given by section 5(6);
“waste” has the meaning given by section 52(4).

66 Minor and consequential modifications
Schedule 2 makes minor modifications and modifications consequential on the provisions of this Act.

67 Short title and commencement
(1) This Act may be cited as the Climate Change (Scotland) Act 2009.
(2) This Act (other than this section and sections 22 to 27, 45C and 64) comes into force on such day (in the case of sections 36 to 44, being not later than 18 months after this Act receives Royal Assent) as the Scottish Ministers may, by order, appoint.
(3) Sections 22 to 27 and 45C come into force in accordance with section 21.
(4) Different days may, under subsection (2), be appointed for different purposes.
SCHEDULE 1
(introduced by section 20)

THE SCOTTISH COMMITTEE ON CLIMATE CHANGE

Status

1 (1) The Committee is a body corporate.

(2) The Committee is not to be regarded as a servant or agent of the Crown, nor is it to be regarded as having any status, privilege or immunity of the Crown.

(3) The Committee’s members and employees are not to be regarded as civil servants.

(4) The Committee’s property is not to be regarded as property of, or held on behalf of, the Crown.

Membership of the Committee

2 (1) The Committee is to consist of the following members—

(a) a person to chair the Committee (“the Chair”); and

(b) not fewer than five and not more than eight other members.

(2) The Scottish Ministers may, by order, modify sub-paragraph (1)(b) so as to alter the number of other members of the Committee.

(3) Members of the Committee are appointed by the Scottish Ministers.

(4) In appointing members to the Committee, the Scottish Ministers must have regard to the desirability of the Committee (taken as a whole) having expertise or experience in the following—

(a) business competitiveness;

(b) climate change policy at Scottish, UK and international level (in particular the social impact of such policy);

(c) climate science and other branches of environmental science;

(d) economic analysis and forecasting;

(e) emissions trading;

(f) energy production and supply;

(g) financial investment;

(h) technology development and diffusion.

Period, and conditions, of appointment of members

3 (1) Each member of the Committee is to be appointed for a period not exceeding five years.

(2) A member holds and vacates office in accordance with the terms and conditions of appointment.

(3) A member may resign office as a member of the Committee by giving written notice to the Scottish Ministers.

(4) On ceasing to be a member, a person is eligible to be reappointed for one further period.
Persons not eligible for appointment

4 No person may be appointed as a member of the Committee if that person is, or has at any time during the previous year been, a member of—

(a) the House of Commons;
(b) the Scottish Parliament;
(c) the European Parliament.

Removal of members of Committee

5 (1) Subject to sub-paragraph (3), the Chair may, by giving written notice, remove a member from office if the Chair is satisfied that one of the situations set out in sub-paragraph (2) exists.

(2) Those situations are—

(a) that the member is insolvent;
(b) that the member has been convicted of a criminal offence;
(c) that the member has been absent from meetings of the Committee for a period longer than six months without the permission of the Chair;
(d) that the member is otherwise unable or unfit to discharge the functions of a member or is unsuitable to continue as a member.

(3) The Chair may only remove a member from office with the agreement of the Scottish Ministers.

(4) The Scottish Ministers may, by giving written notice, remove the Chair from office if the Scottish Ministers are satisfied that one of the situations set out in sub-paragraph (2) exists.

(5) For the purposes of sub-paragraph (2)(a), a member is insolvent when—

(a) a voluntary arrangement proposed by the member is approved;
(b) the member is adjudged bankrupt;
(c) the member’s estate is sequestrated;
(d) the member enters into a debt arrangement programme under Part 1 of the Debt Arrangement and Attachment (Scotland) Act 2002 (asp 17) as the debtor;
(e) the member grants a trust deed for creditors.

Remuneration, allowances and pensions of members

6 (1) The Committee must pay its members such remuneration and allowances as the Scottish Ministers may in each case determine.

(2) The Committee may, with the agreement of the Scottish Ministers—

(a) pay (or make arrangements for the payment);
(b) make payments towards the provision;
(c) provide and maintain schemes (whether contributory or not) for the payment,
of such pensions, allowances or gratuities to or in respect of any person who is or has ceased to be a member of the Committee, as the Committee may determine.

(3) The reference in sub-paragraph (2) to pensions, allowances and gratuities includes pensions, allowances and gratuities paid by way of compensation for loss of office.

5

Chief executive and other employees

7 (1) The Committee is to employ a chief executive.

(2) The chief executive is to be appointed by the Committee on such terms and conditions as the Committee may determine.

(3) The appointment of the chief executive and the terms and conditions of that appointment are subject to the agreement of the Scottish Ministers.

(4) The Committee may appoint other employees on such terms and conditions as the Committee may determine.

(5) The Scottish Ministers may give directions to the Committee as regards the appointment of employees under sub-paragraph (4), which may relate in particular to—

(a) the number of appointments;

(b) the terms and conditions of employment.

(6) The Committee must comply with directions given under sub-paragraph (5).

(7) The Committee may, with the agreement of the Scottish Ministers—

(a) pay (or make arrangements for the payment of);

(b) make payments towards the provision of;

(c) provide and maintain schemes (whether contributory or not) for the payment of, such pensions, allowances or gratuities to or in respect of any person who is or has ceased to be an employee of it, as the Committee may determine.

(8) The reference in sub-paragraph (7) to pensions, allowances and gratuities includes pensions, allowances and gratuities paid by way of compensation for loss of office.

Accounts

8 (1) The Committee must—

(a) keep proper accounts and accounting records;

(b) prepare in respect of each financial year a statement of accounts;

(c) send the statement of accounts to the Scottish Ministers.

(2) The Committee must comply with any directions which the Scottish Ministers gives it in relation to the matters mentioned in sub-paragraph (1).

(3) The Scottish Ministers must, as soon as reasonably practicable after receiving the statement of accounts from the Committee—

(a) send the statement of accounts to the Auditor General for Scotland for auditing;

(b) lay the audited statement before the Scottish Parliament.

(4) The Committee must make its audited statement of accounts and its accounting records available so that they may be inspected by any person.
(5) Those documents are to be made available—
   (a) at any reasonable time; and
   (b) without charge.

(6) In this paragraph and paragraph 9, “financial year” means—

   (a) the period beginning with the day the Committee is established and ending with 31 March in the following calendar year;
   (b) each subsequent period of 12 months ending with 31 March.

Reports

9 (1) As soon as practicable after the end of each financial year, the Committee must prepare a report on—
   (a) the discharge of the Committee’s functions during that year;
   (b) the actions that the Committee proposes to take during the following year in pursuance of its functions.

(2) The Committee must—
   (a) send a copy of the report to the Scottish Ministers; and
   (b) publish the report.

(3) The Committee must prepare and publish the report in accordance with any directions which the Scottish Ministers may give.

(4) The Scottish Ministers must as soon as reasonably practicable after receiving the report from the Committee, lay a copy of it before the Scottish Parliament.

(5) The Committee may publish such other reports on matters relevant to its functions as it considers appropriate.

Sub-committees

10 (1) The Committee may establish sub-committees for any purposes relating to its functions.

(2) A sub-committee must comply with any directions given to it by the Committee.

Proceedings

11 (1) Subject to the remaining provisions of this paragraph, the Committee may regulate—
   (a) its own procedure (including any quorum);
   (b) the procedure of any sub-committee (including any quorum).

(2) The Chair must, if present, chair meetings of the Committee or any sub-committee of the Committee.

(3) If the Chair is not available to be present at a meeting of the Committee (or any sub-committee of the Committee), the Chair is to appoint another member to chair the meeting.

(4) The Chair has a casting vote and any person appointed by the Chair under sub-paragraph (3) has a casting vote for the purposes of that appointment.
(5) The validity of any proceedings of the Committee (or any of its sub-committees) is not affected by a vacancy in membership nor by any defect in the appointment of a member.

Delegation of functions

12 (1) The Committee may, subject to sub-paragraph (2), authorise—

(a) any of its members;
(b) any of its sub-committees;
(c) its chief executive;
(d) any other employee,

to exercise such of its functions (and to such extent) as it may determine.

(2) The Committee may not authorise the exercise of the following functions under sub-paragraph (1)—

(a) the approval of annual reports and accounts;
(b) the approval of any budget or other financial plan.

(3) Sub-paragraph (1) does not affect the responsibility of the Committee for the exercise of its functions.

General powers

13 (1) The Committee may do anything which appears to it—

(a) to be necessary or expedient for the purpose of, or in connection with, the exercise of its functions;
(b) to be conducive to the exercise of its functions.

(2) In particular, the Committee may—

(a) enter into contracts;
(b) with the agreement of the Scottish Ministers, borrow money;
(c) with the agreement of the Scottish Ministers, acquire and dispose of land;
(d) obtain advice and assistance from any person who, in the Committee’s opinion, is qualified to give it.

(3) The Committee may pay to any person from whom advice or assistance is obtained such fees, remuneration and allowances as the Committee may, with the agreement of the Scottish Ministers, determine.

SCHEDULE 2
(introduced by section 66)

MINOR AND CONSEQUENTIAL MODIFICATIONS

Hill Farming Act 1946 (c.73)

1 In section 23(1) of the Hill Farming Act 1946 (prohibition of muirburn at certain times), after “section” insert “and to section 23A,”.
Schedule 2—Minor and consequential modifications

Environment Act 1995 (c.25)

2 In section 41(1) of the Environment Act 1995 (power to make schemes imposing charges), after paragraph (e), insert—

“(f) as a means of recovering costs incurred by it in performing functions conferred by regulations under section 53 of the Climate Change (Scotland) Act 2009 (asp 00), SEPA may require the payment to it of such charges as may from time to time be prescribed;”.

Ethical Standards in Public Life etc. (Scotland) Act 2000 (asp 7)

3 In the Ethical Standards in Public Life etc. (Scotland) Act 2000, in schedule 3 (devolved public bodies) at the appropriate place, insert—

“The Scottish Committee on Climate Change”.

Scottish Public Services Ombudsman Act 2002 (asp 11)

4 In the Scottish Public Services Ombudsman Act 2002, in Part 2 of schedule 2 (listed authorities) at the appropriate place, insert—

“The Scottish Committee on Climate Change”.

Freedom of Information (Scotland) Act 2002 (asp 13)

5 In the Freedom of Information (Scotland) Act 2002, in Part 7 of schedule 1 (Scottish public authorities) at the appropriate place, insert—

“The Scottish Committee on Climate Change”.

Public Appointments and Public Bodies etc. (Scotland) Act 2003 (asp 4)

6 In the Public Appointments and Public Bodies etc. (Scotland) Act 2003, in schedule 2 (specified authorities) at the appropriate place in the list of advisory bodies, insert—

“The Scottish Committee on Climate Change”.

Housing (Scotland) Act 2006 (asp 1)

7 In the Housing (Scotland) Act 2006, section 179 (duty of Scottish Ministers to prepare strategy for improving energy efficiency of living accommodation) is repealed.
Climate Change (Scotland) Bill
[AS AMENDED AT STAGE 2]

An Act of the Scottish Parliament to set a target for the year 2050, an interim target for the year 2020, and to provide for annual targets, for the reduction of greenhouse gas emissions; to provide about the giving of advice to the Scottish Ministers relating to climate change; to confer power on Ministers to impose climate change duties on public bodies; to make further provision about mitigation of and adaptation to climate change; to make provision about energy efficiency; to make provision about the reduction and recycling of waste; and for connected purposes.

Introduced by: John Swinney
On: 4 December 2008
Supported by: Stewart Stevenson
Bill type: Executive Bill
These documents relate to the Climate Change (Scotland) Bill as amended at Stage 2 (SP Bill 17A)

CLIMATE CHANGE (SCOTLAND) BILL
[AS AMENDED AT STAGE 2]

REVISED EXPLANATORY NOTES
AND REVISED FINANCIAL MEMORANDUM

CONTENTS

1. As required under Rules 9.7.8A and 9.7.8B of the Parliament’s Standing Orders the following documents are published to accompany the Climate Change (Scotland) Bill (introduced in the Scottish Parliament on 4 December 2008) as amended at Stage 2:

• revised Explanatory Notes; and
• a revised Financial Memorandum.

Text has been added or deleted as necessary to reflect the amendments made to the Bill at Stage 2 and these changes are indicated by sideling in the right margin.
REVISED EXPLANATORY NOTES

INTRODUCTION

2. These Explanatory Notes have been prepared by the Scottish Government in order to assist the reader of the Bill and to help inform debate on it. They do not form part of the Bill and have not been endorsed by the Parliament.

3. The Notes should be read in conjunction with the Bill. They are not, and are not meant to be, a comprehensive description of the Bill. So where a section or schedule, or a part of a section or schedule, does not seem to require any explanation or comment, none is given.

THE BILL

4. Climate change is one of the most serious threats facing Scotland and the world. The most severe consequences include famine, drought and extinction of species. Urgent action is needed by all nations to avoid the most severe climate change.

5. The aim of the Climate Change (Scotland) Bill is to establish a framework to drive greater efforts at reducing Kyoto Protocol greenhouse gas emissions in Scotland. The Bill will create mandatory climate change targets to reduce Scotland’s greenhouse gas emissions. This will signal clearly that the Scottish Government is serious in tackling greenhouse gases and wishes to set a strong example to other countries in the global effort to reduce climate change.

6. The provisions in this Bill will set a long-term target to reduce Scotland’s emissions of Kyoto Protocol greenhouse gases by 80% by the year 2050. This long term target will be supported by a framework of annual targets intended to drive the policies necessary for achieving this target. Many of the policy measures required to meet these targets will not require legislation to implement, but certain climate change mitigation and adaptation policies have been identified which do require legislation and this Bill contains provisions in Part 5 to allow these to be taken forward.

7. The Bill policy areas are separated into five parts.
   - **Part 1** creates the statutory framework for the greenhouse gas emissions reductions in Scotland by setting an interim 34% reduction target for 2020, to rise to 42% if the EU commits to reducing greenhouse gas emissions by at least 30% compared to 1990 levels by 2020, and an 80% reduction target for 2050. To help ensure the delivery of these targets this part of the Bill also requires that the Scottish Ministers set annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050.
   - **Part 2** contains provisions which will allow the Scottish Ministers to establish a Scottish Committee on Climate Change or to designate an existing body to exercise advisory functions.
   - **Part 3** places duties on the Scottish Ministers requiring that they report regularly to the Scottish Parliament on Scotland’s emissions and on the progress being made towards the emissions reduction targets set in the Bill.
These documents relate to the Climate Change (Scotland) Bill as amended at
Stage 2 (SP Bill 17A)

- **Part 4** places climate change duties on public bodies requiring that they act in the
  way best calculated to deliver the emissions reduction targets included in the Bill. This Part also contains powers to allow the Scottish Ministers, by order, to impose further duties on public bodies in relation to climate change, requirements to issue guidance to those bodies relating to their climate change duties and the power to require that they report upon the discharge of those duties.

- **Part 5 – Chapter 1** requires the Scottish Ministers to lay programmes on adaptation
  to climate change before the Scottish Parliament, and to report on these programmes. It also places a duty on Scottish Ministers to produce a land use strategy and provides for an enabling power for the Scottish Ministers to vary, but not shorten, the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

- **Part 5 – Chapter 2** will allow modification by secondary legislation of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change.

- **Part 5 – Chapter 3** contains a number of provisions relating to energy efficiency.
  - Section 48 – places a duty on the Scottish Ministers to produce an action plan setting out their current and proposed measures to promote the energy efficiency of buildings in Scotland, as well as measures to encourage behavioural change towards energy efficiency.
  - Section 48A – places a duty on the Scottish Ministers to prepare and publish a plan for the promotion of the use of heat from renewable sources.
  - Section 49 – places a duty on the Scottish Ministers to report regularly to the Scottish Parliament on the progress of, and the implementation of, the energy efficiency and renewable heat action plans.
  - Section 49A – the provisions in this section place a requirement on the Scottish Ministers to provide or revise existing guidance that sets the conditions subject to which consent will be granted for the construction of new, or the extension of existing, energy generating stations of a capacity greater than 50 megawatts. This section also places requirements regarding the deadline by which this requirement must be complied with and advice which must be sought before the guidance is provided.
  - Section 50 – the provisions in this section require regulations to be made regarding the assessment of the energy performance of existing non-domestic buildings in order to raise awareness of the contribution that those buildings can make to mitigating climate change through reducing energy demand and thereby emissions of greenhouse gases.
  - Section 50A – the provisions in this section enable the Scottish Ministers to make similar regulations in respect of living accommodation.
  - Sections 50B, 50C and 50D – the provisions in these sections detail mechanisms by which the amount of council tax liable on a dwelling may be reduced by a local authority if energy efficiency improvements are made to that dwelling or technologies installed which are reliant of renewable sources.
of energy or heat. Section 50D in particular introduces reporting requirements and permits review of the discount amounts.

- Section 50E amends the definition of maintenance in schedule 1 of the Tenements (Scotland) Act 2004 to include the installation of insulation.

- Sections 51A and 51B – these sections place a duty on the Scottish Ministers to exercise existing powers to make provision by which permitted development rights may be granted for the installation, alteration or replacement of microgeneration equipment in domestic and non-domestic buildings.

- **Part 5 – Chapter 3A** contains provision regarding the procurement and construction of new buildings which become part of the civil estate in Scotland and sets out duties concerning reports which must be made concerning the efficiency and sustainability of those buildings.

- **Part 5 – Chapter 4** contains provisions which will enable the Scottish Ministers to make regulations relating to the acquisition of accurate information about waste and the promotion of waste reduction and recycling by different methods.

**PART 1 – EMISSIONS REDUCTION TARGETS**

8. The provisions set out in Part 1 of the Bill create the statutory framework for the greenhouse gas emissions reductions in Scotland by setting a 34% reduction target for 2020, to rise to 42% in the event of EU agreement to further reduce its greenhouse gas emissions by at least 30% by 2020, and an 80% reduction target for 2050. To help ensure the delivery of these targets the Bill requires that the Scottish Ministers set annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050.

**The 2050 target**

9. Section 1 sets out the 80% target for 2050. Subsection (1) defines the obligation on the Scottish Ministers as reducing the net Scottish emissions account by 80% by 2050 relative to the defined baseline year. The net Scottish emissions account is defined in section 12 of the Bill. For any one year it will consist of the total of Scottish emissions, reduced by the amount of Scottish removals and adjusted to reflect carbon units credited and debited to the account.

**The interim target**

10. Section 2 sets out the interim target for 2020. It will work in the same way as the 2050 target.

**Modifying the interim target**

11. Section 2A sets out the method by which the interim target can be modified. This can only be modified upwards. Subsections (2) and (3) provide that if the European Union commits to reduce greenhouse gas emissions by at least 30% by 2020, then an order modifying the interim target to a figure of at least 42% must be laid before the Scottish Parliament before the expiry of
an appropriate period. Subsections (4) and (5) contain various definitions including what is meant by an appropriate period. Subsection (6) provides that if the order in subsection (2) is not laid in time, then it has to be laid in draft as soon as reasonably practicable afterwards.

**Annual targets**

12. Subsection (1) of section 3 requires that the Scottish Ministers set annual targets for the maximum amount of the net Scottish emissions account for each year in the period 2010-2050 and must ensure that those targets are not exceeded.

13. Subsection (2) establishes criteria that the annual targets must meet. Subsection (2)(a) specifies that the annual target for the year 2010 is an amount which is less than the estimated net Scottish emissions account for 2009. Subsection (2)(b) requires that the targets for each year in the period 2011-2019 must be set so that each is consistent with a reduction that is in line with achieving the interim target. Subsection (2)(c) requires that the targets for each year in the period 2020-2050 must be set so that each is an amount which is at least 3% less than the target for the preceding year.

**Setting annual targets**

14. Section 4 contains a number of conditions which must be met when the Scottish Ministers set annual targets. Subsections (1) and (2) establish that the targets must be set by order and must be set for certain periods by prescribed dates.

15. Subsection (3) imposes a duty on the Scottish Ministers to take account of both the interim 2020 target and the final 2050 target when setting the annual targets up to 2020. After 2020, the Scottish Ministers must consider the 2050 target when setting the annual targets from 2021 onwards.

16. Subsection (4) details a number of scientific, economic, social, environmental and international criteria which must be considered by the Scottish Ministers when setting annual targets. This list is not intended to be the sole list of factors that the Scottish Ministers consider when setting annual targets and additional factors can also be considered.

**Advice before setting annual targets**

17. Section 5 requires the Scottish Ministers to request and publish expert advice before laying an order containing annual targets and to publish a statement explaining why the annual targets are being set at certain levels, and how these annual targets take account of the target-setting criteria described in section 4(4) of the Bill. The expert advice has to include a view as to whether the annual targets are appropriate by reference to the target–setting criteria. If the Scottish Ministers have chosen to set annual targets in a manner which differs from the expert advice provided, they must publish a statement setting out the reason why. Subsection (5) defines “relevant body” for the purposes of the Part, which will be the UK Committee on Climate Change or a Scottish body designated under section 19.
Modifying annual targets

18. Section 6 allows the Scottish Ministers to modify, by order, annual targets, the minimum annual target percentage reduction applying from 2020, dates by which annual targets must be set and target-setting criteria. The annual targets set by order may only be modified if the Scottish Ministers consider it appropriate to do so as a result of a modification of the interim target or there have been significant changes to the basis on which the annual target was set. Subsections (1)(A) and (1)(B) place a requirement on the Scottish Ministers to lay a report before the Parliament at the same time as laying the draft modifying order explaining why the modification is required and to make a statement to the Parliament relating to this report.

19. Subsection (6) further constrains this ability to modify by preventing its use in the year to which a target relates and its use in a way which would result in the target for the year being greater than the target for the preceding year (i.e. allowing emissions to increase between years). An order to modify the 3% minimum reduction in emissions applying from 2020 may be made only where it is no longer considered necessary for that minimum to be achieved, and it can expressly not be used to substitute a percentage of less than zero. An order to modify either the date by which annual targets are to be set, or the target-setting criteria, may be made only where the Scottish Ministers consider it appropriate.

20. Section 7 requires the Scottish Ministers to request expert advice from the relevant body before laying an order for modification under section 6. If this advice is not followed, this provision requires the Scottish Ministers to lay before the Parliament a report explaining why, and to make a statement to the Parliament relating to the report.

Achievement of annual targets: domestic effort target

21. Section 7A places a duty on the Scottish Ministers to ensure that reductions in net Scottish emissions of greenhouse gases make up at least 80% of the reduction in the net Scottish emissions account in any target year – the “domestic effort target”.

22. Subsection (3) enables the Scottish Ministers to modify, by order, this target so as to substitute a higher figure upwards. Subsection (4) requires that advice from the relevant body must be requested by the Scottish Ministers before making any such modification order and subsection (5) requires the Scottish Ministers to publish a statement if they take a different approach to the advice provided.

Progress towards targets

23. Section 8 requires the Scottish Ministers, from 2011, to request that the relevant body prepare a report on its view on the progress towards achievement of annual targets, the interim target and the 2050 target, a view on whether these targets are likely to be achieved and what further effort may be required to meet the targets.

24. Subsection (2) requires that no later than the end of the second year following an annual target, the Scottish Ministers must request the relevant body to prepare a report detailing its
views on whether the domestic effort target was met in that target year, whether the annual target for the target year was met, the ways in which those targets were or were not met and the action taken by the Scottish Ministers to reduce net Scottish emissions during that year. Subsection (3) requires the Scottish Ministers to lay a response to this report before the Scottish Parliament as soon as reasonably practicable after receiving the report.

**Greenhouse gases**

25. Section 9 defines the greenhouse gases targeted by the Bill and allows for this list of gases to be amended, by order, by adding gases or modifying their description. The power to add new greenhouse gases may be exercised only if it appears to the Scottish Ministers that European or international agreements or arrangements recognise the contribution to climate change of a gas. Before laying an order modifying section 9(1), the Scottish Ministers must request advice from the relevant body.

**The baseline**

26. Section 10 defines the baseline years for each greenhouse gas covered by the statutory targets.

**Baseline years for additional greenhouse gases**

27. Section 11 applies in the situation where the list of target gases for the Bill is expanded and a baseline year is required. If a new greenhouse gas is added to the list of target gases for the Bill, subsections (3) and (4) allow the Scottish Ministers to specify by order what the baseline year is to be and how the net Scottish emissions are to be determined for the baseline year for the new gas.

**Net Scottish emissions account**

28. Section 12 defines the net Scottish emissions account as the aggregate of net Scottish emissions, minus any carbon units credited to the account for the period plus any carbon units debited from the account for the period.

29. Subsection (1A) provides that the net Scottish emissions account for a target year may not be credited with an amount of carbon units which exceeds any statutory limit – the “allowable amount”. Subsection (1B) defines the term “allowable amount” as (a) the amount equal to the limit, set by virtue of subsection 1 of section 18A (Limits on use of carbon units), on the net amount of carbon units that may be credited to net Scottish emissions accounts during the period which includes the target year, or (b) where a net amount of carbon units has been credited to the net Scottish emissions account for any other target year in that period, the balance (if any) remaining of the amount referred to in paragraph (a). Subsection (1C) states that the term “net amount of carbon units” has the meaning given in subsection 3 of section 18A.

30. Subsection (2) enables the Scottish Ministers to provide in regulations which carbon units can be credited to and debited from the net Scottish emissions account, and how this can be
These documents relate to the Climate Change (Scotland) Bill as amended at
Stage 2 (SP Bill 17A)

done. Subsection (3) provides that regulations must ensure that, where carbon units are used to reduce the net Scottish emissions account, they are not also used to offset other emissions elsewhere. This would lead to their “double-counting”.

**Restriction on use in 2010-2012 of carbon units purchased by Scottish Ministers**

31. Section 12A places a restriction on the use in 2010-2012 of carbon units purchased by the Scottish Ministers. Subsection (1) prohibits the Scottish Ministers from crediting the net Scottish emissions accounts for the years 2010-2012 with carbon units that they have purchased. Subsection (2) provides that subsection (1) only applies provided the percentage figure mentioned in section 2(1) (the level of the interim target) is 34%.

**Attribution of emissions to Scotland**

32. Section 13 defines which greenhouse gases are attributable to Scotland for the purposes of calculating net Scottish emissions. These are emissions of greenhouse gases emitted from sources in Scotland plus Scotland’s share of emissions from international aviation and international shipping.

**Scottish share of emissions from international aviation and international shipping**

33. Section 14 allows the Scottish Ministers to make provision, by order, for a proportion of emissions from international aviation and international shipping to be attributed to Scotland. A draft of the first order under section 14(1) must be laid before the Scottish Parliament no later than 1 June 2010, failing which as soon as reasonably practicable afterwards. The order under section 14(1) may make provision for the period or periods in which gases are to be regarded as Scottish emissions, and as to the manner in which such emissions are to be taken into account. Before laying such an order, the Scottish Ministers must seek advice from the relevant body and if this advice is not followed, they must publish a statement explaining why they are following a different approach.

**Scottish emissions and removals**

34. Section 15 defines Scottish emissions and Scottish removals of greenhouse gases, and defines the total of these for a period as the net Scottish emissions for that period.

35. Subsection (2) allows the Scottish Ministers to modify the definition of Scottish removals by order. Subsection (3) requires the amount of emissions and removals to be determined, in so far as reasonably practicable, consistently with international carbon reporting practice, defined in section 17.

**Measurement of emissions etc.**

36. Section 16 provides that emissions, emissions reductions and removals are to be measured in tonnes of carbon dioxide equivalent, and defines that term.
International carbon reporting practice

37. Section 17 defines international carbon reporting practice in terms of the protocols to the United Nations Framework Convention on Climate Change, or other European or international arrangements or agreements which the Scottish Ministers specify by order. This power allows the definition to be updated to take account of new international arrangements and agreements.

Carbon units and carbon accounting

38. Section 18 enables the Scottish Ministers to define “carbon unit” in regulations, and provides the Scottish Ministers with the power by regulations, to establish a scheme or use an existing scheme, for the registering and tracking of carbon units and for establishing and maintaining accounts in which carbon units may be held.

Limits on use of carbon credits

39. Section 18A requires the Scottish Ministers to set limits on the net amount of carbon units which may be credited to the net Scottish emissions account for specified periods. Subsection (A1) allows the Scottish Ministers for a year in the period 2013-2017 to only credit carbon units purchased by them up to a limit of 20% of the reduction in the amount of the net Scottish emission account planned for that year.

40. Subsection (2) lists the periods for which limits on the net amount of carbon units must be set and specifies the dates by which those limits must be set. Subsection (3) defines the term “net amount of carbon units” as C minus D, where “C” is the amount of carbon units credited to net Scottish emissions accounts during the period in accordance with regulations under section 12(2), and “D” is the amount debited during this period. Subsection (4) provides that an order may exclude certain specified carbon units from counting towards any limit set, and subsection (5) requires that if the limit for a period is not set by the corresponding deadline, the limit must be set as soon as reasonably practicable afterwards.

Modifying limits on use of carbon units etc.

41. Section 18B enables the Scottish Ministers to modify, by order, any limits which have been set on the amount of carbon units that may be credited to the net Scottish emissions account, and any dates associated with the limits on carbon units.

42. Subsection (2) specifies the specific circumstances when this order may be made – as a result of firstly a modification of the interim target or secondly, another significant change to the basis on which the limit on these use of carbon units was set and the Scottish Ministers consider it appropriate to do so.
Advice before setting or modifying limits on use of carbon units etc.

43. Section 18C requires the Scottish Ministers to request advice from the relevant body (the UK Committee on Climate Change or a Scottish body designated under section 19 of the Bill) before setting or modifying limits on the net amount of carbon units which may be credited to the net Scottish emissions account for specified periods. If provision is made that is different than that recommended by the relevant body, the Scottish Ministers must publish a statement setting out the reasons why.

PART 2 – ADVISORY FUNCTIONS

Advisory body

44. The emissions reduction provisions in the Bill impose duties on the Scottish Ministers, which require them to establish annual emissions reductions targets in secondary legislation. Ministers will be required to seek expert, independent advice in advance of setting or modifying annual targets, adding greenhouse gases to the Bill, or making provision attributing a proportion of greenhouse gases from international aviation and international shipping to Scotland.

45. Subsections (1) and (2) of section 19 give the Scottish Ministers the power to designate a body or person to undertake the advice functions in sections 5, 7, 8 and 9 and the additional advice functions in sections 22 to 27. Thereafter the body or person will be referred to as the advisory body and will take on the role of the UK Committee on Climate Change.

46. Subsection (3) sets out the functions (the “advisory functions”) which the advisory body has.

47. Subsection (4) sets out examples of what may be included in an order under subsection (1), such as the information requirements for the advice. Subsection (5) defines the term “public body” as used in subsection (1).

Scottish Committee on Climate Change

48. Section 20 allows the Scottish Ministers to establish, by order, a body to undertake the advisory functions under the Bill. If established, this body would be known as the Scottish Committee on Climate Change.

49. Subsection (3) gives effect to schedule 1 which sets out details of the constitution and operation of this Committee and subsection (4) identifies the types of further provision which may be included in an order establishing a Scottish Committee on Climate Change.

Application of sections 22 to 27

50. Section 21 makes it clear that the obligations for this body to provide advice to the Scottish Ministers under sections 22-27 and 45C do not apply until the Scottish Ministers designate,
under section 19, a body to exercise advisory functions. Until such an advisory body is
designated, the Scottish Ministers will seek advice from the UK Committee on Climate Change
(which will be the relevant body for the purposes of sections 5 to 9).

Advice on annual targets etc.

51. Section 22 obliges the advisory body to respond to requests by the Scottish Ministers for
advice on proposed annual targets and proposed modifications of annual targets.

52. Subsection (2) requires the body to provide a view on whether a proposal for an annual
target is appropriate, and explain that view.

53. Subsection (3) requires the body to express views on a number of factors relating to annual
targets. Specifically, it should provide a view on the relative merits of taking action to reduce
emissions, compared with the use of carbon units. It should also express a view on the
contributions to annual and domestic effort targets which may be provided by sectors covered by
trading schemes and those not covered by such schemes, and the contributions to annual targets
that may be made by energy efficiency, energy generation, land use and transport.

54. Subsection (4) requires that the body must provide its advice within the period requested
by the Scottish Ministers. Subsection (5) defines the meaning of “traded sector” for subsection
(3)(b)(i). This refers to the definition contained in section 66 of the UK Climate Change Act
2008.

Reporting on progress towards targets

55. Section 23 requires the advisory body to prepare an annual report setting out its views on
the Scottish Ministers’ progress towards meeting the annual targets, the interim target, and the
2050 target. It should also provide views on whether these targets are likely to be achieved and
views on any action considered necessary to achieve these targets. This duty will be switched on
by the Scottish Ministers at an appropriate time after an advisory body has been designated.

56. Subsection (3) requires that the body’s report in a relevant year must express a view on
matters specified in subsection (3C) which are whether the annual target and domestic effort
target for the target year was met, the ways in which those targets were or were not met, and a
view on the action taken by the Scottish Ministers to reduce greenhouse gas emissions during
that year. It also provides in subsection (3A) that the “relevant year” will be such year as the
Scottish Ministers may, by order, designate subject to certain conditions set out in subsection
(3B).

57. Subsection (4) specifies deadlines for laying the reports before the Scottish Parliament.

Scottish Ministers’ response to reports on progress
58. Section 24 obliges the Scottish Ministers to respond to a report provided by the advisory
body under section 23. This response must be laid before the Scottish Parliament no later than
31 March in the third year following the year for which an annual target has been set, or any
other date as the Scottish Ministers may, by order appoint.

**Duty of body to provide advice or other assistance**

59. Section 25 obliges the advisory body to respond to requests for advice, analysis, information
and assistance by the Scottish Ministers in connection with their functions under the Bill, their
other climate change functions, or in relation to climate change generally.

**Guidance to advisory body**

60. Section 26 requires that the advisory body must have regard to any guidance given by the
Scottish Ministers in respect of its functions under the Bill. Subsection (2) provides that the
Scottish Ministers may not give the body guidance on the content of any advice or report.
Subsection (3) permits the Scottish Ministers to vary or revoke any guidance issued.

**Power to give directions to advisory body**

61. Section 27 gives the Scottish Ministers the power to direct the advisory body in terms of its
functions under the Bill. Subsection (2) provides that the Scottish Ministers may not direct the
body on the content of any advice or report and subsection (3) permits the Scottish Ministers the
to vary or revoke the directions. Subsection (4) requires the body to comply with any
directions given.

**PART 3 – REPORTING DUTIES**

62. The Bill requires that the Scottish Ministers report regularly to the Scottish Parliament on
Scotland’s emissions and on the progress being made towards the emissions reduction targets set
in the Bill.

**Reports on annual targets**

63. Section 28 requires the Scottish Ministers to lay annual reports before the Scottish
Parliament in respect of each year from 2010 to 2050. Subsections (2) to (4) specify information
that the annual report must contain. This includes whether the annual target and domestic effort
targets have been met, and if they have not, the report must explain why. Subsection (5) requires
the annual report to be laid before the Scottish Parliament no later than 31 October in the second
year after that to which the annual target discussed in the report relates.

64. Section 29 specifies further requirements for the content of the information contained in
each annual target report. Subsection 3(aa) requires that the report must state the proportion of
the reduction in the net Scottish emissions account which is accounted for by reductions in net
Scottish emissions. Subsection 4 requires the report to include information on electricity
consumption, electricity generation, the average greenhouse gas emissions per megawatt hour of
electricity generated, and the average greenhouse gas emissions per megawatt hour, and the estimated lifetime cumulative emissions, of any new electricity generation capacity greater than 50 megawatts. Subsection 4(A) requires that the report for each year in the period 2011-2050 must state the amount of the net Scottish emissions account for each preceding target year, and the cumulative amount of the net Scottish emissions account for the target year and all preceding target years.

Reports on proposals and policies for meeting annual targets

65. Subsection (1) of section 30 requires the Scottish Ministers to produce a report as soon as reasonably practicable after making an order under section 4 setting annual targets. Subsection (2) requires this report to set out the proposals and policies intended to meet the annual targets, and their timescales, with an explanation of how these are expected to contribute towards the delivery of the interim target, the 2050 target, and in each target year, the domestic effort target.

66. Subsection (3) requires the report to explain how the proposals and policies are expected to affect the different sectors of the Scottish economy and subsection (4) requires the second and each subsequent report to provide an assessment of progress towards implementation of the policies and proposals in earlier reports, and any adjustments to those policies considered appropriate.

Reports on proposals and policies where annual targets not met

67. If the annual report indicates that the annual target or domestic effort target has not been met, section 31 requires the Scottish Ministers to lay a report before the Scottish Parliament, which sets out the proposals and policies to compensate in future years for the excess emissions.

Reports on emissions attributable to Scottish consumption of goods and services

68. Section 31A requires the Scottish Ministers to lay a report before the Scottish Parliament in respect of each year in the period from 2010 -2050 setting out the emissions of greenhouse gases, whether in Scotland or elsewhere, which are produced by or associated with the consumption and use of goods and services in Scotland during that year, in so far as reasonably practicable. The report can also contain other information the Scottish Ministers think appropriate.

Report on progress towards meeting the interim target

69. Section 31B requires the Scottish Ministers to lay before the Scottish Parliament a report on the progress towards meeting the interim target before 31 December 2015.

Report on the interim target

70. Section 32 requires the Scottish Ministers to lay a report before the Scottish Parliament in respect of the interim target, for the year 2020. Subsections (2) to (8) determine what the report must contain and its timescale for laying.
Report on the 2050 target

71. Section 33 requires the Scottish Ministers to lay a report before the Scottish Parliament in respect of the 2050 target. Subsections (2) to (8) determine what the report must contain and its timescale for laying.

Reports: provision of further information to the Scottish Parliament

72. Section 34(1) requires that where the Scottish Ministers lay various reports before the Scottish Parliament relating to annual targets, the interim target and the 2050 target, they must, immediately send a copy of the report to the persons who convene Scottish Parliament committees, and as soon as reasonably practicable, make a statement on the report in the Scottish Parliament. Subsection (2) specifies all the reports which trigger this obligation. Subsection (3) requires that in terms of the report on the annual target, the Scottish Ministers must attend, if invited, Scottish Parliament committees to give evidence on the report. All of these duties apply only as far as is reasonably practicable. Subsection (4) requires Scottish Ministers to have regard to any resolution or report made following the laying of their own report under subsection (2).

Further provision about reporting duties

73. Section 35 permits the Scottish Ministers to impose new duties on themselves, by order, to report to the Scottish Parliament. Subsection (2) sets out further provision which may also be made by such an order.

PART 4 – DUTIES OF PUBLIC BODIES RELATING TO CLIMATE CHANGE

Duties of public bodies relating to climate change

74. Section 36(A1) places specific climate change duties on public bodies to exercise their functions in the way best calculated to achieve delivery of the targets in the Bill, the way best calculated to help deliver any programme laid under section 45 of the Bill (adaptation) and in a way that they consider most sustainable. Subsection (A2) defines the term “public body” and subsection (3) allows the order to impose different duties on different public bodies.

75. Subsection (1) contains powers to allow the Scottish Ministers, by order, to impose further duties on public bodies in relation to climate change (in addition to those specified in subsection (A1)).

76. Subsections (4) and (5) oblige the Scottish Ministers, in so far as reasonably practicable, to consult with such associations of local authorities and such other persons as they consider appropriate before laying an order imposing such duties. Subsection (6) states that the Scottish Ministers must co-operate with the relevant public bodies to help those bodies comply with duties imposed under this section.
Guidance to relevant public bodies

77. Section 37 requires that the Scottish Ministers give guidance to relevant public bodies in relation to climate change duties and those bodies must have regard to such guidance. Subsections (2) and (3) oblige the Scottish Ministers to consult with such associations of local authorities and such other persons as they consider appropriate before creating guidance, in so far as it is reasonably practicable to do so. Subsection (4) allows the Scottish Ministers to vary or revoke this guidance and subsection (5) requires the Scottish Ministers to publish guidance.

Reporting on climate change duties

78. Section 38 enables the Scottish Ministers, by order, to require relevant public bodies to report on how they are complying with a duty imposed under section 36, and to prepare a report on the actions to address future compliance if they are, following an investigation under section 40, found to be failing to comply with their climate change duties. Subsections (1)(b) to (d) enable the Scottish Ministers to set out what must be in the report, its format, and the time by which it must be submitted to them. Where relevant public bodies are working together on a particular duty, the Scottish Ministers may require them to co-operate with each other to prepare a joint report.

Appointment of monitoring body

79. Section 39 enables the Scottish Ministers, by order, to designate one or more persons or bodies to monitor how relevant public bodies are complying with duties imposed under section 36 or how they are having regard to guidance given under section 37. The person or body is referred to as the “monitoring body”.

Investigations

80. Section 40 enables a monitoring body to carry out investigations into how relevant public bodies are complying with duties imposed under section 36, or whether they are having regard to guidance given under section 37. Section 41 defines the powers of investigators in these circumstances; “investigators” may be either the monitoring body or a person authorised by that body.

Reporting by monitoring body

81. Section 42 enables the Scottish Ministers to direct a monitoring body to prepare a report on its activities, use of resources and any other matters. Those reports will not normally mention continuing investigations unless the Scottish Ministers direct this. Subsection (3) requires the monitoring body to submit the report to the Scottish Ministers, and subsection (4) requires the Scottish Ministers to lay the report before the Scottish Parliament.
Guidance to monitoring body

82. Section 43 requires a monitoring body to have regard to any guidance issued by the Scottish Ministers relating to its functions under Part 4 of the Bill. Subsections (2) and (3) oblige the Scottish Ministers to consult with the monitoring body and such other persons as they consider appropriate, in so far as reasonably practicable, before giving guidance.

83. Subsection (4) allows the Scottish Ministers to vary or revoke this guidance and where a variation is substantial, the Scottish Ministers are obliged to consult the persons listed in subsection (3), in accordance with subsection (2), before varying the guidance. Subsection (5) requires the Scottish Ministers to publish any guidance given under this section.

Power to direct monitoring body

84. Section 44 enables the Scottish Ministers to give directions to a monitoring body relating to its functions under Part 4 of the Bill. Subsection (2) allows a direction given under this section to be varied or revoked. Subsection (3) requires the monitoring body to comply with a direction given under this section.

PART 5 – OTHER CLIMATE CHANGE PROVISIONS

Chapter 1 – Adaptation

Programmes for adaptation to climate change

85. Section 45 applies where the Secretary of State lays a report under section 56 of the UK Climate Change Act 2008 before the UK Parliament on the impact of climate change on the United Kingdom. Where such a report is laid under sub-section (2) the Scottish Ministers must lay a programme before the Scottish Parliament. This programme must set out the Scottish Ministers’ objectives, proposals and policies in relation to adaptation to climate change, including the timescales within which the proposals and policies will be introduced and address the risks identified for Scotland in the Secretary of State’s report. It must also outline arrangements to ensure engagement with stakeholders in delivering the programme, specifically with employers and trade unions and what mechanisms will be used to ensure the public is engaged in meeting the objectives. Subsection (3) requires the Scottish Minister’s programme, where it is a subsequent programme, to also contain an assessment of progress towards the previous programme.

86. Section 45A requires the Scottish Ministers to lay before the Scottish Parliament reports setting out their assessment of progress made towards implementing the objectives, proposals and policies set out in the section 45 programme. It also specifies timescales for when such reports have to be laid.

87. Section 45B applies where the Scottish ministers lay an adaptation programme under section 45(2) and requires independent assessments of the progress made towards such a programme. It requires the Scottish Ministers to request the relevant body to prepare a report.
setting out its assessment of the progress made towards implementing the objectives, proposals and policies set out in that programme. Subsection (2) provides that the request has to be made within 2 years of the day on which a programme is laid by the Scottish Ministers before the Scottish Parliament. The assessments will be conducted by the relevant body, currently the UK Climate Change Committee, until such time as a Scottish advisory body is established.

88. Section 45B also applies where the Secretary of State lays a second or subsequent report under section 56 of the UK Climate Change Act 2008. When this occurs, then the Scottish Ministers must request the relevant body to prepare a further report setting out an assessment of the progress made towards implementing the Scottish Ministers’ most recent programme to adapt to climate change. Under the UK Act, subsequent reports of the Secretary of State are due to be laid every five years after the first.

89. Section 45C only comes into effect when an order is made by the Scottish Ministers designating an advisory body. It requires the Scottish Ministers to request the advisory body to produce an assessment of progress made towards their programmes to adapt to climate change with the same timescales as for section 45B.

**Duty to produce a land use strategy**

90. Section 45D requires the Scottish Ministers to produce a land use strategy.

91. Subsection (1) requires that the Scottish Ministers must lay a land use strategy before the Scottish Parliament no later than 31 March 2011. Subsection (2) requires that the strategy sets out objectives in relation to sustainable land use, proposals and policies for meeting those objectives, and timescales over which the policies and proposals are expected to take effect. Subsection (3) states that these objectives, policies and proposals must contribute to achieving climate change targets, the adaptation programme and sustainable development. Subsection (4) and (5) make provisions regarding publishing a draft strategy, the need for consultation and reporting on consultation. Subsection (6) requires Scottish Ministers to revise the land use strategy at least every five years.

**Variation of permitted times for making muirburn**

92. Section 46 of the Bill inserts a new section 23A into the Hill Farming Act 1946 (the “1946 Act”).

93. Subsection (1) of new section 23A enables the Scottish Ministers to make successive orders specifying the dates before or after which it is lawful to make muirburn in any year. Subsection (1) also clarifies the effect of any order made under subsection (1), that is, to substitute for any of the dates specified in section 23(1), (2) or (3) of the 1946 Act, the dates specified in any such order.

94. Subsection (3) of new section 23A provides that the Scottish Ministers may make an order under new section 23A(1) of the 1946 Act only where they consider it necessary or expedient to do so in relation to climate change. Subsection (3A) of new section 23A prevents the order
making power being exercised so as to reduce the length of the muirburn season below that currently provided for under section 23 of the 1946 Act.

95. Subsection (5) of new section 23A of the 1946 Act provides that any statutory instrument containing an order made under subsection (1) of that section is subject to affirmative Parliamentary procedure.

96. Schedule 2 to the Bill provides for a minor amendment of section 23(1) of the 1946 Act, to clarify that section 23 of the 1946 Act is subject to any provision made by order under new section 23A(1) of that Act.

Chapter 2 – Forestry

Power to modify functions of Forestry Commissioners

97. Section 47(1) allows the Scottish Ministers, by order, to modify the functions of the Forestry Commissioners in or as regards Scotland. Subsection (2) provides that such modifications may be made only where the Scottish Ministers consider it necessary or expedient to allow them to comply with their duties under sections 1, 2 or 3(1)(b) of the Bill to reduce greenhouse gas emissions or more generally in relation to climate change.

98. Subsection (3) provides that the order may modify the Forestry Commissioners’ functions to allow them to form or participate in corporate bodies or trusts.

99. Subsection (3A) places the duty in section 1 of the Nature Conservation (Scotland) Act 2004 on any body corporate established or person appointed by the Forestry Commissioners following an order under section 47 of the Bill

100. Section 64 makes more general provision in relation to the power to make an order under section 47, and makes provision as to the Parliamentary procedure for such an order. Subsections (2) and (3) of section 64 provide that an order made by the Scottish Ministers under section 47 may make different provision for different cases or purposes, or make any appropriate consequential, incidental, supplementary, transitory, transitional or saving provision, including modification of any enactment. Section 64(4) provides that an order made under section 47 is subject to affirmative resolution procedure.

Chapter 3 – Energy efficiency

Duty of Scottish Ministers to promote energy efficiency

101. Section 48 requires the Scottish Ministers, within 12 months of the section coming into force, to publish a plan for promoting energy efficiency and improving the energy efficiency of living accommodation in Scotland. Under subsections (4) and (5), Ministers are required to review the plan at least every 3 years. The plan must set annual energy efficiency targets and describe how those targets are to be reported on.
102. Following a review, the Scottish Ministers must in accordance with subsection (6) publish the plan if the review results in changes to the plan.

103. When preparing a plan and when varying it after a review, subsection (7) requires the Scottish Ministers to have regard to the contribution that improvements to buildings and changes in building standards can make to improving overall energy efficiency and lowering carbon emissions in Scotland.

104. “Energy efficiency” is defined in subsection (8) and includes the use of technologies reliant on renewables sources of energy and the use of materials that produce lower greenhouse gas emissions than alternatives. “Fossil fuel” and “renewable sources” are also defined in subsection (8).

Duty of Scottish Ministers to promote renewable heat

105. Section 48A requires Scottish Ministers to prepare and publish a plan for the promotion of the use of heat produced from renewables sources. Subsection (1A) sets out that the plan must set targets and dates by which the targets are to be met. This subsection also requires that Scottish Ministers describe how the targets will be reported on.

106. Subsection (2) requires the Scottish Ministers to publish, within 12 months of the section coming into force, the plan prepared under subsection (1). Under subsections (3) and (4), Ministers are required to review the plan at least every 2 years.

Laying of plans and reports

107. Section 49(1) and section 48A require the Scottish Ministers to lay the initial plan and any subsequent revised plan before the Scottish Parliament as soon as is reasonably practicable after it is published. Subsections (2) and (3) require Ministers to lay a report before the Scottish Parliament on what steps have been taken to implement the plan. The report must be laid within 12 months of the plan being first published and at least annually thereafter. Under subsection (4) Scottish Ministers are required to make a statement to Parliament as soon as reasonably practicable after the plan is laid.

Energy generating stations: efficiency guidance

108. Subsection (1) of section 49A requires the Scottish Ministers to provide or revise existing guidance using the powers they have under section 36 of the Electricity Act 1989, setting out the conditions subject to which consent will be granted for the construction of new, or for the extension of existing, energy generating stations of a capacity greater than 50 megawatts.

109. Subsection (2) requires that the guidance given under subsection (1) must set out the maximum greenhouse gas emission levels for new or extended power stations per megawatt hour of energy generated, specifying how heat produced from combined heat and power stations is to be included when calculating levels of emissions. This approach is often called setting an emissions performance standard, or emissions limit, for power stations.
110. Subsection (3) provides the Scottish Ministers with the power to vary maximum permitted greenhouse gas emissions permitted for different dates or technologies. This approach could be used to implement the emissions performance standard in a phased manner, so that emissions limits could be varied. Different types of power station emit different levels of greenhouse gases and so the section will allow the Scottish Ministers to reflect these differences in setting the guidance.

111. Subsection (4) requires that the revised or new guidance issued to satisfy the duty in subsection (1) be brought forward no later than 12 months after the commencement date of section 49A.

112. Subsection (5) requires the Scottish Ministers to request advice from the advisory body (a body designated under section 19(1)) regarding the total cumulative emissions budget available for electricity generation in the period 2010-2050. This, essentially, is the total amount of greenhouse gas emissions that electricity generation should emit during that period. The advice sought from the advisory body must include its view as to (a) an appropriate total lifetime greenhouse gas budget per megawatt of generating capacity, and (b) appropriate initial levels of greenhouse gas emissions per megawatt hour of energy generated.

113. Subsection (6) stipulates that if the Scottish Ministers make provision in the guidance issued under subsection (1) different from the advice they receive from the advisory body under subsection (5), they must publish a statement setting out the reasons why.

Non-domestic buildings: assessment of energy performance and emissions

114. Section 50 requires Scottish Ministers to make regulations providing for the assessment of (i) the energy performance of non-domestic buildings, and (ii) emissions of greenhouse gases produced or associated with such buildings or with activities carried out in such buildings, and to make regulations requiring owners of such buildings to take steps to improve the energy performance and to reduce emissions.

115. Subsection (2) sets out some of the provisions which may be included in the regulations, including: the kinds of non-domestic buildings covered; persons who are required to obtain assessments; time periods for carrying out assessments; procedures and methodologies for assessing energy performance and emissions; persons who can carry out such assessments; the issuing of certificates following assessment; the form of any recommendations as to the improvement of the energy performance and reduction of emissions; the manner and periods within which steps must be taken with regard to such recommendations; the registration of certificates; the disclosure of information entered in the register; enforcement authorities; the keeping of records; enforcement of the regulations; and offences.

116. Subsection (3) makes provision about the enforcement authority provided for in the regulations and subsection (4) allows the enforcement authority to levy charges to recover reasonable costs incurred by exercising the functions under the regulations.
117. Subsection (5) defines “non-domestic building” as all buildings, other than buildings which are dwellings. Yards, gardens, outbuildings and other land or buildings associated with dwellings, and any common areas so associated, are also excluded from the meaning of “non-domestic building”.

Living accommodation: assessment of energy performance and emissions

118. Section 50A gives Scottish Ministers powers to make regulations providing for the assessment and improvement of (i) the energy performance of living accommodation, and (ii) emissions of greenhouse gases produced by living accommodation.

119. Subsection (2) sets out some of the provisions which may be included in the regulations, including: the kinds of living accommodation covered; persons who are required to obtain assessments; time periods for carrying out assessments; procedures and methodologies for assessing energy performance and emissions; persons who can carry out such assessments; the issuing of certificates following assessment; the registration of certificates; enforcement authorities; the keeping of records; enforcement of the regulations; and offences.

120. Subsection (3) makes provision about the enforcement authority provided for in the regulations and subsection (4) allows the enforcement authority to levy charges to recover reasonable costs incurred in exercising the functions under the regulations.

Council tax reductions to promote energy efficiency

121. Section 50B requires the Scottish Ministers to make regulations under the Local Government Finance Act 1992 (c.14) that reduce council tax liability by prescribed amounts as detailed in Section 50C for those that install energy efficiency measures and/or renewable energy or heat technologies. This would oblige local authorities to reduce council tax liability for those that met the criteria.

122. Subsection (3) ensures that should someone receive a reduction for an energy efficiency improvement, their eligibility to receive a reduction for installing renewable energy or heat technologies is not affected, and vice versa. It also ensures that should someone receive a reduction for an energy efficiency improvement it will not affect their eligibility for a further reduction for a subsequent improvement.

123. Subsections (4), (5) and (6) allow the Scottish Ministers to specify the maximum number and maximum amount of reductions for any one dwelling in any one financial year, require the Scottish Ministers to specify how eligibility for a reduction is demonstrated, and require that a draft statutory instrument containing the initial regulations is laid before the Scottish Parliament by 31 December 2009.

124. “Energy efficiency improvement” is defined in subsection (7) and the measures that would constitute this are listed, to which the Scottish Ministers may add as provided by subsection (8).
These documents relate to the Climate Change (Scotland) Bill as amended at Stage 2 (SP Bill 17A)

Amounts of reductions in council tax

125. Section 50C details the amount of any reduction in council tax as a result of the regulations in Section 50B dependant on the cost of measures and/or technologies installed.

Review of provision made by virtue of or under sections 50C and (Amounts of reductions in non-domestic rates)

126. Section 50D requires the Scottish Ministers to produce a report after 31 March 2012, and then report annually, on the effectiveness of reducing council tax liability for promoting energy efficiency improvements and technologies reliant on renewable energy or heat.

127. Reference is made in subsections (1) and (3) of section 50D to section 25B of the Local Government (Scotland) Act 1966. Reference is also made in the title of section 50D and in subsections (2) and (3) to section (Amounts of reductions in non-domestic rates). These two sections would have been created by amendments 260 and 262 to the Climate Change (Scotland) Bill which were lodged at Stage 2. These amendments related to non-domestic rates but were not ultimately moved at Stage 2, therefore the two new sections detailed in this paragraph and mentioned in section 50D do not exist.

128. Subsection (2) allows the Scottish Ministers, subject to their conclusions in the report made under subsection (1), to increase the amount of any reduction in council tax [and non-domestic rates] and vary the amounts that have to be spent on improvements and technologies to qualify for a reduction.

129. Subsection (3) allows the Scottish Ministers to vary the mechanism by which the amount of any reductions are calculated based on the cost of improvements and technologies if they conclude this will more effectively promote energy efficiency improvements and technologies reliant on renewable sources of energy.

Tenement management scheme: definition of “maintenance”

130. Section 50E amends the definition of maintenance in schedule 1 of the Tenements (Scotland) Act 2004 to include the installation of insulation.

Permitted development rights

131. Sections 51A and 51B are intended to place duties in statute on the Scottish Ministers under planning legislation to bring forward permitted development rights in specified circumstances for the installation of air source heat pump and wind turbine microgeneration equipment in domestic buildings, and permitted development rights for microgeneration in non-domestic buildings.

132. The Town and Country Planning (General Permitted Development) (Domestic Microgeneration) (Scotland) Amendment Order 2009 already extends permitted development rights to the installation of equipment other than those two technologies. The provisions also
place a duty in statute on the Scottish Ministers under planning legislation to bring forward permitted development rights for an unspecified range of microgeneration equipment in non-domestic buildings.

133. The provisions in the Bill indicate the nature and scope of the consultation that will require to be undertaken, and indicate that there are issues that will need to be considered for their potential impacts on the built and natural environment. Where implemented, the provisions would simplify the planning process and provide a cost saving to applicants.

Chapter 3A – The Scottish civil estate

Energy performance of new buildings procured for the Scottish civil estate.

134. Section 51C(1) places a duty on the Scottish Ministers to ensure, in so far as reasonably practicable, that the energy performance of any constructed building that becomes part of the civil estate in Scotland, falls within the top quartile of energy performance.

135. Subsection (2) sets out the criteria that determine the circumstances in which a building becomes part of the civil estate in Scotland.

Report on the Scottish civil estate

136. Section 51D(1) requires the Scottish Ministers, for each financial year beginning with 2010-2011, to lay before the Scottish Parliament a report containing an assessment of the progress made in the year towards improving (a) the efficiency of buildings that are part of the civil estate in Scotland; and (b) the contribution to sustainability of those buildings.

137. If a building whose energy performance does not fall within the top quartile becomes part of the civil estate in the year, subsection (2) requires the report for that year to explain why.

138. Subsection (3) sets out the buildings to which subsection (2) applies.

139. Subsection (4) contains the deadline by which reports under subsection (1) are to be laid before the Scottish Parliament. For example, for the financial year which ends in March 2011, the report must be laid no later than 31 October 2011.

Scottish civil estate: supplementary

140. Section 51E(1) defines the term “building” for the purposes of this section and sections 51C and 51D and sets out what buildings are to be considered as being part of the civil estate in Scotland for these sections.

141. Subsection (2) contains an order making power to allow specific descriptions of buildings to be included in or excluded from the scope of sections 51C and 51D.
Chapter 4 – Waste reduction and recycling

Waste prevention and management plans

142. Section 52 enables the Scottish Ministers to make detailed provision, by regulations, requiring persons specified in such regulations to make waste prevention and management plans, and to comply with them. Some of the detail which may be included in the regulations is specified in subsection (2), but this is without prejudice to the generality of the section. Some essential terms are defined in subsection (4).

143. The effect of regulations made under this section could be, for example, to provide that a builder should draw up plans for how he proposed to reduce waste generated by a building operation by, for example, the re-use of rubble on-site. On a different scale, they might require an office to prepare a plan showing how it will minimise waste – for example by adopting double-sided printing. A person might be required by virtue of subsection (2)(a) to prepare more than one plan, for instance to deal with different types of waste.

144. Subsection (3) ensures that any enforcement authority appointed in relation to this section must have regard to any guidance the Scottish Ministers may give in relation to its functions, which may include the approval of waste prevention and management plans (subsection (2)(e)(ii)). Further provision about enforcement authorities is made by section 60.

145. It is very likely that a system of enforcement, including offences and penalties, would be required to ensure that plans were actually drawn up and complied with, but this will be a matter for regulations. Maximum penalties which may be imposed in any regulations made under this Chapter are specified in section 61.

Information on waste

146. Section 53 enables the Scottish Ministers to make detailed provision, by regulations, requiring the provision of information by persons specified in those regulations about waste associated with their activities to the Scottish Environment Protection Agency (SEPA). Some of the detail which may be included in the regulations is specified in subsection (2), but without prejudice to the generality of the section. “Waste” is a term which has already been defined in section 52(4): this definition matches that of Directive 2006/12/EC on waste.

147. Subsection (3) refers to section 34(5) of the Environmental Protection Act 1990 (the “1990 Act”). This enables the Scottish Ministers to make regulations requiring those who import, produce, carry, keep, treat or dispose of controlled waste to make, retain and furnish documents. The powers have been used to make the Environmental Protection (Duty of Care) Regulations 1991 (the “1991 Regulations”) and the Special Waste Regulations 1996 (the “1996 Regulations”).

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1 OJ No. L 114, 27.4.2006, p9
2 1990 c.43
3 SI 1991/2839, as amended by SSI 2003/533
These documents relate to the Climate Change (Scotland) Bill as amended at Stage 2 (SP Bill 17A)

Regulations”). These regulations require notes to be prepared when waste covered by them is transferred. Subsection (3) ensures that regulations made under section 53 are not construed as replacing the separate requirements contained in existing regulations.

148. A new subsection, inserted at Stage 2, establishes that the Scottish Ministers must bring forward regulations establishing a scheme to require the provision of data about waste within a year of Royal Assent.

149. It is very likely that a system of enforcement, including offences and penalties, would be required to ensure that information is provided correctly and timeously, but this will be a matter for regulations. Powers to make such provision are contained in subsection (2)(g) and (h).

Recoverable waste: facilities for deposit etc.

150. Section 54 enables the Scottish Ministers to make detailed provision, by regulations, requiring persons specified in those regulations to provide facilities for the deposit of waste, and requiring that waste deposited in such facilities be collected by an authorised person and, as far as practicable, recycled. Some of the detail which may be included in the regulations is specified in subsection (2), but without prejudice to the generality of the section. “Waste” and “recycling” are terms which have already been defined in section 52(4). “Authorised person” is defined in subsection (5) in terms of section 34(3) of the 1990 Act, and includes local authorities and holders of waste management licences.

151. The power this section grants could be used to require offices to have facilities to collect paper for recycling, for example. Such facilities might be no more than a box, but more complex facilities, such as can-crushers, could also be required, as appropriate. This section could not be used to require facilities to be provided at temporary public events, which are covered by section 55 (see section 54(4)). Subsection (2)(b) may be used to restrict the categories of person who must be allowed to use the facilities, such as staff only in an office environment.

152. Subsection (2)(d) may be used to require an authorised person to remove the waste deposited, for example where the person providing the facilities could otherwise encounter difficulties in getting the waste uplifted. If this power were exercised, subsection (2)(e) could be used to set charges to finance this collection, and the recycling of the relevant material.

153. It is very likely that a system of enforcement, including offences and penalties, would be required to ensure that facilities were provided and used properly, but this will be a matter for regulations. Relevant powers are contained in subsection (2)(h) and (i).

Provision of facilities for deposit of recoverable waste at events etc.

154. Section 55 enables the Scottish Ministers to make detailed provision, by regulations, empowering local authorities to issue notices requiring organisers of temporary public events to
provide facilities for the deposit of waste, and requiring that the waste be collected by an authorised person and, as far as practicable, recycled. Subsection (4) of section 54 ensures that events are not subject to requirements, possibly competing, made under both sections.

155. An example of how the power might be used could be a local authority requiring the holder of a music festival to ensure that facilities to collect the kinds of waste to which such a festival might give rise (such as bottles, cans, or plastic cups) are provided for the duration of that festival.

156. Subsection (2)(g) could be used to ensure that notices were issued sufficiently far in advance of the relevant events. Provision for appeals against notices may be made under subsection (2)(h). Subsection (2)(k) to (n) deal with enforcement and provide for the appointment of an enforcement authority, which need not necessarily be the local authority. Further provision on enforcement authorities is made by section 60.

**Procurement of recyclate**

157. Section 56 enables the Scottish Ministers to make detailed provision, by regulations, requiring persons specified in those regulations to ensure that specified things procured or constructed by them include or contain a certain amount or proportion of recyclate. Some of the detail which may be included in the regulations is specified in subsection (3), but without prejudice to the generality of the section. “Recyclate” is defined by subsection (6) in relation to the definition of “recycling” in section 52(4).

158. Subsection (3)(d) could be used to deal with measurement of the proportion of recyclate present in complex items. Subsection (3)(e) could be used to allow the requirement to procure recyclate to be disapplied on application to the Scottish Ministers, for example where this could conflict with Community internal market rules.

159. It is very likely that a system of enforcement, including offences and penalties, would be required to ensure that recyclate was procured in at least the proper proportion, but this will be a matter for regulations.

**Targets for reduction of packaging etc.**

160. Section 57 enables the Scottish Ministers to make detailed provision, by regulations, setting targets for reducing the amount of packaging in use (subsection (1)(a)(i)), or the amount of greenhouse gas emissions associated with packaging (subsection (1)(a)(ii)). Some of the detail which may be included in the regulations is specified in subsection (2), but without prejudice to the generality of the section. “Packaging” is defined by subsection (4) in terms of Directive 94/62/EC on packaging and packaging waste.

161. Subsection (2)(c) would allow targets to be set by a variety of means, for instance by reference to turnover or market share. Subsection (2)(f) could be used to require the production

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of baseline information about the amount of packaging in circulation, which might then be used to set targets. It is very likely that a system of enforcement, including offences and penalties, would be required to ensure that accurate information was provided and the targets actually met, but this would be a matter for the regulations.

Deposit and return schemes

162. Section 58 enables the Scottish Ministers to make detailed provision, by regulations, setting up deposit and return schemes for packaging associated with specified products, the products themselves, or both, where Ministers are satisfied that it is necessary or expedient to do so in order to promote recycling. Some of the detail which may be included in the regulations is specified in subsections (3), (4) (5) and (7), but without prejudice to the generality of the section. Subsections (4)(c) and (5)(f) would confer power to require that materials returned under such a scheme were “recycled”, using the definition at the beginning of this Chapter, which includes re-use and recovery. Any scheme would have to take account of the waste hierarchy set out in the Waste Framework Directive (2008/98/EC), which prioritises re-use over recycling (narrowly defined), and both over recovery.

163. Subsection (5) would permit regulations to establish an administrative body (called a “scheme administrator”) to act on behalf of relevant producers and retailers in certain respects. This is dealt with in more detail in section 58A. Subsection (7) deals with matters such as mechanisms for identifying articles and/or packaging as falling within a scheme, customer information and specification of the places to which packaging could be returned and the deposit reclaimed. The latter could for example be used to deal with return of packaging to a different retailer selling similar types of product. It also provides for a scheme of “split deposits”, whereby there could be an element added to the price which was not refundable. This could be used to fund the scheme.

164. It is very likely that a system of enforcement, including offences and penalties, would be required to ensure that deposits were actually taken and repaid, and subsection (7)(i) to (l) contain appropriate powers.

Deposit and return schemes: designation of scheme administrator

165. Section 58(A) sets out the detail of the Scottish Ministers’ powers to designate, by order, a scheme administrator. The administrator may be a new or an existing body. If an existing body is chosen, it is highly unlikely that its existing powers and functions will match those required for the administrator. Subsection (2), therefore, allows the Scottish Ministers to alter the functions of an existing body accordingly. In subsection (3) particular mention is made of powers to borrow or charge, which will be necessary to fund the operation of the scheme.

166. Similarly, while it is common for the Scottish Ministers to have powers to direct bodies which have a relationship with Government (SEPA being an obvious example), Ministers do not have such powers over all bodies to whom the functions of scheme administrator might be given. Subsection (4) ensures that such functions may be given, but only in respect of a deposit and return scheme. Thus, should a body which is not currently subject to a power of direction by the Scottish Ministers be given the functions of scheme administrator, the Ministers could direct it

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only in respect of those functions. Its pre-existing functions which were not subject to a power of direction would remain unaffected.

**Power to establish scheme administrator**

167. Should a new body be established to act as scheme administrator, it will be necessary for the Scottish Ministers to have appropriate powers to give that new body the full range of functions to run a deposit and return scheme. Section 58B gives the Scottish Ministers those powers, which they may exercise by order. Again, specific mention is made of powers to borrow and to charge. Under subsection (2) any body which may be established to be a scheme administrator shall be a body corporate.

168. Subsection (5) gives Ministers explicit powers to make specific arrangements in relation to issues such as status, constitution, accounts and records. Similarly, the Scottish Ministers may make specific rules for the status, remuneration, allowances and pensions of the members and employees who work for the scheme administrator.

**Finance of scheme administrator**

169. Whether a new or existing body undertakes the functions of scheme administrator, it is likely that financial support will be required, at least temporarily, from the Scottish Ministers. Examples of circumstances in which this need for financial support might arise are during the start-up phase, and during the operational phase where there is a mismatch between the timing of receipts (from charges and sale of recyclate, for example) and outgoings. Section 58C gives the Scottish Ministers power to give financial support to the scheme administrator, whether by grant, loan or financial guarantee. The section gives powers to the Ministers to determine the conditions upon which such support shall be given.

**Charges for the supply of carrier bags**

170. Section 59 enables the Scottish Ministers to make detailed provision, by regulations, requiring persons supplying carrier bags to take goods away to charge for those bags, and requiring that the net proceeds of such charges be applied to environmental good causes. Some of the detail which may be included in the regulations is specified in subsection (2), but without prejudice to the generality of the section.

171. Subsection (2)(c) provides a power to specify the carrier bags in respect of which a charge would have to be made. This could be used to exempt certain bags, for example where Ministers were satisfied that they were likely to be re-used rather than quickly becoming waste.

172. The amount of the charge is to be fixed, and may be varied, by regulations. The charge is to be levied, not by central or local government, but by the supplier of the bag to which the regulations may apply. Subsection (2)(a) to (c) provide that the regulations may apply the charge to particular kinds of goods, or bags, or suppliers of goods. Subsection (2)(e) enables regulations to provide a mechanism for the calculation of the net proceeds of the charge.
173. Subsections (1)(b) and (2)(f) would allow Ministers to ensure that the net proceeds were spent on broadly environmental purposes, and to define those purposes in more detail if that was thought necessary (such as specifying that funds raised were to be spent in Scotland). It is very likely that a system of enforcement, including offences and penalties, would be required to ensure that charges were levied, appropriately accounted for, and devoted to appropriate causes, but this would be a matter for the regulations.

Enforcement authorities

174. Section 53 names SEPA as the enforcement authority in respect of waste information. Other provisions in this Chapter enable the Scottish Ministers to specify, by regulations, enforcement authorities in respect of them. Section 60 allows the Scottish Ministers to specify SEPA, a local authority or such other person or body as may be selected. Subsection (3) allows the functions of an enforcement authority to be divided between different specified bodies. Subsection (4) provides that enforcement authorities may charge to recover costs reasonably incurred in connection with their functions. SEPA, however, already has a charging power under section 41(1) of the Environment Act 1995, so charging in respect of its functions under section 53 has been dealt with as a consequential amendment of that section (see schedule 2, paragraph 2).

Penalties

175. Section 61 sets out the maximum penalties for offences created by regulations under any section in Part 5 of the Bill (namely, section 50 in Chapter 3 and sections 52 to 59 in Chapter 4). The statutory maximum for summary cases (those heard without a jury) is currently £10,000, and was set by the Criminal Proceedings etc. (Reform) (Scotland) Act 2007. It may, however, be varied by order by the Scottish Ministers by powers given by the Criminal Procedure (Scotland) Act 1995.

PART 6 – GENERAL AND MISCELLANEOUS

176. Section 61A provides that the persons mentioned in subsection (2) must in exercising functions conferred on them by virtue of this Act, take into account the need to do so in a way that contributes to the achievement of sustainable development.

177. Section 62 requires the Scottish Ministers and the advisory body, when exercising their functions under the Bill, to encourage equal opportunities and the observance of the equal opportunities requirements.

178. Section 63 provides that the Bill applies to the Crown, including to Her Majesty in her private capacity.

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6 2007 asp 6
7 1995 c. 46
179. Section 64 provides for the procedure for the making of orders and regulations under the Bill. Subsections (2) and (3) provide that such orders and regulations may make different provision for different cases or purposes, or make any appropriate consequential, incidental, supplementary, transitory, transitional or saving provision, including modification of any enactment. Subsections (4) and (5) provide that all orders and regulations made under the Bill, except a commencement order made under section 67, are subject to affirmative resolution procedure except those listed in subsections (6) and (7). The orders and regulations listed in those subsections are subject to negative resolution procedure, unless they modify an Act of Parliament or an Act of the Scottish Parliament (in which case they are subject to affirmative resolution procedure). Subsection (9) places requirements on Scottish Ministers before laying a draft of any regulations under sections 52 to 59 (other than regulations mentioned in subsection (7)(d) or (e)) and subsection (10) defines the period so specified.

180. The exception to the general rule that order and regulations are subject to affirmative procedure are the powers in relation to the matters in Chapter 4, which are the provisions on waste. Unless these are mentioned in subsection (7)(d) or (e) they must be exercised by means of a procedure which requires the discussion of a draft instrument with the Parliament before it is laid.

181. Section 65 brings together defined expressions used in the Bill and either defines them or indicates where in the Bill definitions of them can be found.

182. Section 66 introduces schedule 2, which contains amendments and repeals to other legislation.

183. Section 67 provides that all of the provisions of the Bill, except this section, sections 22 to 27 (powers and duties of advisory body) and section 64 (providing for procedure for orders and regulations), are to come into force on a day set by the Scottish Ministers by order. This section and section 64 come into force on Royal Assent. Sections 22 to 27 come into force in accordance with section 21 (i.e. when an order designating the advisory body is made under section 19). This section also provides for the short title of the Bill.

SCHEDULE 1 – THE SCOTTISH COMMITTEE ON CLIMATE CHANGE

184. Schedule 1 makes provision for the detailed constitution, powers and proceedings of the Scottish Committee on Climate Change which may be established under section 20 of the Bill. The Committee is to consist of a chair and no fewer than five and no more than eight other members. These numbers may be varied by order made by the Scottish Ministers, subject to negative resolution procedure. Members are to be appointed for a period of up to five years. Members are eligible to be reappointed for one further period.

185. In appointing members, the Scottish Ministers are to have regard to the desirability of the Committee (taken as a whole) having expertise or experience in business competitiveness, climate change policy, climate science and other branches of environmental science, economic analysis and forecasting, emissions trading, energy production and supply, financial investment and technology development and diffusion.
186. Schedule 1 provides for the circumstances in which members may be removed, for the disqualification of MPs, MSPs and MEPs from membership, and for remuneration, pensions and allowances.

187. Schedule 1 also provides for the appointment of a Chief Executive of the Committee, with the approval of the Scottish Ministers, and for the appointment of other staff by the Committee. The schedule makes provision for the procedure of the Committee, for the establishment of sub-committees, for its general powers and for the delegation of its functions. The Committee is to be required to keep proper accounts to be audited by the Auditor General for Scotland, and to publish an Annual Report which is to be laid before the Scottish Parliament by the Scottish Ministers.

SCHEDULE 2 – MINOR AND CONSEQUENTIAL MODIFICATIONS

188. Schedule 2 sets out minor and consequential modifications to other legislation required as a result of the Bill.

REVISED FINANCIAL MEMORANDUM

INTRODUCTION

189. This document sets out the financial implications of the Climate Change (Scotland) Bill (as amended at Stage 2). It should be read in conjunction with the Policy Memorandum and the Bill itself. The Policy Memorandum, published separately, explains in detail the policy intentions of the Bill.

190. The main aim of the Climate Change (Scotland) Bill is to establish a challenging long term target which requires the Scottish Ministers to reduce the emission of those greenhouse gases covered by the Kyoto Protocol by 80% by 2050. The Kyoto Protocol greenhouse gases are carbon dioxide, methane, nitrous oxide and the fluoride gases (hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride), collectively referred to as the basket of greenhouse gases. The Bill also contains provisions on topics with a contribution to make to tackling climate change – through mitigation of greenhouse gases or adaptation to the impacts of climate change.

191. The topics in the Climate Change (Scotland) Bill are set out under five significant parts:

- **Part 1** creates the statutory framework for the greenhouse gas emissions reductions in Scotland by setting an interim 34% reduction target for 2020, to rise to 42% once the EU adopts 30% as its target for greenhouse gas emissions reductions for 2020, and an 80% reduction target for 2050. To help ensure the delivery of these targets this part of the Bill also requires that the Scottish Ministers set annual targets, in secondary legislation, for Scottish emissions from 2010 to 2050.
These documents relate to the Climate Change (Scotland) Bill as amended at Stage 2 (SP Bill 17A)

- **Part 2** contains provisions which will allow the Scottish Ministers to establish a Scottish Committee on Climate Change or to designate an existing body to exercise advisory functions.

- **Part 3** places duties on the Scottish Ministers requiring that they report regularly to the Scottish Parliament on Scotland’s emissions, including the emissions attributable to Scottish consumption of goods and services, and on the progress being made towards the emissions reduction targets set in the Bill.

- **Part 4** places climate change duties on public bodies requiring that they act in the most appropriate way to deliver the emissions reduction targets included in the Bill.

- **Part 5 – Chapter 1** requires the Scottish Ministers to lay programmes on adaptation to climate change before the Scottish Parliament, and to report on these programmes. It also places a duty on Scottish Ministers to produce a land use strategy and provides for an enabling power for the Scottish Ministers to vary, but not shorten, the permitted times during which muirburn may be made where they consider it necessary or expedient to do so in relation to climate change.

- **Part 5 – Chapter 2** will allow modification by secondary legislation of the functions of the Forestry Commissioners to enable the Forestry Commission in Scotland to play a greater role in tackling climate change.

- **Part 5 – Chapter 3** contains a number of discrete energy efficiency provisions.
  - Section 48 requires the Scottish Ministers to produce an action plan setting out their current and proposed measures to promote and improve the energy efficiency of buildings in Scotland, as well as setting and reporting annually against a target.
  - Section 48A places a duty on the Scottish Ministers to prepare and publish a plan for the promotion of the use of heat from renewables sources.
  - Section 49 places duties on the Scottish Ministers requiring that they report regularly to the Scottish Parliament on progress of the energy efficiency and renewable heat action plans.
  - Section 49A contains a requirement on the Scottish Ministers to provide or revise existing guidance that sets the conditions subject to which consent will be granted for the construction of new or the extension of existing energy generating stations of a capacity greater than 50 megawatts. There are also requirements regarding the deadline by which this requirement must be complied with and advice which must be sought before the guidance is provided.
  - Section 50 contains measures for assessing the energy performance of existing non-domestic buildings in order to raise awareness of the contribution that those buildings can make to mitigating climate change through reducing energy demand and thereby emissions of greenhouse gases.
  - Section 50A contains provisions which permit Scottish Ministers to promote energy efficiency and improve the energy efficiency of living accommodation.
Section 50B contains provisions which require the Scottish Ministers to make regulations which would facilitate local authorities reducing the amount of council tax a person is liable to pay if that person makes an energy efficiency improvement or installs technology reliant on renewable energy or heat in a domestic dwelling.

Section 50C details the amount of any reductions in council tax as a result of the regulations in section 50B dependent on the cost of measures and or technologies installed.

Section 50D requires annual reports to be made by the Scottish Ministers regarding the effectiveness of specific financial incentives towards promoting energy efficiency improvements and technologies reliant on renewable sources of energy or heat. This section also provides Scottish Ministers with the power to vary the amounts and the criteria involved.

Section 50E amends the definition of maintenance in schedule 1 of the Tenements (Scotland) Act 2004 to include the installation of insulation.

Sections 51A and 51B extend permitted development rights to air source heat pumps and domestic turbines, and microgeneration equipment.

Sections 51C, 51D and 51E contain provision regarding the procurement and construction of buildings of new buildings which become part of the civil estate in Scotland and duties concerning reports which must be made concerning the efficiency and sustainability of those buildings.

Part 5 – Chapter 4 contains provisions which will enable the Scottish Ministers to make regulations relating to the acquisition of accurate information about waste and the promotion of waste reduction and recycling by different methods.

PART 1 – EMISSIONS REDUCTION TARGETS

2050 Target

192. Part 1 of the Bill establishes the 2050 emissions reduction target for the basket of greenhouse gases and underpins this long term target with a framework of annual targets. This Bill establishes targets which go beyond the findings of known studies and reports which explore and estimate the potential costs of addressing climate change, globally and in the UK.

193. Estimating costs can be done in two ways. One is to look at the resource costs of measures including the introduction of low carbon technologies and changes in land use, compared with the costs of the business as usual alternative. The second is to use macroeconomic models to explore the system-wide effects of the transition to a low carbon economy. These can be helpful in tracking the dynamic interactions of different factors over time. However these approaches are inevitably complex and their results can be affected by a whole range of assumptions. The studies described below provide a useful starting point for identifying the potential costs to Scotland of delivering emission reductions in 2050 in order to meet the 80% target.
194. The Stern Review on the Economics of Climate Change\(^8\) is considered to be the most comprehensive review carried out to date on the economics of climate change. The Stern Review report states all countries will be affected by climate change and unabated climate change risks raising average temperatures by over 5°C from pre-industrial levels. Based on the assessment of the science carried out by the Intergovernmental Panel on Climate Change on 2001, the Review report states that the dangers of unabated climate change will be an increase in global temperature and that an increase of 2-3 °C will reduce global GDP by between 5% and 20%.

195. By contrast the report estimates the costs of stabilising greenhouse gas concentrations in the atmosphere to avoid such a temperature rise, to be 1% (+/-3%) of global GDP\(^9\). This range assumes that sensible policies are put in place and deliver the induced technological progress required.

196. Stern goes further to indicate that there are also likely to be economic benefits associated with taking action to shift to a low carbon economy and reports that the global market for low carbon technologies could be worth at least $500 billion per annum by 2050 if the world acts on the scale required.

197. A report commissioned by the Department for Business Enterprise and Regulatory Reform (BERR)\(^10\) has estimated the market potential for the low carbon market in Scotland. In 2007, the low carbon market was worth £8.5 billion to the Scottish economy, and accounted for 73,000 jobs. It also estimates that the sector grew by 5.1% in 2007/08, which is more than double the growth rate of the Scottish economy as a whole over that period.

198. The “80% Challenge: Delivering a low-carbon UK” report by the Institute for Public Policy Research, WWF and RSPB\(^11\), published in October 2007, used the same economic model as that used for the UK Impact Assessment for the UK Climate Change Act\(^12\) (refer to paragraph 8), to indicate that an 80% reduction in carbon dioxide emissions, including international aviation and shipping emissions, may cost up to 3% of GDP in 2050. It can be expected that increasing the target to include the other five gases will increase this estimated cost.

199. The Final Impact Assessment for the UK Climate Change Act\(^13\), published in April 2008, indicates that the long term costs to the UK of achieving a 60% reduction in carbon emissions are likely to be in the range 0.3-1.5% of GDP in 2050, depending on the price of fossil fuel and the availability of low-carbon technologies.

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\(^8\) The Stern Review was published on 20 October 2006 by HM Treasury and was carried out by Sir Nicolas Stern, Head of the UK Government Economic Service and former World Bank Chief Economist. [http://www.hm-treasury.gov.uk/sternreview_index.htm](http://www.hm-treasury.gov.uk/sternreview_index.htm)

\(^9\) World Bank estimates suggest that 1% of global GDP equates to around $650 billion, taking into account both exchange rates and also the purchasing power of each world currency against the dollar, in 2007. [http://www.berr.gov.uk/files/file50253.pdf](http://www.berr.gov.uk/files/file50253.pdf)


200. On 7 October 2008, the expert, independent UK Committee on Climate Change\textsuperscript{14} issued its advice on the level of emissions reductions recommended for the UK. It advised that the UK should aim to reduce emissions of Kyoto Protocol greenhouse gases by at least 80\% by 2050. Based on the Stern Review Report data, the Committee estimates that stabilisation of greenhouse gases at levels of 500-550ppm carbon dioxide equivalent, are between 1\%-2\% of GDP in 2050. This is significant, but is fully consistent with continued growth and development, in contrast with unabated climate change which will eventually pose significant threats to growth. The Committee also stated that the costs to the UK of this level of emissions reductions can be made affordable with appropriate policies and trajectories.

201. The UK Government has agreed with this recommendation and announced on 16 October 2008 that they would seek to amend the target in the UK Climate Change Act to match these recommendations. These amendments to the UK Bill were agreed on 28 October. Meeting an 80\% target is viewed by the Committee as challenging but feasible based on a range of options for reducing emissions including:

- Energy efficiency improvement in buildings and industry (eg. loft and cavity wall insulation, use of more efficient appliances, turning appliances off and using less air conditioning), which will be particularly important for reducing emissions in the period to 2020.
- Decarbonisation of the power sector, starting now and continuing through the 2020s, based on replacing existing conventional fossil fuel fired plant with renewable technologies (e.g. wind and tidal) and carbon capture and storage.
- Transport sector decarbonisation, first through improving fuel efficiency of conventional engines and increased use of sustainable first generation biofuels, with progressive introduction of new technologies such as electric cars, plug in hybrids and hydrogen vehicles, and second generation biofuels.
- Heat sector decarbonisation through increased use of biomass in boilers and combined heat and power, air exchange and ground source heat pumps, and modern electric storage heating.
- Decarbonisation of industry and the energy intensive sector in particular, through the introduction of new technologies such as carbon capture and storage to decarbonise the energy used to produce products such as cement, iron and steel.

2050 target – Costs for the Scottish Government, local authorities, public bodies and Scottish businesses

202. The Scottish Government’s assessment of the potential range and timing of options to deliver an 80\% reduction are tied up with actions at the EU and UK level. The first overview assessment of potential options was published in November 2008\textsuperscript{15} with a focus on measures likely to have a material and lasting impact on emissions in 2050. This is not to downplay the

\textsuperscript{14} The UK Committee on Climate Change is currently operating in shadow form pending its formal establishment under the UK Climate Change Act.

\textsuperscript{15} AEA Energy & Environment, ‘Mitigating against climate change in Scotland: Identification and initial assessment of policy options.’ November 2008
importance of other supporting policy measures such as advice, procurement and training, but recognises the overarching nature of the initial study.

203. The study concludes that options available and currently known could generate an emissions reduction of around 75% based upon our 1990 emissions figure. This percentage includes options about which there is currently considerable uncertainty, so focussing in on the more certain options within this long list, the report concludes that this sub-set of options could potentially deliver around 63% of the total emissions reduction necessary. It is extremely difficult to cost even this sub-set of options but the report further concludes that implementing these measures in 2050 might cost in the region of £1.7 billion (expressed in 2005 prices). This figure is not an assessment of the wider economic costs from implementation nor does it disaggregate the overall cost to show how it falls between producers, consumers or taxpayers. The cost simply relates to the cost of implementing those particular measures in that year.

204. A further study covering the wider economic and societal costs and benefits has also been published. The overall conclusions suggest that reductions in carbon dioxide emissions from a number of policy options may be at the cost of a small reduction in GDP, but it is always important to bear in mind Stern’s conclusions that the “do nothing” option will be far more costly in the long run. The results from this Fraser of Allander study should be seen as early findings illustrating the potential trade-offs across different sectors of the economy rather than a comprehensive answer on the economic cost of meeting our emissions target.

205. The UK Committee on Climate Change cost estimate for delivering the UK Bill target of 80% emissions reduction in 2050, i.e. 1%-2% of GDP, is a close cost comparison available for calculating the cost of delivering the Scottish 2050 emissions reduction target. Estimates for the impact on the UK as a whole are an appropriate proxy for the cost for Scotland as the structure of the Scottish economy is broadly similar to the structure of the UK economy. For example the manufacturing sector represents approximately 14% of the output from the Scottish economy, whereas the corresponding figure for the UK is 14.7%.

206. Chapter 14 of the UK Committee on Climate Change’s first report analysed the economic impacts of the UK Climate Change Act on employment and output in Scotland, Wales and Northern Ireland. It identified the possible implications in each devolved administration as consumers and firms respond to increased production costs and possible competitiveness impacts. In Scotland, sectors at risk are estimated to account for only a small proportion of output and employment, although there is a risk of localised impacts. Sectors at risk account for

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16 Fraser of Allander Institute and Department of Economics, University of Strathclyde, ‘The impact on the Scottish economy of reducing greenhouse has emissions in Scotland: Illustrative findings from an experimental computable general equilibrium model for Scotland, November 2008


18 Sectors regarded as at risk would have to meet two criteria. Energy costs should be a significant proportion of production costs and/or Gross Value Added (GVA), such that increases in energy costs due to carbon prices would significant impact output prices. Also, products should also be tradable or potentially tradable so that transport costs should not be prohibitive. Sectors at risk have been divided into three categories according to production cost increase:

- **Category 1** cost increase as a % of GVA is greater than 25% (plus aluminium)
- **Category 2** cost increase as a % of GVA between 15% and 25%
- **Category 3** cost increase as a % of GVA between 5% and 15%
less than 1% of GVA and less than 0.5% of employment. Over time, growth in the low carbon sectors should be capable of absorbing any output loss in energy intensive sectors.

207. On this basis, the potential costs of delivering an 80% emissions reduction in Scotland could also be considered to be in the region of 1%-2% of GDP in 2050. Were this cost applicable in 2006, not 2050, then Table 1 shows that the potential Scottish costs would be in the region of £1-£2 billion. Clearly 1-2% of GDP in 2050 will generate a higher figure. These costs will apply across the whole of the Scottish economy – Scottish Government, local authorities, public bodies and Scottish businesses.

208. The cost referred to in paragraph 207 is an estimate based on the preliminary work commissioned by the Scottish Government in identifying how Scotland can meet the 80% emissions reduction target in 2050. This preliminary work represents the first steps in a progressive process and will be built on by the Scottish Government’s Strategic Overview project. The main output of this project, the Climate Change Delivery Plan will be published by the end of June 2009. For the purposes of costing the delivery of the 2050 target at this time, the Scottish Government intends to use the cost information referred to in paragraph 207 i.e. 1-2% of GDP in 2050.

209. Costs in 2050 are not transferrable to earlier years as there will likely be a very different cost profile in between. Emissions reductions to 2050 are unlikely to follow a straight line trajectory. Reductions will occur through the advancement of technology as well as through changing demand and changing behavioural patterns. The introduction of a small number of measures can be expected to result in a step change in Scottish emissions (e.g. new, more carbon-efficient power stations coming on line). Others will lead to a gradual change in emissions (e.g. take up of new vehicle technology) while advances in building efficiencies may be significantly slower to reduce emissions. Each of these changes will impose different costs on different sectors of the economy at different times over the period to 2050. It is not possible to accurately predict when technologies will be introduced or the rates of reductions that will occur from changing behaviours and shifting demand. Overall, with all these factors in play, it is impossible to accurately predict what will happen and when. That is why it is not possible to predict cost profiles during the period of change in the years out to 2050.
Table 1: GDP estimates for Scotland, 2006

<table>
<thead>
<tr>
<th>2006 data</th>
<th>UK £ million</th>
<th>Scotland £ million</th>
<th>Scotland as % of UK</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gross Domestic Product (GDP)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>current market prices</td>
<td>1,299,622</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gross Value Added (GVA)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP at basic prices</td>
<td>1,154,959</td>
<td>91,024</td>
<td>7.88%</td>
</tr>
<tr>
<td><strong>Population</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>000s</td>
<td>60,587.3</td>
<td>5,116.9</td>
<td>8.45%</td>
</tr>
<tr>
<td><strong>Estimate of Scottish GDP in market prices</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. based on GVA split</td>
<td>102,425</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. based on population split</td>
<td>109,759</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Estimate of 2% of GDP in market prices</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. based on GVA split</td>
<td>2,048</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. based on population split</td>
<td>2,195</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

210. These costs will be borne by producers and tax payers through higher input prices for goods and public services and by consumers through higher retail prices, leading to lower overall GDP of the order highlighted in the previous paragraph. There is considerable uncertainty about precisely where these costs will fall, and how they will impact on output by sector will depend upon the paths chosen to deliver the emissions reductions.

211. However, in a global context, it should be noted that the cost estimate of taking action to reduce emissions is lower than the cost to society if no action is taken to alleviate climate change – estimated by the Stern Review to be in the order of 5-20% of global GDP.

2020 target – Costs for the Scottish Government, local authorities, public bodies and Scottish businesses

212. Similar difficulties arise with costing the delivery of the 2020 target with any certainty. In addition to steady, year-on-year emissions reductions (e.g. arising from enhanced energy efficiency), some of the more significant emissions reductions will take the form of step changes resulting from, for example, the introduction of new technology. This means that in practice a straight line reduction trajectory is unlikely. For example if carbon capture and storage is
successfully introduced as a mechanism for avoiding emissions of carbon dioxide into the atmosphere, the national reduction trajectory will take the form of series of step changes as the technology is adopted at fossil fuelled power stations.

213. Currently there are not any climate change studies which estimate the costs of reducing emissions by 2020 which could provide a reference point on which to base Scottish costs. As emissions reductions will not occur in a straight line trajectory, taking a proportion of the cost estimated for delivering the 2050 target would not provide a credible cost estimate. The risks and errors with such an approach are too significant.

Annual targets – Costs for the Scottish Government, local authorities, public bodies and Scottish businesses

214. The long term target 2050 target will be underpinned by a series of annual targets, the first of which will be set by order in 2010. The Bill does not specify the methods by which the annual emissions reductions targets are to be delivered. The costs and efficiencies arising as a result of the proposals will depend on a large number of interrelated factors. These include wider economic variables such as macroeconomic conditions and GDP growth, largely exogenous factors such as average winter temperatures and the stability of European energy markets and points more specific to Scotland such as the level at which the annual targets are set, the gradient of the emissions reductions trajectories selected and the costs of the available abatement technologies adopted over the period to 2050. All statutory orders prescribing annual targets will be accompanied by a regulatory impact assessment (RIA) which details the likely cost implications.

215. The Scottish Ministers will be required by the Bill to seek expert, independent advice to identify the most cost effective emissions reductions available when setting annual targets and when identifying the most cost effective way of delivering the post-2020 emissions reduction trajectory required by the Bill.

216. At this time it is not possible to identify what these annual targets will be or how much it will cost to deliver them, at least in part because baseline future emissions are strongly linked to economic activity. As discussed earlier, costs in 2050 are not transferrable to earlier years as there will likely be a very different cost profile in between. This why it is not possible to provide costs for delivering the emissions reductions targets in earlier years.

217. More specifically the Scottish Government expects to be informed on a number of issues by independent advice, which in the first instance is to be obtained from the UK Committee on Climate Change. Under the UK Climate Change Act, the Committee provided advice to the UK Government on 1 December 2008 on the recommended emissions budgets for the first three UK budget periods. The Scottish Government intends to ask the Committee to draw on this advice and advise on the level of annual targets to be set under the Scottish Bill and on the most cost effective abatement methods available to deliver these targets. This advice is not expected to be available until early 2010. Pending this advice it is not possible to quantify the cost of delivering the annual targets to be set under the Bill.
218. In the event of Scotland failing to meet an annual target, the Bill includes powers to address any excess in emissions through the purchase of carbon units. Carbon units represent emissions reductions from recognised sources outside of Scotland. The Bill requires that 80% of the net Scottish emissions account reductions be delivered through emissions reductions in greenhouse gas emissions. It also limits the carbon credits that Scottish Ministers can purchase from 2013 to 2017 to 20% of the required reduction in the net Scottish Emissions Account.

219. Emissions data for Scotland is currently produced by disaggregating UK emissions data. This information is available eighteen to twenty months after the end of a reporting year. Therefore the first year in which these costs might arise for the purchase of units is 2012 in connection with Scotland’s emissions performance in 2010. The cost of purchasing carbon units is determined by the market but is expected to range from at least £15 - £30 per tonne of carbon dioxide equivalent. Should Ministers take up the option to purchase carbon units, the cost can be expected to fall to the Scottish Government from 2012 onwards. It is not possible to estimate at this time exact costs of purchasing carbon credits as this will depend on whether the annual targets are met and if there is any failure, the extent of that failure.

220. The cost of meeting a specific annual or interim target will form part of the overall cost of meeting the 2050 target. For information the cost of any carbon unit purchase represents a transfer of money from Scotland to the country generating a validated carbon unit.

Carbon accounting – Costs for the Scottish Government local authorities, public bodies and Scottish businesses

221. In relation to the net Scottish emissions account, the Bill will allow for the Scottish Ministers to create a scheme, by order, for the tracking of carbon units and establishing and maintaining accounts for holding carbon units. Such a scheme could be administered by the Scottish Government and any costs would be absorbed within existing administration budgets. The potential annual cost of this task is estimated to be £60,000. This cost is based on the employer costs of employing the equivalent of a policy analyst, costed at approximately £60,000 per annum. It is possible that this cost could also be applied in an alternative manner by employing a range of lower grade staff, with employer costs not exceeding this £60,000 estimate.

222. If the Scottish Ministers do create a carbon accounting scheme, these costs will apply to the Scottish Government. There will not be any associated costs for local authorities or Scottish businesses. If the Scottish Ministers require a public body to undertake this activity on their behalf, for example the Scottish Environment Protection Agency, these costs could apply to the public body instead of the Scottish Government.

PART 2 – ADVISORY FUNCTIONS

Advice from the UK Committee on Climate Change Committee

223. The emissions reduction provisions in the Climate Change (Scotland) Bill impose duties on the Scottish Ministers, which among other things, require the Scottish Ministers to establish annual emissions reductions targets in secondary legislation. Ministers will be required to seek expert, independent advice in advance of setting annual targets. It is expected that this advice will be sought from the UK Committee on Climate Change, or corresponding Scottish
Committee, on these annual targets, on the basis of the most cost effective abatement mechanisms for reducing greenhouse gas emissions.

224. If the Bill is approved by Parliament, the first main task for the Scottish Ministers, after it is enacted, will be to set the annual targets for greenhouse gas emissions reductions. These annual targets will be set in batches with the first batch of annual targets expected to cover the period up to and including 2022. Each set of annual targets will be prescribed in orders. All such orders will be accompanied by a fully costed Regulatory Impact Assessment (RIA), detailing the abatement and mitigation policies required to deliver the relevant set of annual targets. The Bill will require the first set of annual targets to be established by June 2010 with subsequent sets established by order at intervals thereafter. This will ensure that a clearly defined statutory reduction pathway is available to guide abatement effort over the short to medium term.

225. The Scottish Ministers intend to seek advice in the short term from the UK Committee on Climate Change. As one of the devolved administrations contributing to the UK target, Scotland has committed to fund this independent, expert Committee and its financial contribution for 2008-09 is £275k, which includes set-up costs and the initial phase of research. Future contributions are expected to be similar although additional funding may be required if the Committee is commissioned to provide advice and the cost of that task is particularly expensive, for example, because the Committee requires to recruit more staff or commission external research in order to develop the advice. Analysis related to the Scottish target and trajectory may at times require extra funding for this reason.

226. If the Scottish Ministers decide to establish a Scottish Committee on Climate Change in the future, for which provision is made in the Bill, the annual costs could be in the region of £2.5m, similar to the current annual cost of running the UK Committee (refer to Table 2). The nature of the advice required and the range of expertise necessary in such a Committee suggests that it would be difficult to save costs by adopting a scaled down operation for Scotland. This would represent a potential increase in costs. There would be little, if any, saving on the core contribution to the UK Committee which advises all 4 administrations on their shared objective of the UK target in the context of a wide-ranging analysis of the UK situation as a whole. There would be a saving in that it would not be necessary to commission any analysis relating to the Scottish target from the UK Committee on Climate Change which might incur extra costs if the task were expensive to carry out. Utilising the expertise of the UK Committee on Climate Change remains the most cost effective option for obtaining advice, currently available to the Scottish Ministers.
Table 2: Outline of estimated first year and on-going costs for the UK Committee on Climate Change as detailed in the UK Climate Change Act Final Impact Assessment, April 2008

<table>
<thead>
<tr>
<th>Function</th>
<th>2007/08 Shadow Committee</th>
<th>On-Going Costs – Post Royal Assent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secretariat</td>
<td>£680,000</td>
<td>£1,300,000</td>
</tr>
<tr>
<td>Committee</td>
<td>£62,000</td>
<td>£210,000</td>
</tr>
<tr>
<td>Research</td>
<td>£750,000</td>
<td>£500,000</td>
</tr>
<tr>
<td>Running Costs</td>
<td>£132,000</td>
<td>£300,000</td>
</tr>
<tr>
<td>Accommodation</td>
<td>-</td>
<td>£270,000</td>
</tr>
<tr>
<td>Corporate Identity19</td>
<td>-</td>
<td>£150,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>£1,624,000</strong></td>
<td><strong>£2,730,000</strong></td>
</tr>
</tbody>
</table>

**PART 3 – REPORTING DUTIES**

227. The Bill establishes a number of reporting requirements for the Scottish Ministers linked to the greenhouse gas emissions targets. All of these will have a minimal cost impact on the Scottish Government and any costs will be absorbed within existing administration budgets. The potential annual cost of this administration task is estimated to be £17,000 (50% of a policy officer’s employer costs costed at approximately £34,000 per annum).

228. The different reporting requirements are:

- An annual report on greenhouse gas emissions in Scotland;
- A report and statement on proposals and policies designed to meet future annual targets, published as soon as practicable after each set of annual targets are set;
- A report and statement on remedial measures in the event that an annual emissions target is exceeded;
- Reports on policies and proposals for adaptation to climate change (under Part 5, section 45), in response to each UK wide risk assessment issued under the UK Climate Change Act;
- A statement as to whether the 2030 greenhouse gas emissions reduction target has been met;
- A final statement on whether the 2050 greenhouse gas emissions reduction target has been met.

19 Corporate identity costs were only necessary in 2008-09 when the Committee became a statutory body after Royal Assent.
229. The main emissions target provisions do not apply any reporting duties to local authorities or other public bodies.

**PART 4 – DUTIES OF PUBLIC BODIES RELATING TO CLIMATE CHANGE**

**Power to impose duties on public bodies in relation to climate change**

230. The Scottish Ministers anticipate that all sectors of society will play their appropriate part in reducing the emissions of greenhouse gases and therefore contribute to tackling climate change.

231. The Bill requires that public authorities, must in exercising their functions, act in the way best calculated to deliver the targets set by the Bill, help deliver any adaptation programme introduced under section 45 and act in way that it considers most sustainable.

232. Overall these duties can be considered to contribute to delivering the emissions targets contained by the Bill and therefore would not pose an additional cost above that required to meet the annual targets, the 2030 target and the 2050 target. If additional specialist duties for public bodies are introduced through an order, such an order would be accompanied by a fully costed Regulatory Impact Assessment.

*Table 3: Summary of potential costs for Parts 1-4 Emissions Reductions*

<table>
<thead>
<tr>
<th>Estimated cost for Scotland’s economy* for delivering the greenhouse gas emissions reduction target in Scotland 2050</th>
<th>1-2% GDP in 2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scottish Government cost (or public body cost) - Estimated annual cost staff cost for managing a carbon unit scheme</td>
<td>£60,000</td>
</tr>
<tr>
<td>Scottish Government cost - Estimated annual cost for administering the reporting duties required for the emissions reductions targets</td>
<td>£17,000</td>
</tr>
<tr>
<td>Scottish Government cost - Estimated annual cost for advice from a Scottish Climate Change Committee, based on current costs.</td>
<td>£2.5m</td>
</tr>
</tbody>
</table>

*Note. Potential for some saving on payment to UK Committee on Climate Change for work in relation to Scottish target – see paragraph 226.*
PART 5 – OTHER CLIMATE CHANGE PROVISIONS

CHAPTER 1 – ADAPTATION

Programmes for adaptation to climate change

233. Section 45 requires the Scottish Ministers to take specific action where the Secretary of State lays a report before the UK Parliament on the impact of climate change under section 56 of the Climate Change Act 2008.

234. As soon as reasonably practicable following receipt by them of the Secretary of State’s report, the Scottish Ministers must respond by laying a programme before the Scottish Parliament which addresses the adaptation risks identified under section 56 of the UK Act and which sets out the Scottish Ministers’ adaptation objectives and their proposals and policies for meeting these objectives. After the first laying of the report, subsequent reports will require the Scottish Ministers to include within their programmes an assessment of progress under the previous programme.

235. This action will initially be triggered within three years of the in-force date of the relevant section of the UK Act, and thereafter at least once every five years. But the response required will form a considerable part of a policy official’s workload when it is required. Overall it is anticipated that this work will be absorbed within existing administration budgets and will approximate to 50% of a policy analyst’s time during the year in which the duty is triggered. This is cost is estimated as £30,000 based on the employer costs of employing the equivalent of a policy analyst, costed at approximately £60,000 per annum. This cost will only occur for the Scottish Government. It is possible that this cost could also be applied in an alternative manner by employing a range of lower grade staff, with employer costs not exceeding this £30,000 estimate.

Land use strategy

236. A comprehensive land use strategy will provide a means of pulling together, with a focus on climate change, a number of different policies, such as those relating to agriculture, food, forestry, renewable energy, soils, water and conservation.

237. The provisions in Part 5, Chapter 1 of the Bill require Scottish Ministers, following consultation on a draft, to lay a land use strategy before the Scottish Parliament no later than 31 March 2011. The land use strategy is to be revised every five years. The main costs associated with the production of a land use strategy will be administrative and can be expected to be in the region of £300,000. This takes account of staff costs, the central costs of producing and consulting on the strategy and associated tasks such as a Strategic Environmental Assessment which could itself cost in the region of £50,000.
Variation of permitted times for making muirburn

238. Muirburn is a current land management activity, which must adapt to the effects of climate change in order to remain effective. The making of muirburn is the act of controlled burning of vegetation on open muir or moorland. Its use provides fresh food sources on rough grassland or actively managed grouse moors and it manages older vegetation which can be a source of fuel for wildfires.

239. The making of muirburn is regulated by the Hill Farming Act 1946 which provides that muirburn is permitted at prescribed times of the year. In Scotland, climate change has altered climate and seasonal weather patterns and as a result, the ability of muirburn as a land management tool has been, and will in the future be adversely affected.

240. The provisions in Part 5, Chapter 1 of the Bill will give the Scottish Ministers the power to use secondary legislation to set and vary the permitted periods for making muirburn where they consider it necessary in relation to climate change. As muirburn is a current activity, the order-making power is not expected to give rise to additional costs. The administrative costs incurred by the Scottish Government in bringing forward an order are expected to be minimal and will be absorbed within existing administration budgets.

CHAPTER 2 – FORESTRY

Renewable energy development on the national forest estate

241. These provisions will allow the Scottish Ministers to confer functions on Forestry Commissioners in Scotland by secondary legislation, where they consider it necessary or expedient in relation to climate change. The immediate intent is to take forward proposals to allow the Forestry Commission to enter into joint ventures for renewable energy development.

242. Renewable energy development on the National Forest Estate through joint ventures will be revenue generating. Recent studies have shown that there is significant untapped potential for wind and hydro developments on the national forest estate. Annual net income potential might be expected to reach perhaps £10m/yr by 2012 and perhaps £30m/yr by 2020. Initial capital costs to the Forestry Commission will depend on specific joint venture arrangements, but the use of the renewables sites themselves as the Forestry Commission share is preferred. There are further options to fund initial capital from routine land disposal programmes.

243. Additional cash resources will be required by the Forestry Commission Scotland (FCS) initially to establish joint venture arrangements, estimated at £0.5m/yr in 2009/10 and 2010/11. This will be found from FCS’s operational budgets.

244. This proposal will not create additional financial burdens on local authorities or other public bodies, individuals and businesses. As well as helping to mitigate climate change, an enhanced rate of woodland creation will provide economic stimulus to Scotland’s forestry sector.
PART 5, CHAPTER 3 – ENERGY EFFICIENCY

245. Chapter 3 of the Bill aims to improve the energy performance of domestic and non-domestic buildings and improve energy efficiency generally across Scotland.

Section 48 – Duty of Scottish Ministers to promote energy efficiency

246. These provisions will put a duty in statute on the Scottish Ministers to produce a plan for promoting energy efficiency in Scotland. The action plan will provide details of the measures to improve energy efficiency and/or to promote micro-generation across all Scottish Government Directorates and to set annual targets and describe how those targets are to be reported on. This duty is part of current planned activity, is not expected to give rise to additional resources and will be met from within existing Scottish Government administration budgets.

Section 48A – Duty of Scottish Ministers to promote renewable heat

247. These provisions will put a duty in statute on the Scottish Ministers to produce a plan for the promotion of the use of heat produced from renewable sources. The action plan will provide measures to develop, grow and promote the sector in Scotland. Furthermore the provisions will require that the plan must include targets and describe how these targets will be reported upon. Finally when the plan is laid before Parliament, Scottish Ministers must make a statement on the plan. This duty is part of current planned activity, is not expected to give rise to additional resources and will be met from within existing Scottish administration budgets. An estimate of staff resource is in the region of £35,000-£40,000 per year. Other activity is currently funded through a number of existing support programmes – Community and Renewable Energy Scheme, Energy Saving Scotland – Home Renewables and Scottish Biomass Heat Scheme which offer advice and capital grants to support renewable energy installations. Additionally the Renewable Obligation (Scotland) supports combined heat and power plants generated from renewable fuels. It is not envisaged that there will be any costs arising from these provisions for local authorities, individuals or businesses.

248. The Community and Renewable Grant Scheme and the Householder Renewables Initiative aims to bring renewable energy to households and communities across Scotland. Both assist with the installation of a range of renewable technologies, one for households and one for communities. The support includes capital grants and advice which is delivered by a team of development officers based across Scotland. The total budget allocation over the current spending review period is £13.5 million per annum.

249. The Scottish Biomass Heat Scheme is a capital grants scheme targeted at the business sector to help with the costs of installing a biomass heating system and for demonstration of district heating. The budget for the programme is £3.3 million over the financial years, 2009-10 and 2010-2011. This total budget is used for renewable heat.
Section 49A – Energy generating stations: efficiency guidance

250. The policy intention behind section 49A is to reduce emissions from the power generation sector in line with the overall 80% greenhouse gas reduction target of the Bill. To do so will require power stations which emit low levels of CO2.

251. The section does not specify particular types of generating station, and states that the Scottish Ministers may vary the maximum greenhouse gas emissions permitted by different technologies. The section could apply equally to all types of power generation, including wind power, nuclear power, biomass power, combined heat and power, solar power, coal power and gas power.

252. Given that emissions levels are highest from coal and gas-fired stations, it is likely that the greatest reductions in emissions under section 49A would be expected to come from these types of generation. Standard coal-fired plants currently emit around 900g of CO2 per kWh, with supercritical plants around the 700g level. Combined cycle gas turbine plants have an emissions intensity of 350g of CO2 per kWh.

253. To reduce these emissions would require some form of carbon capture and storage technology – technology which has not yet been demonstrated on a commercial scale, making cost estimates difficult. Once fitted with CCS, emissions levels would be expected to fall below 150g of CO2 per kWh, depending on the technology employed.

254. There are a number of costs involved in carbon capture and storage at coal-fired power plants:

- Power plant must be retrofitted with capture equipment
- The capture process must be powered
- A transport system needs to be built
- The CO2 must be stored

255. CCS generating plants incur significantly higher costs than traditional coal- or gas-fired plants due to:

- Increased fuel consumption
- Capital investment in carbon capture equipment
- Capital investment in carbon transportation
- Capital investment in carbon storage
- Increased operational costs due to the above infrastructure and activities

256. In the absence of actual commercial data, there are a number of estimated cost increases to the 2007 cost of coal or gas based electricity after CCS has been retrofitted which have been made:
These documents relate to the Climate Change (Scotland) Bill as amended at Stage 2 (SP Bill 17A)

£9 - £22.9/ MWh  Intergovernmental Panel on Climate Change
£13 - £24/ MWh  UK Treasury Consultation 2006
£20 - £30/ MWh  UK Committee on Climate Change

257. Hence, predicted costs of CCS by 2030 are in the range of:

- €30-45/tonne (assuming a roll-out of 80-120 projects in Europe by 2030)
- €5/tonne (assuming a roll-out of 500-550 projects globally by 2030)

258. The cost of building the first CCS plant could be anywhere between £500m and £1bn, on top of the £1bn cost of a new coal-fired power station. However, it has been estimated that retrofitting CCS at a currently operating power station could cost more than £1.1bn.

259. If Scotland’s three principal coal and gas power stations (Peterhead – 3.1Mt CO2 p.a; Cockenzie – 5Mt CO2 p.a; and Longannet – 9.6Mt p.a in 2006) were to have their emissions limited and required CCS to be fitted, we could therefore expect the retrofit cost to be in the order of £3-4 billion in total (at current estimates).

260. This will depend on market dynamics and how the provisions in section 49A were applied – for example if emissions levels were set at a level above 350g per kWh, then this might lead to gas-fired stations being built to replace coal stations. If emissions levels were set below this then CCS would be required on both coal and gas stations, or else investment would have to take place in alternative means of power generation.

261. At current market prices for carbon, it is recognised that the costs of fitting or retrofitting CCS technology will require public sector support. The UK Government has recently announced its intention to consult on taking powers to impose a levy on fossil fuel energy generators, which would raise funds that could be used to fund demonstration of CCS. The Scottish Ministers do not have any such powers to raise such funds because of the reservations in the Scotland Act 1998. The European Union has also committed to supporting CCS demonstration on 15 power stations across the EU via allocations of allowances under the New Entrants Reserve of its Emissions Trading Scheme, though the mechanism for allocation has not yet been finalised.

262. Operators of new or existing coal or gas power stations that would be required to fit CCS technology under the provisions of section 49A could be expected to pursue this funding in order to make their developments viable. If this funding was insufficient to meet the costs of the provisions of section 49A, then additional public funding might have to be found, or costs passed directly to consumers in the form of higher bills.

Section 50 – Energy performance of non-domestic buildings

263. The aim of improving the energy performance of existing non-domestic buildings is to raise the contribution that the existing non-domestic stock can make to mitigating climate change. Buildings account for over 40% of emissions and there is scope to further reduce these levels. They are to be subject to an assessment of the emissions of greenhouse gases and energy
These documents relate to the Climate Change (Scotland) Bill as amended at Stage 2 (SP Bill 17A)

performance, an enhanced form of energy performance certificate (EPC). The results of the consultation in autumn 2008 has informed the detailed route forward which will require building owners to draw up improvement action plans. These plans will include building work actions for owners to follow which lead to improved energy performance and reduce emissions, and where appropriate could also include alternative measures or operational measures that building users may choose to act on. To deliver this policy, substantive provision is made in eight areas as follows:

1) Extending the scope of enhanced EPCs and action plans to take account of operational ratings as well as asset ratings and also embodied energy/carbon when a robust methodology is available to address the issue of historic and traditional buildings. Varying the lifespan of such assessments/certificates.

2) Requiring owners or their delegated persons to obtain enhanced EPCs (even though they are not selling or renting out their buildings).

3) Requiring owners of non-domestic buildings to formulate action plans for building work arising from the advice on their enhanced EPCs.

4) Requiring building owners to implement their action plan.

5) Setting out the manner and timescale within which building owners have to carry out the recommendations within the certificates.

6) The registration of enhanced EPCs and disclosure of information in the register.

7) Developing appropriate standards for such building work e.g. energy efficient lighting, roof space insulation or sub-metering.

8) Empowering local authorities, or similar public bodies, to check and enforce enhanced EPCs.

264. The costs and savings outlined in this memorandum are those costs and efficiencies that are directly attributable to responsibilities and tasks set out in the energy performance of existing non-domestic buildings part of the Bill. The provisions in the Bill clarify the roles and responsibilities of the Scottish Ministers, local authorities, building owners and other responsible persons and authorities for improving the energy performance of existing non-domestic buildings in Scotland. This will result in reductions in emissions and energy use, which will ultimately lead to the reduction in economic costs to occupiers of non-domestic buildings and in general, the greater good of the population.

265. During early years of implementation, it is scenario 2 that is the closest to how the policy will work (assuming fullest coverage of the non-domestic building stock). Scenario 2 covers all existing non-domestic buildings, requiring an enhanced EPC every 5 years with implementation of cost-effective improvements.

266. As CO₂ reductions fall short there will be a need for mandatory implementation of cost-effective measures, scenario 5 is closest to how the policy will work (again assuming fullest coverage of the non-domestic building stock). Scenario 5 is similar to scenario 2 but requires mandatory implementation of cost-effective improvements.
267. The costs identified are preliminary estimates in the absence of detailed secondary legislation, which cannot be developed until the Bill is enacted and the new responsibilities that will be placed on building owners and the authorities involved, are agreed. All secondary legislation introduced will be accompanied by costed regulatory impact assessments. The menu of provisions in the Bill can be assembled in different ways but for the purpose of this Memorandum the seven different scenarios which were set out in the original Financial Memorandum have been reduced. Of the original seven, Scenarios 2 and 5 remain because they more closely model likely implementation.

268. The total cost depends on a number of factors. The variables that could cause the greatest fluctuation in costs will be the type of buildings covered and the extent to which the enhanced EPCs are applied to the stock.

269. The two applicable scenarios are as follows:

Enhanced EPC on sale or rent for all buildings and all large buildings with additional guidance to promote uptake of recommendations and an increase in the frequency of certification;

Enhanced EPC on sale or rent for all buildings and for all buildings with additional guidance, an increase in the frequency of certification, and compulsory uptake of recommendations;

Improving the energy performance of existing non-domestic buildings

270. Additional costs to the Scottish Government will be incurred as a result of the new Ministerial duties and powers set out in the Bill and are set out below on the basis of the scenario adopted and any financial support.

Table 5: Potential costs for Scottish Government for each energy performance scenario

<table>
<thead>
<tr>
<th>Scenario</th>
<th>One-off Costs - £m</th>
<th>Average Annual Cost - £m pa</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>£0.5</td>
<td>£0.5</td>
</tr>
<tr>
<td>5</td>
<td>£0.6</td>
<td>£12.4</td>
</tr>
</tbody>
</table>

271. The costs have been abstracted from the Partial Regulatory Impact assessment contained within the Consultation Action on Climate Change: Proposals for Improving the Energy Performance of Existing Non-Domestic Buildings\(^\text{20}\). Scenario 2 requires enhanced EPCs to be carried out on buildings for sale or rental and for large buildings but without compulsion to implement the recommendations. The higher cost of Scenario 5 in relation to the other scenario is that enhanced EPCs require to be obtained for all buildings irrespective of sale or rental and size and the recommendations have to be implemented for all buildings.

\(^{20}\) [http://www.scotland.gov.uk/Publications/2008/08/15155233/1](http://www.scotland.gov.uk/Publications/2008/08/15155233/1)
The one-off costs include staff costs to develop secondary legislation, impact assessments and guidance, media campaigns to create public awareness, training and research. The average annual cost includes staff for maintaining the system, support funding for businesses where appropriate and additional research and media campaigns where necessary to alert the public of changes to the system.

**Costs on local authorities**

The Bill will have both cost and resource implications for local authorities. It is difficult to estimate the likely total cost of these new duties. The costs of implementing this will again be dependent on how the menu of provisions in the Bill is assembled in the secondary legislation. The secondary legislation will be accompanied by a costed regulatory impact assessment. The two scenarios below give an indication of potential costs and are likely to include the commissioning of building surveys, calculating energy and carbon performance of buildings, formulating action plans and carrying out building work. One off costs are not anticipated. If local authorities are exempt through relaxation provisions from enhanced EPCs then as building owners they will not bear any costs. If the provisions do apply, then the estimated costs in Table 6 will fall to local authorities. If enforcement responsibilities are given to local authorities, it is expected that a self financing system based on penalty charges will be utilised.

**Table 6: Potential costs for local authorities**

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Average Annual Cost - £m pa</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>£4.1m - £5.5m</td>
</tr>
<tr>
<td>5</td>
<td>£27.7m - £37m</td>
</tr>
</tbody>
</table>

**Costs on other bodies, individuals and businesses**

Building owners or their delegated persons are likely to incur costs as a result of future secondary legislation brought in under the powers set out in the Bill. The costs of implementing this will be dependent on how the menu of provisions in the Bill is assembled in the secondary legislation. The secondary legislation will be accompanied by a costed regulatory impact assessment. Table 7 outlines the ranges of potential costs, based on scenarios 2 and 5 of the original seven scenarios and are likely to include the commissioning of building surveys, calculating energy and carbon performance of buildings, formulating action plans and carrying out building work. One off costs are not anticipated.

**Table 7: Potential costs for other bodies, individuals and businesses for each energy performance scenario**

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Average Annual Cost - £m pa</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>£8.2m - £9.6m</td>
</tr>
<tr>
<td>5</td>
<td>£55.4m – 64.7m</td>
</tr>
</tbody>
</table>
275. Example regulations have been drafted to indicate how the provisions in section 50, Energy performance of non-domestic buildings, of the Climate Change (Scotland) Bill could be implemented. These example regulations:

- are broadly in accordance with the parameters set out under scenario 2 in the public consultation;
- are based on the Bill as introduced to Parliament;
- build on the current system of energy performance certificates;
- most importantly, are for illustrative purposes only and actual regulations will require to be fully developed, supported by research, public consultation, stakeholder engagement and subject to affirmative resolution in Parliament.

276. These example regulations are based on office buildings with a floor area greater than 1000m² and certain improvement measures which are usually cost-effective over a 5 year period.

277. However the detailed work for actual regulations will establish the building types and size and the improvement measures which give the most cost effective wins in terms of both cost and emission savings.

278. Work has commenced on an updated partial RIA for the work covered by example regulations and more detailed costings will be developed as part of this work.

Section 50A – Living accommodation: assessment of energy performance and emissions

279. These provisions permit Ministers to require that houses are assessed for their energy performance and that action is taken to improve their energy performance.

280. These powers sit alongside existing measures and proposals to encourage home owners to improve the energy efficiency of their houses, including the Home Insulation Scheme; a commitment to ensuring the provision of loans; funding available under the Carbon Emissions Reduction Target (CERT) scheme; and the Energy Assistance Package.

281. The cost of implementing secondary legislation made under these provisions will depend on the detail of that secondary legislation and when it is made.

282. Some of the factors that are likely to affect the costs of implementing future secondary legislation are: whether the requirements are created and enforced on a general basis or by targeting particular areas or categories of building or by targeting those who have been offered and have refused voluntary measures; whether different approaches are taken to the requirement to assess and the requirement to improve, for example by making a general requirement to assess but only enforcing improvements in association with programmes of assistance; arrangements to subsidise required works where necessary; and the enforcement authority designated by Ministers. Factors affecting the timing of the use of the powers include the extent to which
owners respond to measures that encourage them to do work voluntarily; and whether the powers can be used in a way that does not prevent CERT funding being available.

283. The secondary legislation will be accompanied by a costed regulatory impact assessment, which will examine the various scenarios produced by combinations of factors such as those described above. As an indication of the context within which these scenarios will be assessed, the total cost of installing loft and cavity wall insulation in all suitable domestic properties is of the order of £1 billion.

Sections 50B and 50C – Energy efficiency discounts – Council tax reductions to promote energy efficiency

284. These provisions will require Ministers to reduce council tax liability for those householders that install energy efficiency measures and/or renewable energy or heat technologies.

285. Council tax liability would be reduced by £100 for those spending £250 to £999 on such measures/technologies and £250 for those spending £1,000 or more. The cost to the Scottish Government will be dependent on the involvement or otherwise of energy suppliers, who may wish to fund the scheme and any contribution from local authorities. There are several scenarios that give rise to a range of potential costs based around the number of dwellings eligible for a reduction in council tax and the relative take-up of each reduction amount.

286. It is not possible at this stage to quantify properly the impact of these proposals as there is a range of information unavailable, such as known capacity to install the efficiency measures, and further work is required, but as an initial estimate and to give an indicative range of costs, we have assumed the number of eligible dwellings to be:

   (a) all chargeable dwellings, of which there are approximately 2.4 million; and
   (b) all chargeable dwellings not receiving a discount – dwellings receiving a discount include second homes, single persons’ discount or Council Tax Benefit (CTB). We estimate there are 818,000 properties not receiving a discount.

287. A sample of well managed discretionary schemes in England and Wales indicates a take up of approximately 1% of eligible dwellings, equivalent to some 18,000 households in Scotland. Assuming an even split of take up of each measure, the likely cost associated with these assumptions is £3.2 million. However, the mandatory nature of this proposal combined with greater marketing, publicity and subsequent demand are likely to increase liabilities, and should take up rise to 1.5%, the associated cost would be £4.7 million, and should it rise, for example, to 5%, the cost would be £19 million.

288. The provision will also likely have cost and resource implications for local authorities. These will come from the need to assess the eligibility of dwellings for the scheme and to determine if energy efficiency improvements and/or installed renewable energy or heat technologies qualify for a reduction.
Section 50D – Review of council tax energy provisions

289. If a scheme, established under sections 50B and 50C, were implemented, arrangements would need to be established, in conjunction with local authorities with regards to both council tax and non-domestic rates for the administration of the proposed scheme and any subsequent reporting requirements. It is difficult to estimate the costs at this stage due to factors such as the final shape of any scheme which may be introduced. It is reasonable to assume that there may be significant costs for data collection by local authorities.

290. There are a number of reporting requirements in the Bill and it is proposed that all opportunities be taken to consolidate reporting requirements to deliver cost efficiencies. This would include identifying if it is possible to include this reporting information with the annual reports which will be produced for the annual greenhouse gas emission targets.

Sections 51A and 51B - Permitted development rights

291. It is intended that the provisions under section 51A would simplify the planning process thereby potentially providing a cost saving to applicants. While it is not possible to cost this provision exactly, a number of benefits are envisaged:

- The elimination of time and monetary costs to applicants of obtaining planning permission – currently a planning application costs approximately £145;
- Increased uptake of renewable sources of power relative to non-renewable sources leading to knock-on effects on carbon savings;
- Stimulation of the market demand for renewable technologies;
- Contribution towards the national target for renewable energy; and
- Wider direct and indirect effects including an anticipated reduction in the work of planning authorities in determining planning applications.

292. In terms of extended permitted development rights, this could provide greater clarity and certainty leading to fewer applications for consideration.

Sections 51C, 51D and 51E – The Scottish civil estate

293. Section 51C introduces a new obligation on Scottish Ministers to ensure, where possible, that the energy performance of any newly constructed building that becomes part of the Scottish civil estate in Scotland, falls within the top quartile of energy performance.

294. This new duty will have a cost attached. The potential cost of delivering this new duty will depend on many variables including the location, size and purpose of the buildings. This cost will be managed as much as possible through the competitive procurement process in order to deliver best value. Where it is not possible to meet this duty for a certain building, for example dealing with a single supplier in a single location, Scottish Ministers will be obliged to report the reason for this under section 51D.
295. Section 51D(1) requires that the Scottish Ministers must, in respect of each financial year beginning with 2010-2011, lay before the Scottish Parliament a report containing an assessment of the progress made in the year towards improving (a) the efficiency and (b) the contribution to sustainability of buildings that are part of the civil estate in Scotland.

296. The Scottish Government currently uses the electronic Property Information Mapping System (ePIMS) managed by the UK Office of Government Commerce. This is a database which contains information about the property that the Scottish Government owns, leases and manages. It contains information about the efficiency and sustainability of these buildings. In this regard, the information that section 51D(1) requires be reported each year is available to the Scottish Ministers and would not incur any additional cost to collect.

297. There will be administrative costs associated with the production of this report. It is estimated that this would amount to 10% of one policy analyst’s employers’ cost annually, which equates to £3,400.

PART 5, CHAPTER 4 – WASTE REDUCTION AND RECYCLING

298. These provisions set out measures aimed at improving waste and recycling in Scotland, to help move Scotland to a “zero waste” society. “Zero waste” is about reducing the unnecessary use of raw materials, sustainable design of products, preventing waste, and recovering value from products and materials when they reach the end of their lives through recycling, composting or energy recovery.

299. The provisions in this part of the Bill establish enabling powers to introduce secondary legislation. The costs and efficiencies arising as a result of the proposals will vary widely according to how and when they are implemented. Consequently it is not possible to provide exact costings for the proposals which will come forward in secondary legislation. All secondary legislation will be accompanied by a Regulatory Impact Assessment and what follows is an indication of possible costs and savings in a range of scenarios.

Costs for the Scottish Government

300. In the case of all the provisions in this part of the Bill, the Scottish Government would incur the costs of making the regulations. These would arise in the ordinary course of the Scottish Government’s business, and it is anticipated that they will be absorbed into the administration budget.

Waste prevention and management plans

301. Depending on the provisions of the regulations, the Scottish Government may also be required to produce plans of its own to prevent and manage waste. The costs of these plans would depend on their complexity, and the range of issues they are intended to address. Since it is envisaged that a plan should be made for each individual relevant project the costs would also depend on the number of relevant projects the Government might undertake.
302. A useful comparator may be the costs assessed for Site Waste Management Plans, which are compulsory in England & Wales under the Site Waste Management Plans Regulations 2008. These are likely to represent the minimum set of parameters Scottish regulations might set for plans. (Plans similar to those which are statutory in England are presently optional in Scotland, and are encouraged by Scottish Planning Policy 10.) These plans apply to all aspects of construction work including preparatory work such as demolition and excavation. They are required for civil engineering projects as well as projects involving the maintenance, alteration and decoration of existing structures. The installation, maintenance or removal of all related services such as electrical, gas, water, sewage and telecommunications are also subject to this requirement.

303. Details of these costs are available in the Department for Food and Rural Affairs (Defra) consultation paper (http://www.defra.gov.uk/environment/waste/topics/construction/index.htm.) which assesses the costs of writing a site waste management plan over a number of project values, from £350 in the case of a project worth £70,000, to £1,600 for a project worth £1,600,000. However, in practice drawing up such a plan can deliver cost efficiencies by reducing waste, and therefore waste costs. At the time the consultation paper was published, these efficiencies were estimated at £210 for a project worth £70,000 to £4,800 for a project worth £1,600,000. At the time, it estimated that a site waste management plan was cost-neutral at a project value of £250,000. Above that figure, the larger the project value, the greater the efficiency. Clearly this is an aspect which may be borne in mind when drawing up any Regulations made under this provision.

304. The consultation paper notes that factors such as ongoing increases in landfill tax could further enhance the potential savings of site waste management plans. Landfill tax is currently escalating by £8/tonne per annum for non-inert waste. As time goes on, therefore, it is likely that the break-even point will reduce.

305. These provisions give the Scottish Ministers powers to require a wider range of waste prevention and management plans than site waste management plans drawn up under the 2008 regulations in England & Wales. Costs will relate to the range of aspects which must be considered, and arise through the necessity to carry out an assessment of wastes arising, identifying how the wastes may be dealt with and preparing the plan. In all cases, it is likely that the preparation of a waste prevention and management plan will lead to efficiencies in waste related costs, through minimisation in particular, but also through identifying opportunities to extract value through reuse and/or recycling, leading to resource savings. The value of these efficiencies is likely to increase owing to the landfill tax escalator, irrespective of resource costs. Envirowise currently estimates waste costs at 4% of turnover (http://www.envirowise.gov.uk/dsur5yhjtw). [Link no longer operates] Addressing more aspects in a waste plan can increase plan costs, while also increasing opportunities for efficiencies.

Waste data returns

306. The Scottish Ministers will be required to make returns on any waste produced, and which was the subject of regulations. A transfer note containing information on the weight, nature and destination of the waste must be prepared under the Environmental Protection (Duty of Care) Regulations 1991. In the case of hazardous waste, more detailed provision is made in
Duties to provide recycling facilities

307. The Scottish Ministers may be subject to a requirement to provide receptacles for material to be recycled. Costs will depend on the type of recycling facilities required, which will be a matter for regulations made under these provisions. However, any regulations are likely to concentrate, at least initially, on materials which are easy to collect and for which there is a ready market, and in this respect the Scottish Ministers already provide receptacles for recycling paper, beverage cans, plastic cups and batteries. It is therefore not anticipated that there would be additional costs arising from this provision.

308. An estimate of the costs involved in the provision of recycling facilities may be found in a consultation carried out by Defra last year on public place recycling (on materials which can occur in litter bins) on a voluntary basis, which can be found at http://www.defra.gov.uk/corporate/consult/recyclebins/consultation.pdf. This suggested a range of one-off costs for England of £1.1 million to £3.3 million, with annual recurring costs thereafter ranging from £0.3 million to £0.9 million. These costs are for a voluntary scheme: any compulsory scheme would be likely to have a wider reach and could cost more.

309. The provision of the bins was estimated to cost between £484 and £600 per bin. These costs are dependent on the nature of the facilities provided and the cost of receptacles varies widely. For example, at the Scottish Government offices at Victoria Quay, Edinburgh, paper collection boxes are provided free as part of the general waste contract, specialised containers for plastic cups each cost £60, can crushers can cost up to £600 individually and those currently in use cost £120 nine years ago.

310. Organisations which provide these facilities are likely to find that they must arrange for the collection and recycling of wastes for which they are not the producers. This will increase costs but also potentially benefit society through the more efficient use of resources, and a reduction in waste disposal by landfill thereby reducing the generation of methane emissions. As an indication of costs, the total waste for the Victoria Quay offices (about 2000 people) in 2007-08 was approximately 260 tonnes (82% paper and card, 4% wood and 3% plastic). Most was collected in a container whose rental was £1.18 a day and whose daily uplift cost £60.60. The majority of this was recycled - 200 tonnes.

311. On the other hand, there are likely to be some off-setting efficiencies. Where recycling facilities are provided it is likely that the organisation providing them will recycle more of its own wastes. This has the effect of reducing disposal costs. Regulations made under these provisions are not likely to come into force before 2010. In 2010 – 2011, the landfill tax will be £48/tonne for non-inert wastes, and is predicted to increase at a rate of £8/tonne every year thereafter. Gate fees at landfill, net of tax, are in the region of £20/tonne at present.

Procurement contracts and recyclate

312. If regulations are established for this provision, the Scottish Ministers would also be subject to their requirements. However, this is unlikely to add any costs. The type of materials
likely to be specified are traded widely therefore must be priced competitively. It is reasonable to assume that the replacement of virgin materials with recycled ones is unlikely to increase costs. Rather than a price barrier, the recycling industry often talks of a “perception” barrier preventing the use of products derived from waste. A requirement that recycled products be used is a means of addressing such a perception barrier.

**Targets for reducing packaging**

313. The Scottish Ministers do not produce packaging therefore are unlikely to be affected by a substantive scheme, except by the costs of making Regulations.

**Deposit and return schemes**

314. Costs arising from these provisions will depend on the detail of the regulations. There are currently operational deposit and return schemes in Scotland which do not result in costs for the Scottish Ministers, for example the AG Barr scheme. At the other end of the scale, all those who contribute to a particular type of packaging entering the Scottish market could be obliged to participate in a scheme which provides for the return and recycling of that packaging. Clearing-house functions may arise from this and the set-up costs would probably have to be met by the Scottish Government (though they may be recovered through charges to users).

315. Both Norway and Denmark, countries with a similar sized population to Scotland’s, operate deposit and return schemes which depend on a central function. Details may be found at [http://www.resirk.no](http://www.resirk.no) and [http://www.dansk-retursystem.dk](http://www.dansk-retursystem.dk) respectively. Some indication of the set up costs may be gleaned from the value of the material assets of these organisations at dates close to set-up. Resirk’s “property, plant and equipment” were worth NKR 3.9m (currently c. £40,000) in 2002 (four years after foundation) and Retursystem’s were worth DKR 14.7m (currently c. £161,000) in 2000, the year of founding. This gives a range of c£40,000 to c£200,000 for value of physical assets at today’s prices. Beyond this, of course, there would be time costs and fees involved in any set-up process, but much of this would be absorbed into the administration budget.

**Carrier bag charges**

316. The only costs, other than those incurred through making the regulations, anticipated for the Scottish Government are those related to publicity campaigns.

317. A Member’s Bill to introduce a levy on plastic bags was introduced in an earlier session of Parliament. The Regulatory Impact Assessment (RIA) for this Bill can be found at [http://www.scottish.parliament.uk/business/committees/environment/papers-05/rap05-28.pdf#page=20](http://www.scottish.parliament.uk/business/committees/environment/papers-05/rap05-28.pdf#page=20). This document contains links to a research report, *Proposed Plastic Bag Levy – Extended Impact Assessment*, which forms the basis for much of its material. The features of the scheme proposed in the Climate Change (Scotland) Bill are somewhat different from this Member’s Bill but much of the information is relevant. For example, the RIA mentions the cost of an education campaign which it estimates at £750,000.
Costs for local authorities

Waste prevention and management plans

318. Local authorities could be required by regulation to make waste prevention and management plans – the costs (£350 - £1,600) and potential efficiencies (£210 - £4,800) attributable to the Scottish Government (detailed in paragraph 303) would potentially apply here also.

319. It is also possible that enforcement duties may fall to local authorities, depending on the nature of the regulations. This could include enforcement powers and duties including the registration of plans, and ensuring that obligated bodies have the necessary plans. The number of obligated bodies would depend on the nature of the plans. However, registration of any single plan is unlikely to take in excess of an hour. Assuming that the average employer cost of a member of staff is £25,000, this would make the cost of registration of any plan unlikely to exceed £15, since a FTE is assumed to work about 2,000 hours a year. Any regulations could provide for registration charge to off-set these administrative costs.

320. Where a report is required for the procurator fiscal with a view to prosecution, this may take three hours of an officer’s time and be equivalent to a cost of £45. Legal officers’ costs could be significantly higher than this, potentially bringing the preparation costs for a case to be in excess of £1,000 - but these are likely to be rare.

Waste data returns

321. Local authorities would be obliged to make returns on any waste produced which was the subject of future regulations. They are already obliged to provide information by the 1991 and 1996 Regulations mentioned above. It is likely that similar information would be required here and the additional costs would be marginal. As local authorities handle significant waste for third parties, information is already provided for this waste and no change is anticipated here.

Duties to provide recycling facilities

322. Local authorities may be expected to provide recycling facilities under the provisions of any regulations brought forward on this matter, and the estimate of £60 - £600 for each receptacle, mentioned in paragraph 309, would apply.

323. The same principle would apply to the enforcement of the provision of recycling facilities. This could apply to local authorities and is particularly likely in the case of the provision of facilities at one-off events. Enforcement is likely to consist of ensuring that facilities are provided, are properly used and that the materials collected are sent for recycling rather than to landfill for disposal. Similarly costs for the officers involved are likely to be in the region of £15 an hour plus travelling time and expenses. In the event of any prosecutions becoming necessary, the costs indicated above would also apply.
These documents relate to the Climate Change (Scotland) Bill as amended at Stage 2 (SP Bill 17A)

Procurement contracts and recyclate

324. Regulations on this would likely apply to local authorities but are unlikely to add costs. The type of materials which may be specified are already traded widely and the replacement of virgin materials with recycled materials is unlikely to increase costs.

325. Depending on the form of the regulations, local authorities may be the enforcing body. This would involve examining invoices, and perhaps also making spot checks. The amount of work involved is unlikely to amount to as much as 1 FTE per local authority, so no more than 32 FTEs would be needed in Scotland as a whole (at an annual cost of about £800,000). In the event of prosecution being necessary the costs outlined earlier could be incurred.

Targets for reducing packaging

326. Costs will be dependent on the eventual form of any regulations and it is possible that local authorities would enforce the targets. As they would apply over Scotland as a whole, this could involve designating “home” or “lead” authorities with a particular connection to main retailers. In these instances particular arrangements would have to be made to support that authority in its work. Local authorities are already responsible for enforcing the Packaging (Essential Requirements) Regulations 2003, which provide that packaging should meet “essential requirements”.

327. Potential costs are unlikely to include visits to retailers and other users of packaging. Instead, the function of enforcing targets may be carried out by examining records, many of which are likely to exist already, such as those relating to materials used, and waste returns. There are approximately 265,000 private sector businesses in Scotland, many of which are small, and either do not produce packaging or are likely to be excluded under a de minimis provision. The Scottish Retail Consortium records 13,805 VAT registered enterprises in Scotland, and the Federation of Small Businesses has a membership of over 19,000, which it believes is over 99% of the relevant businesses in Scotland. It seems likely that a figure of 20,000 could reasonably represent the number of enterprises which put packaging on the market in Scotland. If inspection of a data return is estimated to take one hour, inspection of 20,000 returns would take 20,000 hours, which represents approximately 10 FTEs, on the assumption than a FTE is assumed to work about 2,000 hours a year. The cost of 10 FTEs is approximately 10 x £25,000 = £250,000 per annum.

328. There will be opportunities for efficiencies through creating less packaging. For local authorities in particular this would mean that household waste disposal costs could reduce. For every 1% reduction, savings in landfill tax costs could amount to £144,000 – based on 60% of household waste being disposed of at landfill at a cost of £48/tonne in 2010-2011. This equates to almost 6 FTEs.

Deposit and return schemes

329. It is not anticipated that any variant of a deposit and return scheme, introduced under regulations would have significant costs for local authorities. These proposals are more likely to have a financial benefit for local authorities, by reducing the amount of waste they have to handle. Materials which have a monetary value when handed back are less likely to become litter
These documents relate to the Climate Change (Scotland) Bill as amended at Stage 2 (SP Bill 17A)

– which local authorities have a duty to clear. Experience in Denmark indicates that 85% of bottles are returned via their scheme.

Carrier bag charges

330. Costs may arise for local authorities if regulations apply an enforcement duty. The RIA produced for the Members Bill indicated a potential cost of £3.5 million per annum. It is likely that any eventual Regulations would be aimed at carrier bags generally rather than just plastic bags and this may increase the costs beyond those indicated by the RIA. Enforcing and policing is estimated at £2.5m. Occasional prosecution costs may also arise.

Costs on other bodies, individuals and businesses

Waste prevention and management plans

331. Other bodies, individuals and businesses are likely to be among those whom Regulations made under this part of the bill could require to make waste prevention and management plans. Similar costs (£350 - £1600) and efficiencies (£210 - £4,800) to those outlined in para 302 could apply.

332. The regulations could specify a different enforcement body – for example the Scottish Environment Protection Agency (SEPA). Potential costs are likely to be similar to the £15 per registration described before although there could be economies of scale if this function were carried out by a single national body, which could mean that, overall, fewer individuals need to be employed. Again, it is possible that the regulations would enable SEPA (or any other body charged with enforcement) to recover these costs by charging.

333. Where charges were levied for purposes such as registering plans, this could be a cost for all bodies under a duty to prepare such plans, including the Scottish Government and local authorities.

Waste data returns

334. Other bodies and businesses would be required to make returns on any waste produced, which may be covered by future regulations. As described earlier there are already existing controls for the transfer of waste. It is likely that much the same information would be required and additional costs should therefore be marginal. Householders would not be required to make such returns.

335. While these costs should be marginal, they would be dependent on the detail of regulations - including the complexity of the business, and the frequency with which it generated waste. The regulations could also exempt certain bodies or businesses from providing this information.

336. These provisions are aimed at providing information on the volumes of waste which arise to improve information on overall impacts and help create more effective strategies for waste prevention, minimisation and recovery. It will be necessary to collate this data – and to ensure that it is correctly provided. It is appropriate that such a duty would fall on SEPA. SEPA already
collects data on household waste and makes estimates for commercial and industrial waste. These provisions would improve the accuracy of the information for this duty.

337. However it is to be expected that new enforcement costs will arise as additional activity will be required. It would be reasonable to estimate this as one FTE (\(£25,000\) per annum). The prosecution costs outlined earlier may also occasionally arise.

*Duties to provide recycling facilities*

338. Other bodies, individuals and businesses are likely to be amongst those bodies required through regulations to provide recycling facilities and similar costs to those given in paragraph 309 would apply (\(£60 - £600\) per receptacle).

339. As before, the Scottish Environment Protection Agency (SEPA) could be designated the enforcement body for any regulations made under these provisions. Similar costs and opportunities for efficiencies and cost recovery would apply.

*Procurement contracts and recyclate*

340. Other bodies, businesses etc would be subject to the requirements made by Regulations. However, this is unlikely to add any costs for the reasons explained previously.

341. A national organisation such as SEPA could be the enforcing body for any regulations. Enforcement would include examining invoices and perhaps also making spot checks. The amount of work involved is likely to cost less than is outlined for enforcement costs by local authorities (\(£800,000\) per annum), given that economies of scale would be available. In the event of prosecution being necessary the costs outlined previously could also apply. This would be extremely rare, given that there appears to be little or no cost incentive to avoid the procurement of recyclate.

*Targets for reducing packaging*

342. Another body, possibly SEPA, could oversee the regime established to enforce the targets for packaging reduction. The costs would be similar to those described previously - \(£250,000\) per annum. Obligated bodies and businesses would be required to return forms. As many bodies and businesses, are obliged to provide similar information for the purposes of the existing Producer Responsibility Obligations (Packaging Waste) Regulation 2007, the additional cost is unlikely to be significant.

343. Meeting the target could involve costs. For example, research and development costs for “lightweighting” and for new methods of presenting products involving less packaging. This could involve the purchase of machines for consumers to insert refillable containers. However these costs could be offset by efficiencies elsewhere in areas such as transportation costs and the resulting reduction in shelf space. Additionally less packaging could mean reductions in obligations to recover packaging in terms of the 2007 Regulations - in July 2008 a packaging waste recovery note for paper cost £2 – 3 per tonne, and for aluminium it cost £60 – 70 per tonne ([http://www.letsrecycle.com/prices/prnPrices.jsp](http://www.letsrecycle.com/prices/prnPrices.jsp)). This obligation would not impact on householders.
Deposit and return schemes

344. Any form of deposit and return scheme which may be developed under regulations would be likely to have costs for other bodies and for businesses. This cost could be off-set by an increase in re-use and recycling of the materials collected and lower disposal costs.

345. The extent to which such a scheme would cost or benefit individuals would depend on the extent to which they returned all the materials subject to the scheme. Broadly, a 100% return would be cost neutral – the deposit fee, included in the price, would be recovered. Those persons choosing not to return the materials would be unable to recover the deposit fee thereby discouraging thoughtless disposal.

346. If schemes similar to the existing AG Barr scheme were compulsory for a range of Scottish operators, retailers would incur storage and packaging return costs. However, retailers are already obliged, under the Producer Responsibility Obligations (Packaging Waste) Regulations 2007, to recover a certain amount of glass, steel, aluminium paper/board, plastic and wood, which are principally the materials likely to be targeted for deposit and return schemes. Any deposit and return scheme would supplement, and not replace, these producer responsibility obligations. This could make it easier for retailers to meet the relevant targets, which are expected to increase over time.

347. Producers would be likely to incur a one-off cost of arranging for marking to refer to the deposit. Retailers and producers would also incur the cost of maintaining records and possibly making returns.

348. Regulations could require the designation of a competent authority to inspect returns and ensure a scheme is operated. With more ambitious schemes, such as those operated in Norway and Denmark, there is also a clearing house function. In the case of the Danish scheme, packaging captured by the scheme is registered and marked, to indicate that the deposit fee has been paid. Retailers return the materials and the clearing house issues a payment from the deposit fees. The clearing house collects, or arranges to collect, the materials from the retailers and also arranges for it to be recycled. The clearing house may also carry out the functions of overseeing and enforcing the system.

349. This is clearly a more expensive option. In 2006, the Danish and Norwegian systems cost £17.8m and £17.4m respectively to operate. An estimate of £15-£20 million per annum running costs for a Scottish system handling the same materials (essentially soft drinks packaging) would appear to be reasonable. These costs would have to be recovered through the deposit fees and other possible means, such as sale of recyclate. A similar system could apply to a wider or narrower range of materials, which would affect the costs accordingly.

350. The greater expense of the Danish/Norwegian model could be off-set by the collection and recycling of greater volumes of materials and the subsequent reduction of disposal costs. There could be added benefits through the greater disincentive for littering and fly-tipping and other forms of unauthorised disposal.
351. The Danish experience illustrates an 85% return rate. Dansk Retursystem is empowered to spend any profit on improving the system as it was set up as a non-profit making body. The same principle could be applied in Scotland. Regulations could permit the scheme to spend money on improvements and these could include supporting recycling facilities or the provision of reverse vending machines, which automate the return of the relevant material.

352. However AG Barr’s experience with its current scheme indicates that return rates have dropped from 99% in 1976 to 70% at the beginning in 2007. The firm has recently increased its deposit from 20p to 30p a bottle to address this but it is too early to analyse any results arising from this.

Carrier bag charges

353. The RIA mentions the costs incurred by the Irish Government, which set up a centralised collection service. The set-up costs were approximately €1.5m. This, however, included the costs of an advertising campaign, which would probably be borne by the Scottish Government rather than by other bodies. Ongoing costs are €300,000 (currently c. £240,000) pa, while €12 million (currently c. £9,700,000) a year is raised by the levy. Any scheme the Scottish Government would establish will be subject to set-up and collection costs. It is appreciated that there might be a disproportionate outlay at the beginning of any scheme: for example, the Regulatory Impact Assessment suggests a cost of £1,349,000 for updating tills etc.

354. Costs would arise for the enforcing authority for the regulations. As discussed earlier, this could be local authorities. The Regulatory Impact Assessment referenced in the Member’s Bill estimated that these costs could be £3.5 million per annum. It is likely that any eventual Regulations would be aimed at carrier bags in general, rather than just the plastic ones considered in the Member’s Bill. Although this may increase the costs, a single enforcement body could derive economies of scale and reduce costs. Enforcement and policing was estimated to cost £2.5m.

355. Retailers who issue carrier bags would be subject to a requirement to set a charge and to administer that charge including the potential transfer to good causes approved by the Scottish Ministers. It is expected that any costs would be recoverable from the income realised from charges. The UK Government will levy VAT on the charge, payable to HM Revenue & Customs; this too will be a cost, which will presumably be passed on to the consumer.

356. Users of the carrier bags would pay the charge. The Regulatory Impact Assessment indicated an income of £7.75m on the basis of a charge of 10p per bag. For comparison, in Ireland the income raised from a tax of €0.15, is approximately €12m (£9.7m) a year. If SMEs, charities and promotions were exempted from the charges indicated by the Member’s Bill, the Regulatory Impact Assessment calculated the potential income as £5.43m a year. The proposals included in the Climate Change (Scotland) Bill may have a higher cost as a wider range of bags is under consideration. However this could be off-set by greater efficiencies in waste reduction, litter clear-up, loss of amenity etc. The inclusion of paper bags (as is probable under the present proposals) would result, according to the Regulatory Impact Assessment, in an income of £8.14 million per annum.
357. Consumers can avoid paying this type of charge by using their own bags (though this may mean they have to purchase other items, such as bin-liners). A “bag-for-life” which may be used for carrying shopping instead of the kind of carrier bag likely to be aimed at costs from £1 - £3 and may last indefinitely.

358. Good causes in Scotland would benefit from any profits arising from the system. It is also possible that the Scottish Ministers could provide that only profit arising from the minimum level of charge would be allocated to good causes. If retailers chose to charge more, it is possible that additional profit could be retained by the retailer.

359. The Regulatory Impact Assessment suggested that the changes proposed in the Member’s Bill would cost 300 – 700 jobs in Scotland. This figure would be likely to increase if non-plastic carrier bags were also subject to a charge. However there would be some off-setting such as increased employment in the manufacture and distribution of bags for life.
Table 8: Summary of potential estimated costs for Part 5, Chapter 4 – Waste provisions

<table>
<thead>
<tr>
<th>Provision</th>
<th>Costs on Scottish Government</th>
<th>Costs on Local Authorities</th>
<th>Costs on other bodies, individuals and businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste prevention and management plans</td>
<td>£350 - £1,600 per plan.</td>
<td>£350 - £1,600 per plan.</td>
<td>£350 - £1,600 per plan.</td>
</tr>
<tr>
<td></td>
<td>Savings of £210 - £4,800 per plan</td>
<td>Savings of £210 - £4,800 per plan</td>
<td></td>
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<tr>
<td></td>
<td>Registration costs: £15 per plan</td>
<td></td>
<td>Registration costs: £15 per plan</td>
</tr>
<tr>
<td>Duties to provide recycling facilities</td>
<td>Receptacles £60 - £600 each</td>
<td>Receptacles £60 - £600 each</td>
<td>Receptacles £60 - £600 each</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Enforcement: £15/hour each officer</td>
<td>Enforcement: £15/hour each officer</td>
</tr>
<tr>
<td>Deposit and return schemes</td>
<td>Set-up costs: £200,000</td>
<td></td>
<td>£15 - £20 million per annum</td>
</tr>
<tr>
<td>Waste data returns</td>
<td>Marginal</td>
<td>Marginal</td>
<td>£25,000 per annum</td>
</tr>
<tr>
<td>Targets for reducing packaging</td>
<td>-</td>
<td>£250,000 per annum</td>
<td>£250,000 per annum</td>
</tr>
<tr>
<td>Carrier bag charges</td>
<td>Campaign: £750,000</td>
<td>Enforcement: £3.5 million per annum</td>
<td>Enforcement: £3.5 million per annum</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Updating costs: £1,349,000</td>
<td>Annual amount of charge: £8.14 million</td>
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<td></td>
<td></td>
<td>Annual amount of charge:</td>
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<tr>
<td>Procurement contracts and recyclate</td>
<td>-</td>
<td>Enforcement: £800,000 per annum</td>
<td>Enforcement: &lt;£800,000 per annum</td>
</tr>
</tbody>
</table>

Note: costs shown are not totalled as they are not cumulative. For example, enforcement costs would generally fall either on local authorities or on another body, eg SEPA.
### SUMMARY OF ADDITIONAL COSTS

**Table 9: Summary of potential costs for Parts 1-4 Emissions Reductions and Part 5 Adaptation Programme**

<table>
<thead>
<tr>
<th>Cost Description</th>
<th>Estimated Cost</th>
<th>Paragraph</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated cost for Scotland’s economy* for delivering the greenhouse gas emissions reduction target in Scotland 2050</td>
<td>1-2% GDP in 2050</td>
<td>1 – Paragraph 207</td>
</tr>
<tr>
<td>Scottish Government cost (or public body cost) - Estimated annual cost staff cost for managing a carbon unit scheme</td>
<td>£60,000²</td>
<td>2 - Paragraph 221</td>
</tr>
<tr>
<td>Scottish Government cost - Estimated annual cost for administering the reporting duties required for the emissions reductions targets</td>
<td>£17,000³</td>
<td>3 - Paragraph 227</td>
</tr>
<tr>
<td>Scottish Government cost - Estimated annual cost for advice from a Scottish Climate Change Committee, based on current costs.</td>
<td>£2.5m⁴</td>
<td>4 - Paragraph 226</td>
</tr>
<tr>
<td>Note. Potential for some saving on payment to UK Committee on Climate Change for work in relation to Scottish target – see paragraph 226.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scottish Government cost – Estimated cost for the Scottish Ministers response to a report on impact of climate change laid under the UK Climate Change Act. In the first instance, this cost will occur within the first three years. Thereafter, this cost will only occur once every five years.</td>
<td>£30,000⁵</td>
<td>5 – Paragraph 235</td>
</tr>
<tr>
<td>Scottish Government estimates cost for producing a land use strategy</td>
<td>£300,000⁶</td>
<td>6 – Paragraph 237</td>
</tr>
</tbody>
</table>

*Note - The estimated cost for delivering the 2050 target will apply across all sectors of the economy in Scotland – central government, public sector including local government and private businesses.*
These documents relate to the Climate Change (Scotland) Bill as amended at Stage 2 (SP Bill 17A)

**Table 10: Part 5, Chapter 2 – Forestry costs for the Scottish Government**

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional annual cost for FCS to establish joint venture arrangements</td>
<td>£0.5m</td>
<td>7 – Paragraph 243</td>
</tr>
</tbody>
</table>

**Table 11: Part 5, Chapter 3 – Scottish Government costs for the promotion of renewable heat**

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renewable heat estimated staff costs</td>
<td>£35,000 – 40,000</td>
<td>8 – Paragraph 247</td>
</tr>
</tbody>
</table>

**Table 12: Part 5, Chapter 3 – Non-Domestic Buildings – Summary of potential costs for each energy performance scenario**

<table>
<thead>
<tr>
<th>Scenario</th>
<th>One-off Costs - £m Scottish Government</th>
<th>Average Annual Cost - £m Scottish Government</th>
<th>Average Annual Cost - £m Local Authorities</th>
<th>Average Annual Cost - £m Bodies, Individuals, Businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>£0.5m</td>
<td>£0.5m</td>
<td>£4.1m - £5.5m</td>
<td>£8.2m - £9.6m</td>
</tr>
<tr>
<td>5</td>
<td>£0.6m</td>
<td>£12.4m</td>
<td>£27.7m - £37m</td>
<td>£55.4m – 64.7m</td>
</tr>
</tbody>
</table>

**Key to financial data in Table 12**

9 – Table 5
10 – Table 5
11 – Table 6
12 – Table 7
**Table 13: Part 5, Chapter 3 – Summary of estimated potential costs for the Scottish Government for the assessment of energy performance of living accommodation and for energy efficiency discounts**

<table>
<thead>
<tr>
<th>Assessment of energy performance of living accommodation</th>
<th>Estimated cost of installing loft and cavity wall insulation in domestic dwellings - £1 billion(^{13})</th>
<th>13 - Para 283</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy efficiency discounts</td>
<td>Estimated cost £3.2m - £19m(^{14})</td>
<td>14 – Para 287</td>
</tr>
</tbody>
</table>

**Table 14: Part 5, Chapter 3A – Summary of estimated cost for the Scottish Government for reporting on the Scottish civil estate**

| Reporting annually on the Scottish civil estate         | Estimated administration costs for the Scottish Government - £3,400\(^{15}\)    | 15 – Para 297 |
Table 15: Part 5, Chapter 4 – Waste Reduction and Recycling Costs

<table>
<thead>
<tr>
<th>Provision</th>
<th>Costs on Scottish Government</th>
<th>Costs on Local Authorities</th>
<th>Costs on other bodies, individuals and businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste prevention and management plans</td>
<td>£350 - £1,600 per plan(^{16})</td>
<td>£350 - £1,600 per plan(^{21})</td>
<td>£350 - £1,600 per plan(^{29})</td>
</tr>
<tr>
<td></td>
<td>Savings of £210 - £4,800 per plan(^{16})</td>
<td>Savings of £210 - £4,800 per plan(^{21})</td>
<td>Savings of £210 - £4,800 per plan(^{29})</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Registration costs: £15 per plan(^{22})</td>
<td>Registration costs: £15 per plan(^{30})</td>
</tr>
<tr>
<td>Duties to provide recycling facilities</td>
<td>Receptacles £60 - £600 each(^{17})</td>
<td>Receptacles £60 - £600 each(^{23})</td>
<td>Receptacles £60 - £600 each(^{31})</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Enforcement: £15/hour each officer(^{24})</td>
<td>Enforcement: £15/hour each officer(^{32})</td>
</tr>
<tr>
<td>Deposit and return schemes</td>
<td>Set-up costs: c£200,000(^{18})</td>
<td>-</td>
<td>£15 - £20 million per annum(^{33})</td>
</tr>
<tr>
<td>Waste data returns</td>
<td>Marginal(^{19})</td>
<td>Marginal(^{25})</td>
<td>£25,000 per annum(^{34})</td>
</tr>
<tr>
<td>Targets for reducing packaging</td>
<td>-</td>
<td>£250,000 per annum(^{26})</td>
<td>£250,000 per annum(^{35})</td>
</tr>
<tr>
<td>Carrier bag charges</td>
<td>Campaign: £750,000(^{20})</td>
<td>Enforcement: £3.5 million per annum(^{27})</td>
<td>Enforcement: £3.5 million per annum(^{26})</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Updating costs: £1,349,000(^{37})</td>
<td>Annual amount of charge: £8.14 million(^{37})</td>
</tr>
<tr>
<td>Procurement contracts and recyclate</td>
<td>-</td>
<td>Enforcement: £800,000 per annum(^{28})</td>
<td>Enforcement: &lt;£800,000 per annum(^{38})</td>
</tr>
</tbody>
</table>

*Note: costs shown are not totalled as they are not cumulative. For example, enforcement costs would generally fall either on local authorities or on another body, eg SEPA.*
These documents relate to the Climate Change (Scotland) Bill as amended at Stage 2 (SP Bill 17A)

**Key to financial data in Table 15**

16 - Paragraph 303, 17 – Paragraph 309, 18 – Paragraph 315, 19 – Paragraph 306
20 – Paragraph 317, 21 – Paragraph 318, 22 – Paragraph 319, 23 – Paragraph 322
28 – Paragraph 325, 29 – Paragraph 331, 30 – Paragraph 332, 31 – Paragraph 338
32 – Paragraph 332, 33 – Paragraph 349, 34 – Paragraph 337, 35 – Paragraph 342
36 – Paragraph 354, 37 – Paragraphs 353 and 356, 38 – Paragraph 341
Purpose

1. This Memorandum has been prepared by the Scottish Government to assist the Subordinate Legislation Committee in its consideration of the Climate Change (Scotland) Bill. This Memorandum describes provisions in the Bill conferring power to make subordinate legislation which were either introduced to the Bill or amended at Stage 2. The Memorandum supplements the Delegated Powers Memorandum on the Bill as introduced.

2. The contents of this memorandum are entirely the responsibility of the Scottish Government and have not been endorsed by the Scottish Parliament.

3. In deciding whether to adopt negative or affirmative resolution procedure, careful consideration has been given to the degree of parliamentary scrutiny that is felt to be required for the regulations, balancing the need for the appropriate level of scrutiny with the need to avoid using up parliamentary time unnecessarily.

4. During the Stage 2 proceedings, new powers were introduced and a number of the delegated powers were modified. These changes give Parliament a greater role in scrutinising some of the subordinate legislation made under the Bill and respond positively to the comments made by the Parliamentary Committees which scrutinised the Bill. Outlined below are descriptions of the relevant powers which have been added or modified and explanations of and as to why the additions, amendments or alterations have been made and are considered appropriate.
PROVISIONS CONFERRING POWER TO MAKE SUBORDINATE LEGISLATION INTRODUCED OR AMENDED AT STAGE 2

PART 1 – EMISSIONS REDUCTION TARGETS

Section 2A(1) – Modifying the interim target

Power conferred on: the Scottish Ministers
Power exercisable by: order made by statutory instrument

Provision
5. Section 2A was inserted into the Bill during Stage 2. Subsection (1) allows the Scottish Ministers to modify by order the percentage figure mentioned in section 2(1) of the Bill. The percentage figure in section 2(1) of the Bill is 34%, known as “the interim target”. The interim target is expressed in terms of “at least 34%”. The Scottish Ministers are only given the power to modify this figure to substitute a higher percentage figure. There is a requirement in section 2A(2), with details explained in subsections (3) to (6), that if the European Union (EU) brings a Community instrument into force which contains a commitment to reduce greenhouse gas emissions by at least 30% compared to 1990 levels by 2020, the Scottish Ministers must, lay an order before the Scottish Parliament to increase the 34% figure in section 2(1) to at least 42%. Subsection (4) provides that the period within which a draft order in terms of subsection (1) is to be laid is 3 months beginning from the day on which the appropriate Community instrument comes into force. Subsection (5) provides that if the order is not laid before the expiry of that period, then it must be laid as soon as reasonably practicable thereafter.

Reason for taking power
6. On the receipt of particular advice from the relevant or advisory body, or if there have been significant changes to the basis on which the interim target was set, it may be considered necessary to modify the level of the interim target. The power in section 2A(1) allows for this to happen. Section 2A(2) contains a requirement that the Scottish Ministers must lay an order to modify the interim target to make it “at least 42%” if an “appropriate Community instrument” comes into force. This recognises that action at the European Union level has an important influence on certain elements of Scotland’s greenhouse gas emissions. Approximately 40% of Scotland’s greenhouse gas emissions are generated by the “traded sector”, i.e. installations which operate within the EU Emissions Trading Scheme. If the quantity of emissions allowed within that scheme is reduced there is potential for increased emissions savings in Scotland.

Choice of procedure
7. As subsection (1) allows an important percentage set in primary legislation to be modified, it is considered appropriate that affirmative resolution should apply.
Section 6 - Modifying annual targets

**Power conferred on:** Scottish Ministers  
**Power exercisable by:** order made by statutory instrument  
**Parliamentary procedure:** affirmative resolution of the Scottish Parliament

**Provision**

8. Section 6 allows the Scottish Ministers to modify various parts of sections 3 and 4 by order. Subsection (1)(a) enables the Scottish Ministers to modify the percentage figure by which annual targets must reduce year-on-year from 2020. Subsection (2) restricts this power so that the percentage may be modified only if the Scottish Ministers consider that it is no longer necessary to set the targets by reference to that percentage. Subsection (5) further states that the percentage may not be changed to a figure less than zero.

9. Subsection (1)(b) allows the Scottish Ministers to modify an annual target once it has been set by order under section 4. Subsection (3) restricts this power so that an annual target may be changed only as a result of significant changes to the basis on which the annual target was first set.

10. Subsection (1)(c) enables the Scottish Ministers to modify any of the dates set out in section 4 (the dates of the batches of annual targets) and subsection (1)(d) allows modification of the criteria to which the Scottish Ministers must have regard when setting annual targets. Subsection (4) sets out that the Scottish Ministers may only exercise these powers if they consider it appropriate to do so.

11. Subsections (1A) and (1B) were inserted at Stage 2. Subsection (1A) requires the Scottish Ministers, at the same time as laying a draft instrument under any paragraph of subsection (1), to lay before the Scottish Parliament a report explaining why the modification is being proposed. Subsection (1B) requires that Ministers make a statement to the Parliament on this subject as soon as reasonably practicable after the laying the report mentioned in subsection (1A).

12. Subsection (6) allows the Scottish Ministers to exercise the power to modify annual targets set by order only before the beginning of the year to which the target relates. This power may not be used to allow the target to exceed that set for the previous year.

13. Paragraph (a) of subsection (3) was inserted at Stage 2, which in turn moved the content of what is now paragraph (b) from the body of subsection (3) into a separate paragraph. This subsection now specifies that the Scottish Ministers may make an order under subsection (1)(b) only if they consider that it is appropriate to do so as a result of a modification to the interim.

14. Section 7 requires that all of the powers specified in section 6 may only be exercised once the Scottish Ministers have requested advice from the relevant body defined in section 5(5). Subsection (2) was amended at Stage 2 so that, rather than publish a statement, as was the case in the original clause, the Scottish Ministers must lay a report before the Scottish Parliament if the order differs from the recommendation of the relevant body. Section 7(3) was amended in its
entirety at Stage 2. It now requires that Ministers make a statement to the Parliament on relating to the report made under subsection (2) as soon as reasonably practicable after the laying that report mentioned in subsection (2).

**Reason for taking power**

15. The annual targets will be set in advance and are based on a range of criteria. Between the date when an annual target is set and the year to which it relates, circumstances may change significantly which require a re-evaluation of the annual target level. Subsections (1)(a) and (1)(b) allow this re-evaluation to occur. Over time, it may become apparent that annual targets need to be set further, or not as far, in advance. Subsection (1)(c) allows the date by which the annual targets are set to be changed. It is not possible to foresee the full range of criteria which need to be taken into account up until 2050. Additional criteria may become as important as the current list. Subsection (1)(d) allows the criteria to change.

**Choice of procedure**

16. As subsection (1)(a) allows an important percentage set in primary legislation to be modified, it is considered appropriate that affirmative resolution should apply. Subsection (1)(b) allows a change to a previous instrument subject to affirmative resolution, it is therefore considered appropriate that affirmative resolution should apply. As subsections (1)(c) and (1)(d) allow a change in primary legislation, it is considered appropriate that affirmative resolution should apply.

**Section 7A – Achievement of annual targets: domestic effort target**

- **Power conferred on:** the Scottish Ministers
- **Power exercisable by:** order made by statutory instrument
- **Parliamentary procedure:** affirmative resolution of the Scottish Parliament.

**Provision**

17. Section 7A was inserted into the Bill at Stage 2. Subsection (1) requires that the Scottish Ministers must ensure that reductions in net Scottish emissions account for at least 80% of the reduction in the net Scottish emissions account in any target year. Subsection (3) provides that the Scottish Ministers may, by order, modify the percentage figure in subsection (1) but only to substitute a higher figure.

**Reason for taking power**

18. Concerns were expressed by a range of stakeholders that, as introduced, the Climate Change (Scotland) Bill did not place a restriction on the amount of carbon units which could be used to credit the net Scottish emissions account – effectively offsetting quantities of Scottish emissions. As such, it was argued, the Scottish Ministers would, in theory, be able to use carbon units to achieve all of the emissions reductions required by the 2050, interim and annual targets set under the provisions in the Bill. Section 7A seeks to address this concern by requiring that the Scottish Ministers ensure that at least 80% of the reduction in the net Scottish emissions account in any target year is achieved by reductions in net Scottish emissions and not the use of carbon units to credit that account. It may be considered appropriate in the future to seek to ensure that an even greater proportion of the reduction in the net Scottish emissions account in
any year should be achieved by reductions in net Scottish emissions. The power in subsection (3) therefore allows for the domestic effort target to be increased by order.

19. Subsection (4) requires the Scottish Ministers to request advice from the relevant body before making an order. Subsection (5) requires that if the order makes provisions different from those recommended by the relevant body, then the Scottish Ministers must publish a statement setting out the reasons why.

Choice of procedure

20. Subsection (1) sets an important percentage figure in primary legislation. As subsection (3) allows this percentage to be modified to substitute a higher figure, it is considered appropriate that affirmative resolution should apply.

Section 12 - The net Scottish emissions account

Power conferred on: Scottish Ministers
Power exercisable by: regulations made by statutory instrument
Parliamentary procedure: On the first occasion, affirmative resolution of the Scottish Parliament. The second and subsequent regulations will be subject to negative resolution provided the amendments made are simply technical in nature. More detail is provided below.

Provision

21. Subsection (2) of section 12 enables the Scottish Ministers to make provision by regulations about how and in what circumstances carbon units are credited to and debited from the net Scottish emissions account. Subsections (1A), (1B) and (1C) were inserted at Stage 2. Subsection (1A) specifies that the net amount of carbon units which may be credited to the net Scottish emissions account for a target year must not exceed the allowable amount. The terms “allowable amount” and “net amount of carbon units” are defined in subsections (1B) and (1C) respectively.

Reason for taking power

22. Certain businesses in Scotland participate in the European Union Emissions Trading Scheme. It is possible that firms in Scotland may participate in other such trading schemes in the future. If the net Scottish emissions account is to take account of the units traded within such schemes, it will be necessary to define the terms by which this occurs. This power will also enable the Scottish Ministers to create regulations covering the use of carbon units purchased or sold by Ministers themselves outside of specific trading schemes – for example, units generated by the Clean Development and Joint Implementation Mechanisms established under the Kyoto Protocol.

Choice of procedure

23. The initial regulations will set out how and in what circumstances carbon units are credited to and debited from the net Scottish emissions account which will be a key component of the operation of that account. Affirmative resolution procedure is therefore considered
This document relates to the Climate Change (Scotland) Bill as amended at Stage 2
(SP Bill 17A)

appropriate for the initial regulations. Subsequent regulations will likely involve technical amendments which are unlikely to be significant and, therefore, will usually merit negative resolution procedure. If, however, the second or subsequent regulations make provision to alter the amount by which a carbon unit reduces or increases the net Scottish emissions account, affirmative resolution will be required because of the significant effect this could have on the account.

Section 14 - Scottish share of emissions from international aviation and international shipping

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision

24. International aviation and international shipping emissions are generally not directly emitted in a specific country. Subsections (1) and (2) allow the Scottish Ministers to specify by order how certain emissions from international aviation and international shipping are to be regarded as “Scottish emissions”. Subsections (2A) and (2B) were inserted at Stage 2. Subsection (2A) requires that the first order under subsection (1) must be laid before the Scottish Parliament no later than 1 June 2010. Subsection (2B) provides that, if the deadline in subsection (2A) is missed, the Scottish Ministers must lay the draft order as soon as reasonably practicable afterwards. Subsection (3) requires the Scottish Ministers to seek advice from the relevant body defined in section 5(5) prior to making an order. Subsection (4) requires the Scottish Ministers to publish a statement if the advice of the relevant body is not followed.

Reason for taking power

25. As international aviation and international shipping emissions are generally not directly emitted in a specific country, it is necessary to specify how certain amounts of these emissions will be allocated to the Scottish emissions account. This allocation may also need to change over time, particularly if a European or international agreement makes such a change necessary in the future. There is no current international agreement on how to allocate these emissions to states.

Choice of procedure

26. As this is an issue of high interest and could significantly alter the calculation of “Scottish emissions”, and thereby the calculation of the net Scottish emissions account and future annual targets, affirmative resolution procedure is considered appropriate.
Section 18A – Limits on use of carbon units

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision

27. Section 18A was inserted into the Bill at Stage 2. Subsection (1) specifies that the Scottish Ministers must by order set limits on the net amount of carbon units which may be credited to net Scottish emissions accounts during specified periods which are set out in subsection (2). Subsection (2) also contains dates by which the limits on carbon units must be set.

28. Subsection (A1) places a specific restriction on the Scottish Ministers that they may only credit to the net Scottish emissions account for a year in the period 2013-2017 carbon units purchased by them up to a limit of 20% of the reduction in the amount of the net Scottish emissions account planned for that year.

29. Subsection (3) contains a definition of “net amount of carbon units”. Subsection (4) provides that an order under subsection (1) may provide that specified carbon units do not count towards the limit. Subsection (5) provides that if any of the deadlines listed in subsection (2) are missed, the Scottish Ministers must set the relevant limit as soon as reasonably practicable afterwards.

Reason for taking power

30. Concerns were expressed by a range of stakeholders during Stage 1 of the Bill that, as introduced, the Climate Change (Scotland) Bill did not place a restriction on the amount of carbon units which could be used to credit the net Scottish emissions account – effectively offsetting quantities of Scottish emissions. As such, it was argued, the Scottish Ministers would, in theory, be able to use carbon units to achieve all of the emissions reductions required by the 2050, interim and annual targets set under the provisions in the Bill. Section 18A seeks to address this concern by requiring that the Scottish Ministers set limits on the net amount of carbon units which may be credited to net Scottish emissions accounts during specified periods up to and including the year 2050.

Choice of procedure

31. The amount of carbon units which may be credited to net Scottish emissions accounts for any given target year is an important factor in determining the plans and policies which may be implemented to achieve the annual targets. Affirmative resolution procedure is therefore considered appropriate for setting limits on the amounts of carbon units in this section of the Bill.
Section 18B – Modifying limits on use of carbon units

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision

32. Section 18B was inserted into the Bill at Stage 2. Subsection (1)(a) provides that the Scottish Ministers may by order modify a limit on the use of carbon units set by virtue of section 18A(1). Subsection (1)(b) provides that the Scottish Ministers may by order modify any date mentioned in section 18A(2).

33. Subsection (1)(c) provides that the Scottish Ministers may make an order under subsection (1)(a) only if they consider that it is appropriate to do so as a result of a modification of the interim target or another significant change to the basis on which the limit on use of carbon units was set. Subsection (1)(d) sets out that the Scottish Ministers may exercise the power to make an order under subsection (1)(b) only if they consider it appropriate to do so. Subsection (4) provides that an order under subsection (1)(a) may provide that specified carbon units do not count towards the limit.

Reason for taking power

34. There may be circumstances in which limits on carbon units have been set but are subsequently considered to be inappropriate. An example of this would be if the interim target is increased. This would probably have the knock-on effect of requiring certain annual targets to be increased. As a result, the limits set on the use of carbon units for the periods covering those target years may no longer be appropriate. It is therefore necessary for the Scottish Ministers to have the flexibility to modify limits which have been set on the use of carbon units.

35. Scottish emissions are a component part of the UK carbon account, in respect of which the UK Climate Change Act 2008 creates duties on the Secretary of State to reduce. The periods listed in section 18A(2), for which limits on the use of carbon units must be set, are intended to cover the same periods that are covered by the carbon units set under the UK Climate Change Act 2008. This is in recognition of the fact that it may be necessary and appropriate for the Scottish Ministers, when setting limits on the use of carbon units in relation to the Scottish annual targets, to take account of any limit on carbon units that the Secretary of State sets with regard to the UK carbon budgets. Direct compatibility with the UK carbon budgets may not always be necessary or desirable. The power in subsection (1)(b) allows sufficient flexibility for Scotland to move out of synch with the UK carbon accounting cycle should it be decided in the future that this would be desirable.

Choice of procedure

36. The amount of carbon units which may be credited to net Scottish emissions account for any given target year and the periods for which limits on those units may be set at any given time, are important factors in determining the plans and policies which may be implemented to achieve the annual targets. Affirmative resolution procedure is therefore considered appropriate
for modifying the limits on the amounts of carbon units and the dates associated with those limits.

Section 18C – Advice before setting or modifying limits on use of carbon units

37. Section 18C was inserted into the Bill at Stage 2. It does not contain an enabling power but it does contain conditions which must be adhered to by the Scottish Ministers before they seek to exercise their powers under sections 18A(1) and section 18B(1)(a).

38. Subsection (1) requires that the Scottish Ministers must, before laying a draft of a statutory instrument under section 18A(1) or section 18B(1)(a), request advice from the relevant body.

39. If orders under either of those two sections make provision different from that recommended by the relevant body, section 18C(2) requires that the Scottish Ministers must publish a statement setting out the reasons why. Subsection (3) provides that this statement may be published in such manner as the Scottish Ministers consider appropriate.

PART 2 – ADVISORY FUNCTIONS

Section 23(4) – Reporting on progress towards targets

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision

40. Section 23(2) enables the Scottish Ministers to specify the first year for which the advisory body must prepare reports on the progress being made towards the targets established under the Bill. Section 23(4) specifies when the advisory body must lay this report before the Scottish Parliament but also enables the Scottish Ministers to amend this deadline. Section 23(4) was amended at Stage 2 to enable the Scottish Ministers to specify earlier dates as well as later dates, which had been the condition in this subsection when the Bill was introduced to the Scottish Parliament.

Reason for taking power

41. The power to amend the reporting deadline date is intended to provide flexibility should there be a change to the time, for whatever reason, of the availability of the information (such as the disaggregated Scottish emissions data, for example) upon which the advisory body is required to comment.

Choice of procedure

42. Affirmative resolution procedure demonstrates the significance of the reporting and scrutiny framework established by this Bill.
Section 24(2) – Scottish Ministers’ response to reports on progress

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision

43. Section 24(1) requires that the Scottish Ministers respond to the report prepared by the advisory body under section 23. Section 24(2) specifies the date by which this response is to be laid in the Scottish Parliament but also enables the Scottish Ministers to amend this deadline. Section 24(2) was amended at Stage 2 to enable the Scottish Ministers to specify by order earlier dates as well as later dates, which had been the condition in this subsection when the Bill was introduced to the Scottish Parliament.

Reason for taking power

44. The power enabling the Scottish Ministers to amend the response deadline is intended to provide flexibility should the advisory body’s report under section 23 be delayed or be made available earlier than currently expected. In the latter set of circumstances, this would prevent the Scottish Ministers from having a much longer period than intended in the Bill at introduction within which they may respond to the advisory body’s section 23 report.

Choice of procedure

45. Affirmative resolution procedure demonstrates the significance of the reporting and scrutiny framework established by this Bill.

PART 4 – DUTIES OF PUBLIC BODIES RELATING TO CLIMATE CHANGE

Section 36 - Duties of public bodies relating to climate change

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision

46. Section 36 enables the Scottish Ministers to impose duties relating to climate change, by order, on bodies or persons exercising functions of a public nature, referred to as “public bodies” for the purposes of this Bill. Subsection (3) allows the regulations to impose different duties on different public bodies. Subsections (4) and (5) state that the Scottish Ministers must consult with such associations of local authorities and such other persons as they consider appropriate before imposing a duty. Subsection (6) states that the Scottish Ministers must co-operate with the relevant public bodies to help them comply with duties imposed under this section.

47. Subsections (A1) and (A2) were inserted into Section 36 at Stage 2. Subsection (A1) imposes, on the face of the Bill, three climate change duties on public bodies. Subsection (A2) provides that in this Part of the Bill a “public body” means a Scottish public authority within the meaning of section 3(1)(a) of the Freedom of Information (Scotland) Act 2002. The effect of
subsection (A1) is to change the enabling power in section 36(1) to be a power to make further provision relating to the imposition on public bodies of duties relating to climate change. Section 36(1) was therefore amended at Stage 2 to insert the word “further” before the word “provision” in recognition of this.

Reason for taking power

48. Section 36 allows for flexibility in the future to help ensure bodies with functions of a public nature take action on climate change, including reducing emissions or adapting to the effects of climate change.

Choice of procedure

49. As this provision could place a burden on bodies or persons exercising functions of a public nature, affirmative resolution procedure is considered appropriate.

Section 38 – Reporting on climate change duties

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: negative resolution of the Scottish Parliament

Provision

50. Section 38 enables the Scottish Ministers, by order, to require relevant public bodies to report on how they are complying with climate change duties created under section 36. It also enables the Scottish Ministers to set out what reports must include what format they must take and the time by which they must be submitted.

51. At Stage 2, paragraph (aa) was inserted into subsection (1). This paragraph makes clear that the Scottish Ministers may by order make provision requiring any relevant public body found, following an investigation under section 40 of the Bill, to be failing to comply with its climate change duties, to prepare a report on the actions it is taking to secure future compliance with those duties.

52. An amendment was made to paragraph (b) of subsection (1) to insert the condition that any provision made by an order made under subsection (1) as to the information that reports made by relevant public bodies must contain must be subject to subsection (1A). Subsection (1A) would have been created by amendment 209 to the Climate Change (Scotland) Bill which was lodged at Stage 2. This amendment was not ultimately moved at Stage 2, therefore the subsection (1A) mentioned in section 38(1)(b) does not exist.

Reason for taking power

53. The power to require public bodies to report on compliance with climate change duties is intended to ensure that such duties are carried out in an open and transparent fashion.
Choice of procedure

54. Requiring public bodies to report upon climate change duties which they are required to carry out is not considered as significant a burden as the requirement to perform such duties in the first place. Negative resolution procedure is therefore considered appropriate.

PART 5 – OTHER CLIMATE CHANGE PROVISIONS

CHAPTER 1 - ADAPTATION

Section 46 - Variation of permitted times for making muirburn

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision

55. Section 46 inserts a new section 23A into the Hill Farming Act 1946 (“the 1946 Act”). Subsection (1) of new section 23A of the 1946 Act provides the Scottish Ministers with an order-making power to substitute for the dates specified in section 23(1), (2) or (3) of the 1946 Act, such other dates before which, and after which, it is lawful to make muirburn in any year.

56. Subsection (1) of section 23A was amended at Stage 2 to clarify that the order making power may be exercised to modify the dates specified in section 23(1), (2) or (3) of the 1946 Act repeatedly.

57. The original subsection (2) of section 23A was deleted by an amendment at Stage 2, and equivalent text was inserted instead into subsection (1). This text clarifies that any of the dates specified in section 23(1) to (3) of the 1946 Act may be substituted for the dates specified in an order made under section 23A(1) of the 1946 Act.

58. Subsection (3) provides that the Scottish Ministers may make an order under section 23A(1) of the 1946 Act only if they consider it necessary or expedient to do so in relation to climate change.

59. A new subsection (3A) was inserted at Stage 2 after subsection (3). The new subsection clarifies the extent of the Scottish Ministers’ power to modify section 23 of the 1946 Act such that the order-making power may not be exercised so as to reduce the length of the muirburn season below that currently provided for under section 23 of the 1946 Act. The amendment has the effect of maintaining the present length of the muirburn season.

Reason for taking power

60. The permitted times for making muirburn in Scotland have not changed since the 1946 Act came into force. Climate change in Scotland has altered our seasonal weather patterns. Future climate change scenarios suggest that annual temperatures will rise, winters may become wetter and summers generally drier. These climatic changes have impacted, and are likely to continue to impact, on the ability to successfully undertake muirburn. Where effective muirburn
cannot be carried out, there is an increased risk of wildfire from dry or dead vegetation, which can result in the loss of valuable habitats and carbon stored in peat underlying the lands upon which this vegetation is found. The power to vary the dates of the permitted muirburn season will enable muirburn, and those engaged in that activity, to adapt to the effects of climate change by permitting the activity at times of the year which reflect optimal climatic conditions.

Choice of procedure

61. Subsection (5) of new section 23A of the 1946 Act provides that order made under new section 23A(1) of the 1946 Act is subject to affirmative Parliamentary procedure. This allows for greater Parliamentary scrutiny of a draft order which proposes modification of the muirburn season. And as such an order modifies the text of section 23 of the 1946 Act, it is considered appropriate that affirmative, rather than negative, resolution procedure should apply.

CHAPTER 2 - FORESTRY

Section 47 - Power to modify functions of Forestry Commissioners

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision

62. Section 47 confers on the Scottish Ministers the power to modify the functions of the Forestry Commissioners in or as regards Scotland. Subsection (2) provides that this power may be exercised by the Scottish Ministers only where they consider it to be necessary or expedient to do so to comply with their duties under sections 1, 2 or 3(1)(b) of the Bill, or otherwise in relation to climate change. Subsection (3) provides that an order under this section could enable the Forestry Commissioners to form or participate in corporate bodies or trusts. Subsection (4), which was deleted at Stage 2, contained provisions that would have allowed the Forestry Commissioners to delegate their functions to other persons.

Reason for taking power

63. The Forestry Commissioners have the general duty to promote the interests of forestry, the development of afforestation and the production and supply of timber and other forest products. In addition, the Forestry Commissioners have the function of managing land comprising the national forest estate. These functions have benefits in relation to the development of programmes, such as afforestation, which will assist with mitigation of climate change. The effects of climate change will continue to develop in the future. This power will ensure that the Forestry Commissioners can establish, participate in, or facilitate programmes to mitigate climate change without being prevented from doing so because of the limits set out in their current functions and duties which do not allow for them to form or participate in corporate bodies or trusts. The power will allow for flexibility to ensure that the Forestry Commissioners functions and duties can continue to be modified in future to meet the challenges posed by the continuing effects of climate change. Another amendment introduced at Stage 2 provides that any corporate body or trust formed under the powers provided for by Subsection (3) is subject to the biodiversity duty set out in section 1 of the Nature Conservation (Scotland) Act 2004.
Choice of procedure

64. The affirmative resolution procedure is considered appropriate because of the breadth of the power and the fact that it may involve modification of primary legislation.

CHAPTER 3 – ENERGY EFFICIENCY

Section 50 – Non-domestic buildings: assessment of energy performance and emissions

Power conferred on: Scottish Ministers
Power exercisable by: regulations made by statutory instrument

Provision

65. Section 50 requires that the Scottish Ministers make regulations relating to the assessment of the energy performance of and the emission of greenhouse gases from non-domestic buildings. Subsection (1) was amended at Stage 2 to state that the Scottish Ministers “must” make regulations under this section rather than simply that they “may make such regulations, which was the provision in this subsection when the Bill was originally introduced to the Scottish Parliament. Subsection (1)(b) provides that the regulations may extend not only to the greenhouse gases emitted by non-domestic buildings themselves but also to greenhouse gases otherwise associated with such buildings and with the activities carried out in these buildings.

66. At Stage 2 a new subsection was inserted after subsection (1). This new subsection together with the amendment above contains provision that the Scottish Ministers must by regulations require the implementation of recommendations made under subsection (1). The wording of subsection (1) itself has also been slightly amended to enable this new subsection to be introduced.

67. Subsection (2) lists certain things which the regulations may, in particular, provide about. A small amendment was made to paragraph (f) at Stage 2 to clarify that the activities referred to in that paragraph which may be the subject of greenhouse gas assessment are specifically those carried out in buildings. Subsection (2)(h) provides that the regulations made under subsection (1) may make provision about the issuing of certificates following such assessments, including the form, manner and content of such certificates. At Stage 2 four new paragraphs were inserted after subsection (2)(h) to enable regulations to include provision for the form of recommendations contained in such certificates, the manner and periods which persons will be permitted to comply with those recommendations, the setting up of a register for certificates and the disclosure of information in the register.

68. Subsection (3) states that the enforcement authority provided for in the regulations is to be a local authority or such other person or body as the Scottish Ministers consider appropriate. Subsection (4) enables the enforcement authority to levy charges to recover the reasonable costs incurred in exercising its functions under the regulations.
Reason for taking power

69. The aim of the provisions for improving the energy performance of existing non-domestic buildings is to raise the contribution that the existing non-domestic stock can make to mitigating climate change. Buildings account for over 40% of emissions and there is scope to reduce these levels. They are to be subject to an assessment of the emissions of greenhouse gases and energy performance, an enhanced form of energy performance certificate (EPC). The enabling powers in section 50 will allow the creation of the framework necessary for this.

Choice of procedure

70. As this provision may be used to create regulations which could place a significant burden on the owners of non-domestic buildings, affirmative resolution procedure is considered appropriate. When the Bill was introduced to the Scottish Parliament, regulations made to make provision relating to the recovery of costs by the enforcement authority were subject to negative resolution procedure as it was considered that such regulations would be needed to keep such provisions up to date and would involve technical amendments which were unlikely to be significant. However, during Stage 1, the Economy, Energy and Tourism Committee considered that amendments of this kind were of sufficient significance to also merit affirmative resolution procedure. An amendment to section 64 to this effect was made to the Bill at Stage 2.

Section 50A - Living accommodation: assessment of energy performance and emissions

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision

71. Section 50, as amended at Stage 2, enables the Scottish Ministers to make regulations relating to the assessment and improvement of the energy performance and the emission of greenhouse gases from non-domestic buildings, and to require the implementation of recommendations made as part of that assessment.

72. At Stage 2 section 50A was inserted into the Bill, giving the Scottish Ministers powers broadly equivalent to those in section 50 as it was before stage 2, but in relation to living accommodation rather than non-domestic buildings. Subsection (1) of the new section differs from subsection (1) of section 50 by specifying living accommodation and also by referring only to emissions produced by the living accommodation, omitting reference to emissions otherwise associated with the building or activities carried out in the building. It also gives the Scottish Ministers powers to make regulations about improving the energy performance and emissions of living accommodation. Subsection (2) lists certain things which the regulations made under subsection (1) may, in particular, provide about. Subsection (3) states that the enforcement authority provided for in the regulations is to be a person or body that the Scottish Ministers consider appropriate. In this respect, it differs from section 50(3) by making no specific reference, in the case of living accommodation, to the possibility that the local authority could be the enforcement authority. Subsection (4) enables the enforcement authority to levy charges to recover the reasonable costs incurred in exercising its functions under the regulations.
Reason for taking power

73. The aim of the provisions for improving the energy performance of existing domestic buildings is to raise the contribution that the existing domestic stock can make to mitigating climate change. Buildings account for over 40% of emissions and there is scope to reduce these levels. They are to be subject to an assessment of the emissions of greenhouse gases and energy performance, which would be an enhanced and more precise, and therefore fairer, form of energy performance certificate (EPC). The enabling powers in section 50 will allow the creation of the framework necessary for this and for the improvement of energy performance and emissions.

Choice of procedure

74. As this provision may be used to create regulations which could place a significant burden on the owners of domestic buildings, affirmative resolution procedure is considered appropriate.

Section 50B - Council tax reductions to promote energy efficiency

Power conferred on: Scottish Ministers
Power exercisable by: regulations made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision

75. Section 50B was inserted into the Bill at Stage 2. This section requires that the Scottish Ministers make regulations that would facilitate local authorities to reduce the amount of council tax a person is liable to pay in the following financial year if that person makes an energy efficiency improvement or installs technologies reliant on renewable energy or heat in a domestic dwelling in the current financial year.

76. Subsection (1) places a duty on the Scottish Ministers to make regulations under section 80 of the Local Government Finance Act 1992 to provide that, in respect of a person who satisfies certain conditions set out in paragraphs (a) and (b) of the subsection, the first of which relates to energy efficiency improvements being made to a dwelling, the amount of council tax that the person is to be liable for in the next financial year shall be reduced in accordance with section 50C which was also added to the Bill at Stage 2.

77. Subsection (2) requires that the regulations that the Scottish Ministers must make under subsection (1) must also make similar provision about reducing the council tax which is liable following the installation of technologies reliant on renewable energy or heat in a dwelling.

78. Subsection (3) provides that, subject to subsection (4) any reductions made under either subsection (1) and (2) are without prejudice to reductions made under the other subsection. Subsection (3) also provides that any reduction made under subsection (1) is without prejudice to any further reduction made by virtue of that subsection.

79. Subsection (4) provides that the regulations made by virtue of subsection (1) may specify a maximum number of reductions, or a maximum total reduction, in the amount of council tax payable in respect of any one dwelling in any one financial year.
80. Subsection (5) provides that the regulations made under subsection (1) must make provision regarding the sort of evidence that a local authority is to accept as demonstrating that an energy efficiency improvement has been made to a dwelling and/ or that a dwelling meets a reasonable standard of energy efficiency.

81. Subsection (6) requires that a draft of a statutory instrument containing the first regulations under subsection (1) must be laid before the Scottish Parliament no later than 31 December 2009.

82. Subsection (7) contains definitions of several of the terms used in other parts of 50B and subsection (8) provides that the Scottish Ministers may by regulations, amend subsection (7) to add to the list of measures in the definition of “energy efficiency improvement”.

\textit{Reason for taking power}

83. Under the UK Carbon Emissions Reduction Target scheme, payments are made by energy generators to incentivise householders to make improvements to the energy efficiency of their dwellings and/ or install renewable energy or heat technologies in those dwellings. In England and Wales this money can be made available via local authorities by directly or indirectly reducing the level of council tax payable in respect of particular properties. Section 50B makes provisions for similar incentivisation schemes to be operated in Scotland.

\textit{Choice of procedure}

84. Given that regulations made under section 50B concern varying council tax payable on certain dwellings in specific circumstances and that this has implications for local authorities in Scotland regarding the administration and funding provision of these payments, it is considered that affirmative resolution procedure affords an appropriate level of parliamentary scrutiny.

\textit{Section 50D - Review of provisions made by virtue of or under sections 50C and (Amounts of reductions in non-domestic rates)}

\textbf{Power conferred on:} Scottish Ministers  
\textbf{Power exercisable by:} regulations made by statutory instrument  
\textbf{Parliamentary procedure:} affirmative resolution of the Scottish Parliament

\textit{Provision}

85. Reference is made in subsections (1) and (3) of section 50D to section 25B of the Local Government (Scotland) Act 1966. Reference is also made in the title of section 50D and in subsections (2) and (3) to section (Amounts of reductions in non-domestic rates). These two sections would have been created by amendments 260 and 262 to the Climate Change (Scotland) Bill which were lodged at Stage 2. These amendments related to non-domestic rates but were not ultimately moved at Stage 2, therefore the two new sections detailed in this paragraph and mentioned in section 50D do not exist. This Supplementary Delegated Powers Memorandum provides information only on the powers that are actually available to the Scottish Ministers.

86. Section 50D requires annual reports to be made by the Scottish Ministers regarding the effectiveness of specific financial incentives towards promoting energy efficiency improvements
and technologies reliant on renewable sources of energy or heat, and powers to vary these amounts, and alter the criteria involved.

87. Subsection (1) provides that the Scottish Ministers must, as soon as reasonably practicable after 31 March 2012, and annually thereafter, lay a report before the Scottish Parliament on the operation of regulations made by virtue of section 50B of the Bill, including a assessment of whether reductions which have been made in council tax have contributed effectively towards promoting energy efficiency improvements and technologies reliant on renewable sources of energy or heat.

88. Subsection (2) provides the Scottish Ministers with the power to vary, in specified circumstances, the amount of reduction which may be made to council for the purpose of promoting energy efficiency improvements and technologies reliant on renewable sources of energy or heat.

89. Subsection (3) provides the Scottish Ministers with the power to vary, in specified circumstances, the specified mechanisms for calculating the amount of reduction which may be made to council tax for the purpose of promoting energy efficiency improvements and technologies reliant on renewable sources of energy or heat.

**Reason for taking power**

90. The provision in section 50D is necessary to ensure that the effectiveness of the specified financial incentives towards promoting energy efficiency improvements and technologies reliant on renewable sources of energy or heat is kept under review. The regulation making powers in subsections (2) and (3) are necessary to enable Ministers to take appropriate remedial action should any of the reports made under subsection (1) identify that any of the amounts of reductions in council tax mentioned in that subsection should be increased or otherwise varied or that different mechanisms for calculating those amounts be prescribed.

**Choice of procedure**

91. Given that regulations made under subsections (2) and (3) of section 50D concern varying council tax payable on certain buildings in specific circumstances and that this has implications for local authorities in Scotland regarding the administration of these payments, it is considered that affirmative resolution procedure affords an appropriate level of parliamentary scrutiny.
Section 51A – Air source heat pumps and micro wind turbines in domestic properties: permitted development rights

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: negative resolution of the Scottish Parliament

Provision

92. Subsection (1) of section 51A places a duty on the Scottish Ministers to bring forward an amendment to the Town and Country Planning (General Permitted Development) (Domestic Microgeneration) (Scotland) Amendment Order 2009. Subsection (2) specifies items that the amendment under subsection (1) must contain.

93. Subsection (3) requires that an order making the amendment required in subsection (1) be brought forward no later than six months after the commencement date of this section. The order will be made under section 30 of the Town and Country Planning (Scotland) Act 1997.

94. Subsection (4) contains provision about certain consultation criteria that the Scottish Ministers must comply with before making the amendment under subsection (1).

95. Subsection (5) contains the definition of the term “microgeneration” for the purposes of section 51A.

Reason for taking power

96. Section 51A would place a duty on the Scottish Ministers to take specific action that would provide for the circumstances in which permitted development rights would be granted for the installation, alteration or replacement of air source heat pump and wind turbine microgeneration equipment in domestic properties.

Choice of procedure

97. Orders made under section 30 of the Town and Country Planning (Scotland) Act 1997 are subject to negative resolution procedure.

Section 51B – Microgeneration in non-domestic buildings: permitted development rights

Power conferred on: Scottish Ministers
Power exercisable by: order or regulations made by statutory instrument
Parliamentary procedure: negative resolution of the Scottish Parliament

Provision

98. Subsection (1) of section 51B places a duty on the Scottish Ministers to bring forward an order or regulations under section 30 of the Town and Country Planning (Scotland) Act 1997.

99. Subsection (2) specifies that the order or regulations made under subsection (1) must make provision specifying the circumstances in which the installation, alteration or replacement
of microgeneration within the curtilage of a non-domestic building is considered to be a permitted development within the meaning of sections 30 and 31 of the 1997 Act.

100. Subsection (3) requires that the order or regulations made to satisfy the duty in subsection (1) be brought forward no later than 12 months after the commencement date of this section.

101. Subsection (4) contains provision about certain consultation criteria that the Scottish Ministers must comply with before making the amendment under subsection (1).

102. Subsection (5) contains the definition of the terms “microgeneration” and “non-domestic building” for the purposes of section 51B.

Reason for taking power

103. Section 51B would place a duty on the Scottish Ministers to take specific action that would provide for the circumstances in which permitted development rights would be granted for the installation, alteration or replacement of microgeneration equipment in non-domestic buildings.

Choice of procedure

104. Orders made under section 30 of the Town and Country Planning (Scotland) Act 1997 are subject to negative resolution procedure.

CHAPTER 3A – THE SCOTTISH CIVIL ESTATE

Section 51E – Scottish civil estate: supplementary

Power conferred on: Scottish Ministers
Power exercisable by: order made by statutory instrument
Parliamentary procedure: affirmative resolution of the Scottish Parliament

Provision

105. Sections 51C (Energy performance of new buildings procured for the Scottish civil estate) and 51D (Report on the Scottish civil estate) were inserted into the Bill at Stage 2. Section 51E contains a delegated power related to these two subsections.

106. Section 51E(1) sets out what buildings are to be considered as being part of the civil estate in Scotland for the purposes of sections 51C and 51D.

107. Section 51E(2) contains an order making power to allow specific descriptions of buildings to be included within the scope of sections 51C and 51D if the generic description in subsection (1) is considered not to apply to them. Subsection (2) also provides that descriptions or uses of buildings may be excluded from or included in the scope of sections 51C and 51D.
This document relates to the Climate Change (Scotland) Bill as amended at Stage 2 (SP Bill 17A)

Reason for taking power

108. The wording of subsection (1) of section 51E is drafted so that sections 51C and 51D will cover the buildings used for Scottish central government administration. It may in the future be considered appropriate that subsection (1) should not extend to specific descriptions or uses of buildings or, conversely, that it does not cover particular buildings or uses that it should. The order making power in subsection (2) allows for the scope of subsection (1) to be varied by order to respond to such circumstances.

Choice of procedure

109. Members of the Scottish Parliament are likely to have an interest in which buildings fall within the scope of section 51E and which are therefore covered by sections 51C regarding the procurement or construction of such buildings and section 51D regarding reporting on the efficiency and contribution to sustainability of those buildings. It is considered that affirmative resolution affords the sufficient level of parliamentary scrutiny should the Scottish Ministers seek to use an order under section 51E(2) to alter the scope of section 51E(1).

CHAPTER 4 – WASTE REDUCTION AND RECYCLING

Section 52 - Waste prevention and management plans

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<tr>
<th>Power conferred on:</th>
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<td>Parliamentary procedure:</td>
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<td>(negative procedure for regulations dealing only with charging by enforcement authority)</td>
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Provision

110. Section 52 enables the Scottish Ministers, by regulations, to place a duty on specified persons to prepare waste prevention and management plans. The Scottish Ministers would prescribe in regulations the persons required to prepare a plan (or plans), as well as the matters to be included in a plan. It is intended that the plans can be required for a range of different matters. For example, the regulations might require a plan for an individual construction project. Alternatively, they might require a plan for waste generated by a business on an on-going, day-to-day basis (e.g. office waste). It is intended that these regulations would deal with measures to prevent as well as manage waste.

111. Should the preparation of waste prevention and management plans be made compulsory by regulations under this section of the Bill, a regime will need to be established to ensure that plans are drawn up, that they are sufficiently rigorous, and that they are followed. A body will need to be established, or nominated, to do this. Subsection (2)(e) to (h) and section 60 of the Bill grants powers enabling such a regime to be set up and to establish or nominate a body to operate the regime.

Reason for taking power

112. Minimisation of waste, better use of resources, and careful management of such waste as does arise all impact on climate change. They are also important for other environmental goals,
such as landfill reduction and preservation of amenity. Avoidance of waste can also generate savings for businesses. In view of this range of gains, many businesses already plan for prevention and management of waste. Powers would be taken to ensure that performance across the economy met best standards, and that up-to-date approaches and techniques be adopted.

113. The range of activities encompassed by the plans, and the kind of waste with which they will need to deal, will be strongly influenced by economic activities and market conditions prevailing in future. All of these may change over time. Taking these powers allows a flexible response to prevailing conditions.

Choice of procedure

114. Regulations will provide the detail of any scheme which is to be enforced. At Stage 2 it was considered appropriate, for proper Parliamentary scrutiny, that super-affirmative procedure be adopted. This was thought to be desirable given that regulations are likely to create new offences. The exception would be regulations dealing only with charges by the monitoring and enforcement body (see section 60(4)) which, in terms of section 64(5) and (7)(e), would be made by negative resolution.

Section 53 - Information on waste

Power conferred on: Scottish Ministers
Power exercisable by: regulations made by statutory instrument
Parliamentary procedure: super-affirmative resolution of the Scottish Parliament

Provision

115. Subsection 53(1) enables the Scottish Ministers, by regulations, to require specified persons to provide information to SEPA about the waste that they produce. In terms of an amendment introduced at Stage 2, the first regulations must be made under this section within a year of Royal Assent. Subsection (2) lists certain things which the regulations may, in particular, provide about, including the enforcement of duties imposed by the regulations and related offences for failing to comply with the requirements of the regulations.

Reason for taking power

116. It will be difficult to move to a zero waste society without much better information about the circumstances in which waste arises and its management, treatment and disposal in Scotland. Good, reliable waste data informs policy-makers when they are developing new ways of reducing and managing waste. It informs the private sector when it is seeking to invest in waste infrastructure as part of the move away from landfill, and also when looking to minimise waste, and thus costs. Such information would also help to meet the obligations of the Scottish Ministers under the Waste Statistics Regulation (2150/2002/EC)\(^1\). This establishes a framework for the production of Community statistics on the generation, recovery and disposal of waste. It requires Member States and the European Commission to produce Community statistics on the generation, recovery and disposal of waste. SEPA already collates waste statistics which are

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\(^1\) OJ No L 332, 9.12.2002, p1
used to meet Scotland’s obligations under the EU Regulation. However, statistics on commercial and industrial waste are based on surveys for which the return rate is low.

117. Taking powers would enable the kind of statistics collected to be determined by developing needs. As an example, and without prejudicing any eventual use of the power, in future it may become possible and desirable to keep statistics relating to the greenhouse-gas-generating potential of waste.

Choice of procedure

118. Regulations will provide the detail of any scheme which is to be enforced. At Stage 2 it was considered appropriate, for proper Parliamentary scrutiny, that super-affirmative procedure be adopted. This was thought to be desirable given that regulations are likely to create new offences.

Section 54 - Recyclable waste: facilities for deposit etc.

Power conferred on: Scottish Ministers
Power exercisable by: regulations made by statutory instrument
Parliamentary procedure: super-affirmative resolution of the Scottish Parliament (negative procedure for regulations dealing only with charging by enforcement authority)

Provision

119. Section 54 enables the Scottish Ministers to make regulations which may require receptacles to be provided by persons of the kinds specified for a broad range of types of waste. It is possible that, for example, supermarkets could be required to provide recycling facilities at or near tills for packaging which customers could use. Offices could be required to provide receptacles in which employees could recycle their own paper, as well as that of the workplace. This would not be a complete innovation: such facilities are already available in places. In practice, the Scottish Ministers would only prescribe types of waste if there was capacity to recycle that waste and a market for the resulting recyclate.

120. Regulations may also be used to require persons with the correct environmental authorisation to collect waste deposited in such facilities and to ensure so far as reasonably practicable that such waste is recycled. Charges payable to such authorised persons may be specified.

121. A monitoring and enforcement regime may be established to ensure that the facilities are provided, and used and operated correctly. Subsection (2)(f) to (i) and section 60 of the Bill grants powers enabling such a regime to be set up and to establish or nominate a body to operate the regime.

Reason for taking power

122. Improved provision of recycling facilities reduces the use of landfill and can also help to mitigate climate change. To improve recycling rates the producers of waste have to be given
better opportunities to recycle, rather than dispose of the waste they produce; and waste has to be separated and kept uncontaminated to make recycling easier, or even physically possible. The provision of receptacles at convenient places, and which keep waste streams separate, achieves both these conditions.

123. The kinds of waste for which receptacles are provided are likely to change over time as recycling markets change or new products are developed. This will in turn affect judgements about the persons who should be required to provide and enabled to use these facilities. For this reason requirements are likely to need to be modified; and this power will permit this to be done.

**Choice of procedure**

124. Regulations will provide the detail of any scheme which is to be enforced. At Stage 2 it was considered appropriate, for proper Parliamentary scrutiny, that super-affirmative procedure be adopted. This was thought to be desirable given that regulations are likely to create new offences. The exception would be regulations dealing only with charges by the monitoring and enforcement body which, in terms of section 64(5) and (7)(e), would be made by negative resolution.

**Section 55 - Recyclable waste: facilities for deposit at events etc.**

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**Provision**

125. Whereas section 54 is most likely to be used to require the provision of receptacles at more-or-less permanent locations, section 55 enables the Scottish Ministers to make regulations which confer power on local authorities to issue notices requiring receptacles to be provided for a broad range of types of waste at various events. The receptacles would be needed only for the duration of the event. This would not be a complete innovation: such facilities have already been made available at particular events. In practice, the Scottish Ministers would only prescribe types of waste if there was capacity to recycle that waste and a market for the resulting recyclate.

126. Those who hold sporting or cultural events could be placed under a duty to provide receptacles in which those attending could leave a range of waste – relevant examples could be plastic cups and programmes. The materials so collected could then be recycled. Regulations may also be used to enable local authorities to require persons with the correct environmental authorisation to collect such waste and to ensure so far as reasonably practicable that waste deposited in such facilities is recycled. Regulations may specify charges payable to such authorised persons.

127. A monitoring and enforcement regime may be established to ensure that facilities are provided, used and operated correctly. Subsections (2)(k) to (n) and section 60 of the Bill grant
powers enabling such a regime to be set up and to establish or nominate a body to operate the
regime.

Reason for taking power

128. As with the kind of receptacles in permanent locations envisaged by section 54, the aim
here is to encourage recycling and thus the more efficient use of resources. The conditions for
higher recycling rates are to be established by maximising collection and by keeping different
types of waste separate for easy recycling. An additional benefit which may be achieved by the
 provision of recycling facilities at events is a reduction in littering.

129. The kinds of waste for which receptacles are provided are likely to change over time as
recycling markets change or new products are developed. This may in turn affect judgements
about which events should be potentially subject to notices. For this reason, requirements are
likely to need to be modified; and this power will permit this to be done.

Choice of procedure

130. Regulations will provide the detail of any scheme which is to be enforced. At Stage 2 it
was considered appropriate, for proper Parliamentary scrutiny, that super-affirmative procedure
be adopted. This was thought to be particularly desirable given that regulations are likely to
create new offences. The exception would be regulations dealing only with charges by the
monitoring and enforcement body which, in terms of section 64(5) and (7)(e), would be made by
negative resolution.

Section 56 - Procurement of recyclate

Power conferred on: Scottish Ministers
Power exercisable by: regulations made by statutory instrument
Parliamentary procedure: super-affirmative resolution of the Scottish Parliament
(negative procedure for regulations dealing only with charging by enforcement authority)

Provision

131. Section 56 gives the Scottish Ministers powers to require specified persons to ensure that
particular things procured or constructed by them contain or include a certain proportion of
recyclate.

132. Arrangements would be required to ensure that these obligations were observed. A body
would have to be set up or nominated to do this. Section 56(3)(f), subject to section 60, contains
provisions allowing such a regime to be developed.

Reason for taking power

133. A great deal of recyclate is already procured by a wide range of businesses and public
bodies, which promotes resource efficiency, reduces the use of landfill and helps mitigate
climate change. It is likely, however, that markets for recyclate, and with them economic
activity in the waste processing sector, could be increased if such procurement were made
compulsory. It would also help to counter the effects of what may be perceived as a stigma attached to recycled products.

134. The kind of recycled materials which should be procured would, however, depend on market conditions prevailing at the time, as would the type of organisation at which the powers would be aimed. Care would also have to be taken, for example, that any materials stipulated should be sufficiently widely available and readily traded to avoid market distortions. Powers therefore need to be flexible enough to allow modification, as envisaged in this section.

Choice of procedure

135. Regulations will provide the detail of any scheme which is to be enforced. At Stage 2 it was considered appropriate, for proper Parliamentary scrutiny, that super-affirmative procedure be adopted. This was thought to be desirable given that regulations are likely to create new offences. The exception would be regulations dealing only with charges by the monitoring and enforcement body which, in terms of section 64(5) and (7)(e), would be made by negative resolution.

Section 57 – Targets for reduction of packaging etc.

Power conferred on: Scottish Ministers
Power exercisable by: regulations made by statutory instrument
Parliamentary procedure: super-affirmative resolution of the Scottish Parliament (negative procedure for regulations dealing only with charging by enforcement authority)

Provision

136. Section 57 enables the Scottish Ministers, by regulations, to set targets to reduce the amount of packaging used and to require specified persons to comply with those targets. Without prejudicing detailed provisions, it would allow Ministers to obtain information about a baseline volume of packaging on the market in Scotland and then set targets on retailers, for example, to reduce that amount year on year. The reduction might be expressed in ways other than absolute amounts: for example, targets could be set with reference to the relationship between volume of packaging put on the market by a retailer and its turnover. The forms of packaging for which targets might be set would be a matter for the regulations and could, obviously, be altered by further regulations.

137. A monitoring and enforcement regime may be established to ensure that information is properly collated and targets met. Subsection (2)(e) to (h) and section 60 of the Bill grants powers enabling such a regime to be set up and to establish or nominate a body to operate the regime.

Reason for taking power

138. There is already legislation regarding packaging, in the form of the Packaging (Essential Requirements) Regulations 2003\(^2\) and the Producer Responsibility Obligations (Packaging

\(^2\) SI 2003/1941
This document relates to the Climate Change (Scotland) Bill as amended at Stage 2
(SP Bill 17A)

Waste) Regulations 2007\(^3\). These respectively set out the required specifications of packaging, and place responsibility on producers to recycle a proportion of waste packaging put on the market by them. Neither of these sets of regulations actually requires that the overall amount of packaging used should be reduced. The proposal in this Bill would complement existing legislation. Baseline information about packaging in circulation is needed before targets can be set, and the system is likely to require future revision in light of changing market conditions.

Choice of procedure

139. Regulations will provide the detail of any targets, to whom they apply, and how they should be enforced. At Stage 2 it was considered appropriate, for proper Parliamentary scrutiny, that super-affirmative procedure be adopted. This was thought to be desirable given that regulations are likely to create new offences. The exception would be regulations dealing only with charges by the monitoring and enforcement body which, in terms of section 64(5) and (7)(c), would be made by negative resolution.

Section 58 – Deposit and return schemes

Power conferred on: Scottish Ministers
Power exercisable by: regulations made by statutory instrument
Parliamentary procedure: super-affirmative resolution of the Scottish Parliament other than where the regulations only make provision relating to one or more of: charging by the enforcement authority, amount of deposits, form and content of notices or registration fees, in which case the procedure is negative resolution of the Scottish Parliament

Provision

140. Section 58 allows the Scottish Ministers to establish deposit and return schemes, which are defined in terms of attaching a returnable element, called a “deposit” to the sale price of an article, which would be payable to the person returning the packaging associated with that item, the item itself, or both the item and the packaging. The section allows the items and/or packaging which would be included in the scheme, and the persons involved, as well as the amount of any deposit, to be defined in regulations. The section as drafted dealt originally only with packaging. Amendments were made at Stage 2 at various places in the section to refer to the articles, the returnable packaging, and to both articles and packaging, allowing any scheme to deal with consumer articles as well as, or even without, their respective packaging.

141. The section also allows for a non-returnable element being included in the price, to defray the expenses of any scheme. This amendment was inserted in section 58(7) at stage 2.

142. The section would permit a range of schemes to be developed, within that basic structure. At its simplest a scheme could merely require Scottish producers to establish their own deposit and return schemes. At the other end of the scale it could require the establishment of a “clearing house” system similar to that operating in Denmark and Norway, whereby relevant items are identified by the clearing house against payment of a fee by whomever puts them on

\(^3\) SI 2007/871
the market. These fees are used to refund those who return the materials. The clearing-house can also take responsibility for recycling the materials collected: this is allowed for by the section.

143. A monitoring and enforcement regime may be established to ensure that materials subject to the requirements have a deposit attached to the sale price of the relevant items and this is properly refunded to those returning them. Monitoring and enforcement powers would be required. Subsection (7)(i) to (l) and section 60 of the Bill grants powers enabling such a regime to be set up and to establish or nominate a body to operate the regime. Section 58(5) contains provision allowing a clearing house of the type described above to carry out these functions. The clearing house, called a “scheme administrator” in an amendment introduced at Stage 2, is dealt with in more detail in the succeeding sections which were similarly introduced at that Stage.

Reason for taking power

144. While the 2007 Regulations described above do require the recycling of certain amounts of packaging this tends to be “back of store”. A deposit and return scheme could increase the return and the recycling of packaging which reaches consumers’ hands. Furthermore, the 2007 Regulations do not affect the consumer items themselves, which might also reasonably be subject to a scheme. For example, a deposit and return scheme could be used to encourage the collection and proper management of waste low-energy light bulbs.

145. Section 58(6) provides that Ministers may only make regulations where they consider this to be necessary or expedient in order to promote or secure an increase in the recycling of materials. Furthermore, by attaching a monetary value to items and packaging it could discourage the careless discarding of these materials – littering and fly-tipping – and reduce the concomitant amenity, and health and safety, problems.

146. A scheme could also encourage manufacturers to develop reusable forms of consumer items and packaging. Those who operate existing deposit and return schemes do so to encourage reuse of materials and thus keep their own costs down. It is likely that the types of product which are suitable for deposit and return schemes will develop along with markets and technology. The level of detail required to establish properly functioning schemes is likely to be best left to subordinate legislation.

Choice of procedure

147. Regulations will provide the detail of any deposit and return schemes. At Stage 2 it was considered appropriate, for proper Parliamentary scrutiny, that super-affirmative procedure be adopted. This was thought to be desirable given that regulations are likely to be complex and, in particular, to create new offences. The exceptions would be regulations dealing only with charges by the monitoring and enforcement body, the amount of the deposits, form and content of information notices for customers, and registration fees which, in terms of section 64(5) and (7)(d) and (e), would be made by negative resolution.
Section 58A - Deposit and return schemes: designation of scheme administrator

**Power conferred on:** Scottish Ministers  
**Power exercisable by:** regulations made by statutory instrument  
**Parliamentary procedure:** affirmative resolution of the Scottish Parliament

**Provision**

148. This section was inserted at Stage 2. Any scheme administrator to which section 58(5) applies needs to be designated by the Scottish Ministers. Subsection (1) of this section allows the Scottish Ministers to do so. It may be either an existing or a new body. Subsection (2) also allows the Scottish Ministers to confer, remove or otherwise vary the scheme administrator’s functions, where the scheme administrator is an existing body. Amongst these functions it mentions in particular, at subsection (3), borrowing and charging in respect of the exercise of its functions. This is necessary to ensure that the scheme administrator’s costs can be covered.

149. Subsection (4) also obliges a scheme administrator to comply with directions the Scottish Ministers may give it. This is common among existing bodies enforcing environmental law, such as SEPA.

**Reason for taking power**

150. The kind of functions envisaged for a scheme administrator – running a clearing-house type of deposit-and-return scheme – are different in nature from the functions of existing bodies in Scotland, and are unlikely all to be available in existing legislation. Not only is it necessary to be able to give a body, whether new or existing, those functions, but it is also necessary to take powers to ensure that Scottish Ministers are able to give any body the necessary functions at all.

**Choice of procedure**

151. An order would provide the detail of to whom the functions of a scheme administrator may be given, and the details of those functions. This would be made by affirmative procedure.

Section 58B - Power to establish scheme administrator

**Power conferred on:** Scottish Ministers  
**Power exercisable by:** regulations made by statutory instrument  
**Parliamentary procedure:** affirmative resolution of the Scottish Parliament

**Provision**

152. This section was inserted at Stage 2. It allows the Scottish Ministers to set up a new body to undertake the functions of a scheme administrator. The detail of the Ministers’ powers in respect of the administrator’s status, constitution, members and employees, functions and accounting is set out in subsection (5). Any such body will be a body corporate. It will have the powers necessary or expedient to carry out the functions of running a clearing-house deposit and return scheme. In particular it may carry out such quasi-commercial functions as entering into contracts, borrowing and charging.
Reason for taking power

153. It is not unlikely that a new body would have to be created to exercise the functions of a scheme administrator, since they are unlike those of any existing body. Detailed powers are therefore necessary to create and establish parameters for a new body, and delineate its functions.

Choice of procedure

154. An order would provide the detail of powers regarding the establishment of a new body to act as scheme administrator. This would be made by affirmative procedure.

Section 59 - Charges for supply of carrier bags

Power conferred on: Scottish Ministers
Power exercisable by: regulations made by statutory instrument
Parliamentary procedure: super-affirmative resolution of the Scottish Parliament (negative procedure for regulations dealing only with charging by enforcement authority)

Provision

155. Section 59 will enable the Scottish Ministers to require suppliers of goods to charge for carrier bags. This may be done by reference to the type of goods sold, the type of supplier, turnover or other factors. The regulations would also define the carrier bags to which the charge applied and specify either the amount to be charged for each bag, or provide for how that amount is to be determined. The regulations would also be able to specify how the net proceeds are to be used, for example to ensure (if necessary) that the proceeds are applied to environmental causes which operate in Scotland.

156. Records will need to be kept about matters such as the number, type and tonnage of carrier bags for which a seller has imposed the charge. Section 59(2)(g) to (l), subject to section 60, enable the Scottish Ministers to appoint a body or bodies to monitor the accuracy of these records, and also to enforce the regulations, including ensuring that the proceeds were actually spent on the required good causes and to impose sanctions for failure to comply with the regulations.

Reason for taking power

157. Voluntary action has already significantly reduced the issue of carrier bags. However, reducing carrier bag use to a minimum may well require the imposition of a charge. Exactly what bags should be subject to such a charge, however, is likely not only to be a matter of detailed exposition, but also to be subject to variables, depending on – for example – life cycle analyses of various kinds of bag at any given time. Changes in the plastic reprocessing market, for example, could significantly affect the assessment of the environmental costs of plastic bags. Consumer shopping habits may change, and be reflected in the pattern of bag use associated with supermarkets on the one hand and boutiques on the other. It is therefore necessary for the power to set charges to be capable of modifying a range of details.
**Choice of procedure**

158. Regulations will provide the detail of any scheme which is to be enforced. At Stage 2 it was considered appropriate, for proper Parliamentary scrutiny, that super-affirmative procedure be adopted. This was thought to be desirable given that regulations are likely to create new offences. The exception would be regulations dealing only with charges by the enforcement body, which, in terms of section 64(5) and (7)(e), would be made by negative resolution.
Subordinate Legislation Committee

35th Report, 2009 (Session 3)

Climate Change (Scotland) Bill as amended at Stage 2

Published by the Scottish Parliament on 24 June 2009
Subordinate Legislation Committee

Remit and membership

Remit:

1. The remit of the Subordinate Legislation Committee is to consider and report on-

   (a) any-

      (i) subordinate legislation laid before the Parliament;

      (ii) Scottish Statutory Instrument not laid before the Parliament but classified as general according to its subject matter,

   and, in particular, to determine whether the attention of the Parliament should be drawn to any of the matters mentioned in Rule 10.3.1;

   (b) proposed powers to make subordinate legislation in particular Bills or other proposed legislation;

   (c) general questions relating to powers to make subordinate legislation; and

   (d) whether any proposed delegated powers in particular Bills or other legislation should be expressed as a power to make subordinate legislation.

   (Standing Orders of the Scottish Parliament, Rule 6.11)

Membership:

Jackson Carlaw
Malcolm Chisholm
Bob Doris
Helen Eadie
Tom McCabe
Ian McKee (Deputy Convener)
Jamie Stone (Convener)
Committee Clerking Team:

Clerk to the Committee
Shelagh McKinlay

Assistant Clerk
Jake Thomas
The Committee reports to the Parliament as follows—

1. At its meeting on 23 June the Subordinate Legislation Committee considered the delegated powers provisions in the Climate Change (Scotland) Bill as amended at Stage 2. The Committee submits this report to the Parliament under Rule 9.7.9 of Standing Orders.

2. The Scottish Government provided the Parliament with a supplementary memorandum on the delegated powers provisions in the Bill (“the supplementary DPM”)\(^1\).

Delegated Powers Provisions

3. The Committee considered all of the powers as set out in the supplementary DPM and is content with sections: 4, 6, 7, 7A, 12, 14, 18A, 18B, 18C, 23(3A) and (4), 24(2), 38, 46, 50A, 51E, 52, 53, 54, 55, 56, 57, 58 and 59.

Section 2A(1) – Modifying the interim target

4. Section 2(1) provides that Ministers must ensure that the net Scottish emissions account for 2020 is at least 34% lower than the baseline figure. This is the “interim target” figure. The new power in section 2A(1) enables the Scottish Ministers to increase the interim target figure by way of an affirmative order. This power may be exercised at any time, or on a number of occasions.

5. **The Committee is content with the delegated power in section 2A of the Bill in principle, which is subject to affirmative resolution procedure.**

6. The remainder of this section requires the Scottish Ministers to make an order substituting a higher figure of at least 42%, if an appropriate Community instrument is made. However, there is no explanation as to the connection between the sort of Community instrument that triggers section 2A(2) and the 42% figure, nor why the Bill is not simply modified if these circumstances arise.

\(^1\) Supplementary Delegated Powers Memorandum
7. The Committee accordingly draws to the attention of the Parliament that no explanation has been given in the supplementary DPM for the relationship between the sort of Community instrument which triggers section 2A(2), and the 42% figure in this section.

Section 36 – Duties of public bodies relating to climate change

8. At Stage 1, the Committee reported that the power under section 36(1) to impose climate change duties on public bodies is extremely wide in its scope, as neither the public bodies which may be subject to climate change duties, nor the duties themselves were defined in the Bill as introduced.

9. The Committee also recommended that this could be mitigated to some extent by provision of a list of public bodies to whom the power is to apply, along with a power to add to the list, subject to affirmative procedure.

10. Section 36 has been amended at Stage 2. It imposes general duties on public bodies relating to climate change (rather than by order), but retaining the power of Scottish Ministers, if they consider it appropriate, to make further provision relating to the imposition on public bodies of duties relating to climate change by affirmative order. Specific duties are imposed by new subsection (A1). Public bodies must exercise their functions in the way best calculated to contribute to the delivery of (a) the targets set in or under Part 1 of the Bill and (b) any programme for adaptation to climate change laid under section 45. Functions are also to be exercised in the manner that bodies consider most sustainable. The power to impose further duties is retained.

11. The Committee’s recommendation in relation to providing a definition of the bodies who will be subject to the duties has been taken on board by the new section 36(A2). This defines a “public body” for the purposes of this Part 4 of the Bill as a Scottish public authority within the meaning of section 3(1)(a) of the Freedom of Information (Scotland) Act 2002.

12. The Committee welcomes this development (that is, more definition of the term “public body” in the Bill). The Committee also notes that in relation to subsection (A2), the Government has lodged an amendment at Stage 3 that would substitute a new definition of “relevant public body” in (7). This would define a “relevant public body” as either a local authority, or a devolved public body within the meaning of section 28(1) and schedule 3 to the Ethical Standards in Public Life etc. (S) Act 2000.

13. As to the concerns which the Committee raised in its Stage 1 Report in relation to the potential width of the powers to impose further duties on bodies, the Government stated in its response to the Committee at Stage 1 that it was never the intention to define “climate change duties” more specifically elsewhere in the Bill. The supplementary DPM, in relation to reasons for taking the powers, offers the further comment that “section 36 allows for flexibility in the future to help ensure bodies with functions of a public nature take action on climate change, including reducing emissions or adapting to the effects of climate change.”
14. The position in the Bill after Stage 2 in relation to the width of the powers has therefore not altered in substance.

15. The Committee accordingly reports that the power in section 36(1) remains potentially extremely wide in scope, in particular as the further climate change duties which may be imposed by order are not clearly defined, but welcomes the provision of a definition of “public body”.

**Section 47 – Power to modify functions of Forestry Commissioners**

16. Section 47 confers on the Scottish Ministers the power to modify the functions of the Forestry Commissioners in or as regards Scotland. Subsection (2) provides that this power may be exercised by the Scottish Ministers only where they consider it to be necessary or expedient to do so to comply with their duties under sections 1, 2 or 3(1)(b) of the Bill, or otherwise in relation to climate change. Subsection (3) provides that an order under this section could enable the Forestry Commissioners to form or participate in corporate bodies or trusts. At introduction subsection (4) contained provisions that would have allowed the Forestry Commissioners to delegate their functions to other persons. However, this was deleted at stage 2. The order is subject to affirmative procedure.

17. In its stage 1 report, the Committee drew attention to the fact that the power to modify the functions of the Forestry Commissioners in or as regards Scotland was very broad in scope and that there was no limitation beyond that it must deliver a climate change purpose.

18. This has not altered – although the Bill does not now permit the delegation of Forestry Commission functions to other bodies. This may have addressed an area of some political controversy as regards future management of the forestry estate on a day to day basis.

19. The terms of the committee’s stage 1 report remain relevant. The Committee therefore draws the Parliament’s attention to the width of this power to modify the functions of the Forestry Commissioners as regards Scotland in relation to climate change purposes while noting that there is no longer power to permit the delegation of functions to other bodies.

**Section 50 – Non-domestic buildings: assessment of energy performance and emissions**

20. At introduction this section allowed the Scottish Ministers to make regulations relating to the assessment of the energy performance of and the emission of greenhouse gases from non-domestic buildings. Subsection (1) as amended at Stage 2 now places a duty on the Scottish Ministers to make regulations under this section.

21. In addition the section has been amended to place a duty on Ministers to make regulations, requiring owners of non-domestic buildings to take steps to improve the energy performance of such buildings and to reduce emissions of greenhouse gases.
22. The Committee draws the Parliament’s attention to there now being a duty to make regulations under section 50(1) rather than there being simply a power available to Ministers to do so. The Committee draws to Parliament’s attention that there is also a duty to make regulations requiring owners to take steps to improve energy performance of non-domestic buildings and reduce emissions from such buildings. The Committee is otherwise content that all of the powers under section 50 are, now, to be exercisable by affirmative procedure. The Committee notes that given the element of discretion afforded to Ministers as to what is provided there may arise a tension as between Ministers duties under the section, and the need for such regulations to be approved by the Parliament before they can be made.

Section 50B - Council tax reductions to promote energy efficiency

23. Section 50B was inserted into the Bill at Stage 2. The supplementary DPM explains that the policy intention is to promote “incentivisation schemes” for energy efficiency improvements through the council tax regime. The Committee considers that it is not clear from the supplementary DPM why it is appropriate to make this provision through a power to make subordinate legislation rather than making direct provision for such schemes.

24. This section places a duty on the Scottish Ministers to make regulations that would facilitate local authorities to reduce the amount of council tax a person is liable to pay in the following financial year if that person makes an energy efficiency improvement or installs technologies reliant on renewable energy or heat in a domestic dwelling in the current financial year.

25. This is a significant new provision. It sets out a duty on Minister to make regulations but as the exercise of the power is subject to affirmative procedure Ministers the Committee observes that Ministers would not be able to fulfil that duty if the Parliament does not approve the Regulations. The exercise of the powers would require council tax reductions, raising significant attendant implications in relation to local authority funding. As this is a policy matter the Committee does not comment on the substance of the power but draws its subject matter to the Parliament’s attention.

26. The Committee draws Parliament’s attention to the new regulation making provision at section 50B and that no justification has been provided in the supplementary DPM as to why it is appropriate to make this provision through subordinate legislation. The Committee notes that Ministers are placed under an obligation to make Regulations but can be prevented from so doing if Parliament does not approve what is laid before it. Given the impact of the power if Parliament considers it acceptable then the Committee considers that the power should be exercisable subject to affirmative procedure.
Section 50D - Review of provisions made by virtue of or under sections 50C and (Amounts of reductions in non-domestic rates)

27. Section 50D was inserted at stage 2 and requires annual reports to be made by the Scottish Ministers regarding the effectiveness of specific financial incentives towards promoting energy efficiency improvements and technologies reliant on renewable sources of energy or heat set out in sections 50B and 50C. Subsections (2) and (3) provide powers to vary these amounts, and alter the criteria involved.

28. Such regulations would enable Ministers to increase, or vary, amounts of reductions in council tax, by significant amounts. This may have significant implications for local authority budgets. The subject matter is a policy matter and as such not for the Committee to review but the Committee considers it should address whether proper justification for the need for subordinate legislation has been provided. It appears from the supplementary DPM that flexibility is required to react to the reports produced so as to ensure that the scheme works effectively as an incentive to promote energy efficiency measures.

29. The Committee draws Parliament’s attention to the new powers in section 50D, with particular reference to the potential financial impact on local authority budgets. Given the significance of the power, the Committee considers that it should be exercisable subject to affirmative procedure.

Section 51A – Air source heat pumps and micro wind turbines in domestic properties: permitted development rights

30. Section 51A was inserted at Stage 2. It places a duty on the Scottish Ministers to exercise powers to amend the General Permitted Development Order so as to specify in what circumstances there will be permitted development rights for the installation, alteration or replacement of air source heat pump and wind turbine microgeneration equipment in domestic properties. While the supplementary DPM explains the intended effect of the section, it does not however provide justification for the duty to exercise the relevant functions to achieve that being required.

31. Rather than providing a new power the committee considers that this places a duty on Ministers to exercise their existing powers. It does however modify that power by imposing new consultation requirements.

32. The Committee draws Parliament’s attention to the duty placed on the Scottish Ministers to exercise their powers under section 30 of the Town and Country Planning (Scotland) Act 1997 to achieve the effect set out in section 51A(2). The Committee is content with the additional consultation requirement imposed by section 51A(4).

Section 51B – Microgeneration in non-domestic buildings: permitted development rights

33. Again, this is a new provision inserted into the Bill at Stage 2. Section 51B places a duty on the Scottish Ministers to exercise existing powers under the 1997
Act to prescribe the circumstances in which permitted development rights would be granted for the installation, alteration or replacement of microgeneration equipment in non-domestic buildings.

34. Orders made under section 30 of the Town and Country Planning (Scotland) Act 1997 are subject to negative resolution procedure.

35. Similar comments apply here to those made in relation to section 51A above. It is understood that there is an intention that the Scottish Ministers should be obliged to make an instrument of the nature set out and covering the matters to which reference is made. An explanation of the nature of the duty is provided in the supplementary DPM, but no analysis of the need for it is set out there.

36. The Committee draws Parliament’s attention to the duty placed on the Scottish Ministers to exercise their powers under sections 30 and 31 of the Town and Country Planning (Scotland) Act 1997 to achieve the effect set out in section 51B(2). The Committee is content with the additional consultation requirement imposed by section 51B(4).

Section 58A - Deposit and return schemes: designation of scheme administrator

37. This is a new section inserted at Stage 2. Any scheme administrator to which section 58(5) applies needs to be designated by the Scottish Ministers. Subsection (1) allows the Scottish Ministers to deal with the designation of a body or person as a ‘scheme administrator’ of a deposit and return scheme, by way of order. It may be either an existing or a new body. Subsection (2) also allows the Scottish Ministers, in making such an order, to confer on, remove or otherwise vary the scheme administrator’s functions. Amongst these functions it mentions in particular, at subsection (3), borrowing and charging in respect of the exercise of its functions. It is stated in the supplementary DPM that this is necessary to ensure that the scheme administrator’s costs can be covered.

38. The Committee notes that aside from being able to designate bodies or persons, provision is made to the effect that an order doing so can modify the functions of an existing body ‘in so far as the Scottish Ministers consider it necessary or expedient to do so’. This power is potentially quite a wide one to the extent that, as indicated, it may be used to modify the functions of an existing body. It can also make provision about borrowing or charging by a body.

39. Given also that an order under section 58A would be setting out details in respect of the persons or bodies to whom the functions of a scheme administrator, and the details of those functions, it is considered that they should be subject to at least affirmative procedure.

40. The Committee draws the Parliament’ attention to this power to the extent that it may be used to modify the functions of existing bodies. The Committee is otherwise satisfied that the process under new section 58A is currently subject to super- affirmative procedure.
Section 58B - Power to establish scheme administrator

41. This is a new section, inserted at Stage 2 which allows the Scottish Ministers to set up a new body to undertake the functions of a scheme administrator by order. The detail of Ministers’ powers in respect of the administrator’s status, constitution, members and employees, functions and accounting is set out in subsection (5).

42. The supplementary DPM indicates that this new power was considered necessary since it is not unlikely that a new body would have to be created to exercise the functions of a scheme administrator, since they are unlike those of any existing body. These detailed powers are necessary to create and establish parameters for a new body, and delineate its functions.

43. The Committee acknowledge that some level of need has been identified for this new power, to establish a scheme administrator of a deposit and return scheme established under section 58, although it notes from the supplementary DPM that there appears to have been an element of speculation as to the extent to which there is an absolute requirement for it.

44. The Committee considers that the powers which that body may have, and what can be provided for within an order under section 58B, are quite widely expressed. However, the requirement that such an order would be subject to super affirmative procedure provides some measure of reassurance in terms of Parliament thereby being fully involved in the process relating to such an order.

45. The Committee draws Parliament’s attention to the breadth of this power, in particular so far as it enables a body established under it ‘to do anything which appears to it to be necessary or expedient for the purposes of, or in connection with, the exercise of its functions in relation to a deposit and return scheme, or conducive to the exercise of those functions’. The Committee is otherwise satisfied that any order made under section 58B is to be made by super-affirmative procedure.
Dear Patrick

CLIMATE CHANGE (SCOTLAND) BILL – DEPOSIT AND RETURN

During the Committee’s discussions of Section 58 at its meeting on 9 June, I agreed to write outlining the circumstances in which the Scottish Ministers would consider exercising the powers to establish deposit and return schemes proposed in that section.

First, I should repeat what my colleague Richard Lochhead told the Rural Affairs & Environment Committee on 4 February. He said, “We will wish to consider the impact on the economy and on the business community of any provisions that we make in the future. Secondary legislation will not be made in the immediate few months from now, so we will have to monitor the economic situation, but I can assure the committee that we will be sensitive to the impact of any provisions on the business community and the economy in general.”

This remains the case. We are clear that now is not the time to be making substantive regulations on these matters. We need to be sure, for example, that markets for recyclate have settled down before we are able to make sensible regulations about deposit and return schemes.

In the mean time, as we have previously indicated, we are keen to see what may be achieved on a voluntary basis. As an example of this, AG Barr recently increased the amount of the deposit on its glass bottles from 20p to 30p, since at the former level the company was seeing a rate of return of only some 70% of bottles. It will be very informative to discover if the increase in the level of deposit brings the return rates the company wishes to see.
More generally, we are very keen to see business engage with the issue of packaging in particular. While the producer responsibility regime currently set out in the GB-wide Producer Responsibility Obligations (Packaging Waste) Regulations 2007 has been very successful at capturing and recycling “back of shop” packaging, it is clear that it has not had much of an impact on the materials that get into the hands of consumers. This must change, since not only are there large carbon benefits to be had from re-using and recycling this material, but consumer packaging is also a significant cause of litter. It is for this reason that petitions PE986 and 1145 support the introduction of deposit and return schemes. As I mentioned at the meeting, there has been genuine progress on this issue, with the introduction of “reverse vending” machines, to which consumers may return packaging. The use of such machines could also be appropriate for used consumer items, such as low-energy light bulbs. Further progress in this respect will be a very significant factor in our decision about whether, and when, to introduce deposit and return schemes.

We are aware that there are a number of issues which must be borne in mind when establishing deposit and return schemes. The effect on existing forms of collection is one that has been raised. Another is the mesh with the producer responsibility regime I have just mentioned. These are quite apart from the mechanics of the schemes themselves, which require consideration of space available, storage, and transport as well as materials involved, their identification and deposit levels. We do not underestimate the complexity of the issues involved. Consequently I am happy to give an assurance that we will work with the interests involved. As Richard Lochhead said on 4 February, “Our approach will be to set up a working group that includes businesses that have strong feelings about the schemes to ensure that we have the right schemes, they are delivered to the right timescales and they are suited to Scottish circumstances.”

I hope this provides assurance that any scheme will be carefully designed. However, I should conclude by observing that we must improve our re-use and recycling rates. Furthermore, the recently revised Waste Framework Directive enjoins extended producer responsibility, and application of the “polluter pays” principle. Merely meeting the targets in the 2007 Regulations is, quite simply, not enough.

I am copying this letter to Maureen Watt MSP, Convener, Rural Affairs & Environment Committee.

STEWART STEVENSON
CLIMATE CHANGE (SCOTLAND) BILL
LETTER FROM THE CHIEF EXECUTIVE OF THE COMMITTEE ON CLIMATE
CHANGE AND OTHER MATTERS

Yesterday I received a letter from the Chief Executive of the Committee on Climate Change responding to a recent request which I made in relation to advice which the Committee will be providing to us on annual targets to 2022. This contains important observations on the appropriate level of the 2020, interim target. I enclose the letter at Annex A and given its importance in respect of the Stage 3 debate of the Bill on Wednesday 24 June, I have copied this letter and the letter from the Chief Executive of the Committee to all MSPs and SPICE.

The letter from the Chief Executive of the Committee comments that, on the basis of current evidence, Scotland should not depart from the approach adopted for the UK, namely the adoption of a target of 34% reduction by 2020, this being increased to 42% in the event of a global deal. The letter further notes that the inclusion of international aviation and shipping in the Scottish targets means that higher cuts will be required in other sectors to meet the targets, thereby making the achievement of Scotland’s targets more difficult than for the UK overall. Accordingly, the Chief Executive considers that an appropriate 2020 target without a global deal could be slightly below 34%.

For information, officials have calculated that the inclusion of international aviation and shipping in the Scottish target makes the 2020 target akin to a 35.5% target if the Scottish Government had not included these sectors.

Separately, you will be aware of the Parliamentary Technical Briefing recently circulated to all MSPs by WWF which suggested a target of more than 40% can be achieved. My
officials advise that this briefing is incorrect on two major points. On the basis of the Delivery Plan, WWF have concluded that the delivery of the non-traded sector measures identified in the Delivery Plan for the Scottish 42% target would deliver over 37% whereas in fact delivery of those measures, where the Scottish Government has competency, would only deliver 36% savings.

Further, WWF advocate the purchase of international credits to cover any shortfall in the delivery of the 40% target. However, the domestic effort provision in clause 7A of the Bill requiring at least 80% of the annual reduction to be domestic abatement means that it would be impossible for the Scottish Government to buy sufficient credits to cover the expected shortfall between the reduction expected through implementation of the measures in the Delivery Plan and the proposed 40% target.

Even assuming 37% from domestic abatement, purchasing the maximum number of credits allowed by the Bill would only deliver a 37.2% reduction, far short of the 40% indicated. Officials have advised WWF of the flaws in their calculations.

Finally, even if the Climate Change Bill did allow for the purchase of international carbon credits to bridge the gap between 36% and 40%, the cumulative cost of purchasing these credits to 2020 (based on €20 or €50 per tonne of CO₂e) would be €300 - €800 million.

The Government believes that the targets as currently set out in the Climate Change Bill are both ambitious and challenging but importantly, as set out in the Delivery Plan published last week, deliverable.

STEWART STEVENSON
Mr Stewart Stevenson  
Minister for Transport, Infrastructure and Climate Change  
The Scottish Government

22 June 2009

Dear Stewart

Thank you for your letter of June 17th informing me of recent developments with your Climate Change Bill and including questions on the 2020 target and the UK Climate Projections.

**2020 target**

We will provide advice to you on the appropriate level of the 2020 target taking into account a range of factors:

- Consistency with the path to meeting the longer term 80% emissions reduction target.
- The international framework
- Opportunities for reducing emissions in Scotland and for the purchase of emissions reductions in the carbon market.

Our recommendation for the UK was that an Interim target of 34% should be adopted until there is a global deal, with a more ambitious target of 42% adopted once a global deal has been reached. We also recommended that the Interim target should be met through domestic emissions reductions, which would prepare for meeting the more ambitious budget mainly through domestic emissions reductions possibly complemented through limited credit purchase.

The evidence that we currently have does not suggest that Scotland should depart from this approach. We will, however, consider whether Scotland has additional low cost options for reducing emissions relative to the UK. If this were to be the case, then there could be an argument either that Scotland should aim to outperform the Interim budget, or set a higher level of ambition in legislation.
The approach adopted in Scotland includes international aviation and shipping. Given that these sectors will not achieve a 34% cut by 2020, a higher required cut in other sectors to meet the economy wide average target. This makes the Scottish approach more ambitious than the UK approach, which requires a 34% cut in sectors excluding international aviation and shipping. I would therefore consider that an appropriate Scottish 2020 target could be set slightly below 34% to account for different treatments of international aviation under UK and Scottish approaches.

**UK Climate Projections**

These projections will be central to our work contributing to development of a UK Climate Change Risk Assessment via our new adaptation sub-committee. We will consider the implication of these projections for Scottish targets as you request. We would not expect, however, that targets should change in light of the new projections. The reason for this is that the projections are based on business as usual scenarios from the IPCC. We have already assessed these scenarios in the context of advising on the UK’s long term target, where we suggested a departure from business as usual. The 80% target is therefore designed to avoid the world as modelled in the UK Climate Projections.

I look forward to hearing from you following the successful passing of the Climate Change (Scotland) Bill.

David Kennedy
Chief Executive, Committee on Climate Change
Climate Change (Scotland) Bill

Marshalled List of Amendments selected for Stage 3

The Bill will be considered in the following order—

Sections 1 to 67  Schedules 1 and 2
Long Title

Amendments marked * are new (including manuscript amendments) or have been altered.

Section 1

Patrick Harvie

6  In section 1, page 1, line 12, leave out <80%> and insert <90%>

Before section 2

Sarah Boyack
Supported by: Des McNulty

94*  Before section 2, insert—

<Setting and modification of interim target>

(1) The Scottish Ministers must ensure that the net Scottish emissions account for the year 2020 is at least 40% lower than the baseline.

(2) In this Act, the target set out in subsection (1) is known as the “interim target”.

(3) The Scottish Ministers may, by order, modify the percentage figure mentioned in subsection (1) so as to substitute—

(a) a figure provided by the relevant body by virtue of subsection (4)(b); or

(b) a higher figure,

for the one for the time being mentioned there.

(4) The Scottish Ministers must, as soon as reasonably practicable after the Bill for this Act receives Royal Assent, request advice from the relevant body as to (having regard to the criteria set out in subsection (5))—

(a) whether the percentage figure for the time being mentioned in subsection (1) is the highest achievable interim target; and

(b) if not, what the highest achievable interim target is.

(5) The criteria referred to in subsection (4) are—

(a) scientific knowledge about climate change;

(b) technology relevant to climate change;

(c) economic circumstances, in particular the likely impact of the target on—
(i) the Scottish economy;
(ii) the competitiveness of particular sectors of the Scottish economy;
(iii) small and medium-sized enterprises;
(iv) jobs and employment opportunities;
(d) fiscal circumstances, in particular the likely impact of the target on taxation, public spending and public borrowing;
(e) social circumstances, in particular the likely impact of the target on those living in poorer or deprived communities;
(f) the likely impact of the target on those living in remote rural communities and island communities;
(g) energy policy, in particular the likely impact of the target on energy supplies, the renewable energy sector and the carbon and energy intensity of the Scottish economy;
(h) environmental considerations and, in particular, the likely impact of the targets on biodiversity;
(i) European and international law and policy relating to climate change.
(6) The Scottish Ministers must publish the advice requested under subsection (4) by 31 December 2009 (or, if the advice is not published by that date, as soon as reasonably practicable afterwards).
(7) Where the relevant body has provided advice of the kind mentioned in subsection (4)(b), the Scottish Ministers must, as soon as reasonably practicable after that advice is published under subsection (6), comply with either of the duties set out in subsection (8).
(8) The duties are—
(a) to lay before the Scottish Parliament a draft of a statutory instrument containing an order under subsection (3) substituting for the percentage figure for the time being mentioned in subsection (1) the figure provided by the relevant body by virtue of subsection (4)(b); or
(b) to make a statement to the Scottish Parliament setting out the reasons why no such order has been laid.
(9) If an appropriate Community instrument comes into force, the Scottish Ministers must, before the expiry of the appropriate period, lay a draft of a statutory instrument containing an appropriate order before the Scottish Parliament.
(10) An “appropriate order” means an order under subsection (3) modifying the percentage figure mentioned in subsection (1) so as to substitute a figure of at least 42%.
(11) An “appropriate Community instrument” means a Community instrument—
(a) which contains a commitment to reduce greenhouse gas emissions by at least 30% compared to 1990 levels by 2020; and
(b) which amends Decision 406/2009/EC of the European Parliament and of the Council of 23 April 2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community’s greenhouse gas emission reduction commitments up to 2020 in the manner envisaged in Article 8(2) of the Decision.
(12) The “appropriate period” means the period of 3 months beginning with the day on which the appropriate Community instrument comes into force.

(13) If a draft of an appropriate order is not laid before the expiry of the appropriate period, the Scottish Ministers must lay the draft as soon as reasonably practicable afterwards.

(14) Subsections (9) to (13) cease to apply if a figure higher than 42% is, by virtue of a draft of a statutory instrument of the kind mentioned in subsection (8)(a) having been approved by the Scottish Parliament, the percentage figure for the time being mentioned in subsection (1).

Stewart Stevenson

94A* As an amendment to amendment 94, line 4, leave out <40%> and insert <42%>

Section 2

Patrick Harvie

7 In section 2, page 1, line 17, leave out <34%> and insert <50%>

Alison McInnes

8 In section 2, page 1, line 17, leave out <34%> and insert <42%>

Sarah Boyack

Supported by: Des McNulty

95 Leave out section 2

Section 2A

Patrick Harvie

96 In section 2A, page 1, line 22, leave out subsections (2) to (6)

Stewart Stevenson

97 In section 2A, page 1, line 22, after <instrument> insert <; or

( ) an appropriate Order in Council,

Stewart Stevenson

9 In section 2A, page 2, line 4, leave out <the Decision of 26 March 2009> and insert <Decision 406/2009/EC>

Stewart Stevenson

10 In section 2A, page 2, line 5, after <Council> insert <of 23 April 2009>

Stewart Stevenson

98 In section 2A, page 2, line 7, at end insert—
An “appropriate Order in Council” means an Order in Council under section 30(2) of the Scotland Act 1998 (c.46)—

(a) which modifies Part 2 of schedule 5 to that Act so that—

(i) in Head A, in Section A1, the words “Fiscal, economic and monetary policy”;

(ii) Head D; and

(iii) in Head E, Sections E1, E2 (other than the words from “Rail transport security” to “Railway Heritage Act 1996”), E3 and E4,

cease to have effect; or

(b) which, taken together with other such Orders, so modifies that schedule.

Stewart Stevenson

In section 2A, page 2, line 9, after <instrument> insert <or appropriate Order in Council>

Sarah Boyack

Supported by: Des McNulty

Leave out section 2A

After section 2A

Shirley-Anne Somerville

After section 2A, insert—

<Advice on the interim target

(1) The Scottish Ministers must, as soon as reasonably practicable and, in any event, before laying a draft of a statutory instrument containing the first order under section 4(1) before the Scottish Parliament, request advice from the relevant body on what interim target that body considers is appropriate.

(2) The Scottish Ministers must publish the advice requested under subsection (1) as soon as reasonably practicable after they receive it.

(3) The Scottish Ministers must have regard to that advice and, if they consider it appropriate to do so, lay a draft of a statutory instrument containing an order under section 2A(1) before the Scottish Parliament.

(4) If—

(a) the relevant body recommends that the interim target should be a higher percentage figure than the one for the time being mentioned in section 2(1); and

(b) the Scottish Ministers do not consider that the figure recommended is appropriate, the Scottish Ministers must lay before the Scottish Parliament a report setting out the reasons why.

(5) The Scottish Ministers must, as soon as reasonably practicable after laying a report before the Scottish Parliament under subsection (4), and in so far as reasonably practicable, make a statement to the Parliament relating to the report.>
Section 3

Alison McInnes
11 In section 3, page 2, line 20, after <is> insert <at least 3%>

Patrick Harvie
Supported by: Alison McInnes
12 In section 3, page 2, leave out lines 22 to 24

Stewart Stevenson
13 In section 3, page 2, line 23, leave out <time of the net Scottish emissions account> and insert <that period of net Scottish emissions accounts>

Stewart Stevenson
14 In section 3, page 2, line 24, after <target> insert <and the 2050 target>

Patrick Harvie
Supported by: Alison McInnes
15 In section 3, page 2, line 25, leave out <2020> and insert <2011>

Stewart Stevenson
16 In section 3, page 2, line 25, after <is> insert—

<(  ) consistent with a reduction over that period of net Scottish emissions accounts which would allow the 2050 target to be met; and

(  )>

Patrick Harvie
17 In section 3, page 2, line 25, leave out <3%> and insert <4.5%>

Section 4

Stewart Stevenson
18 In section 4, page 3, line 5, leave out subsection (3)

Shirley-Anne Somerville
102 In section 4, page 3, line 9, at end insert—

<(  ) The Scottish Ministers must, when setting annual targets, have regard to any advice they receive from the relevant body as to the cumulative amount of net Scottish emissions for the period 2010-2050 that is consistent with a reduction over that period of net Scottish emissions accounts which would allow the 2050 target to be met.>
Alison McInnes

103  In section 4, page 3, line 11, at end insert—

<(  ) the objective of not exceeding the fair and safe Scottish emissions budget;>

Alison McInnes

104  In section 4, page 3, line 33, at end insert—

<(  ) In this Act, the “fair and safe Scottish emissions budget” is the aggregate amount of net Scottish emissions for the period 2010-2050 recommended by the relevant body as being consistent with Scotland contributing appropriately to stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.>

Section 5

Stewart Stevenson

19  In section 5, page 3, line 36, leave out <and publish>

Stewart Stevenson

20  In section 5, page 3, line 38, leave out subsection (1A) and insert—

<(  ) The request for advice must include requests for the relevant body’s views—

(a) in the case of annual targets proposed for years in the period 2010-2020, as to whether those targets are consistent with a reduction over that period of net Scottish emissions accounts which would allow the interim target and the 2050 target to be met;

(b) in the case of annual targets proposed for years in the period 2021-2050, as to whether those targets are consistent with a reduction over that period of net Scottish emissions accounts which would allow the 2050 target to be met;

(c) in any case, as to what annual targets are appropriate by reference to the target-setting criteria.>

Patrick Harvie

20A  As an amendment to amendment 20, line 11, at end insert—

<(  ) as to the extent to which the annual targets should be met—

(A) by taking action to reduce net Scottish emissions;

(B) by the use of carbon units that in accordance with section 12(1A) and regulations under section 12(2) may be credited to the net Scottish emissions account;

(  ) as to the respective contributions towards meeting the annual targets and the domestic effort target that should be made—

(A) by the traded sector of the Scottish economy;

(B) by the other sectors of the Scottish economy;>
as to the respective contributions towards meeting the annual targets and the domestic effort target that should be made by—
(A) energy efficiency;
(B) energy generation;
(C) land use;
(D) transport;
as to the average greenhouse gas emissions per megawatt hour of electricity generated in Scotland that would be compatible with the delivery of the annual targets for the period to which the advice applies;
as to the level of average greenhouse gas emissions per megawatt hour of electricity generated that should be achieved by new, extended or refurbished generating capacity approved during the period to which the advice applies;
as to what cumulative amount of the net Scottish emissions account for all years between 2010 and 2050 it considers, in the light of current scientific understanding, would comprise an equitable Scottish contribution to a global greenhouse gas emissions budget consistent with the stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.

Stewart Stevenson
20AA* As an amendment to amendment 20A, leave out lines 17 to 29

Stewart Stevenson
21 In section 5, page 4, line 1, at end insert—
<( ) The Scottish Ministers must publish the advice requested under subsection (1) as soon as reasonably practicable after they receive it.>

Shirley-Anne Somerville
105 In section 5, page 4, line 1, at end insert—
<( ) The request for advice must also include a request for the relevant body’s views as to the cumulative amount of net Scottish emissions for the period 2010-2050 that is consistent with a reduction over that period of net Scottish emissions accounts which would allow the 2050 target to be met.>

Patrick Harvie
106 In section 5, page 4, line 17, at end insert—
<( ) In this section, “traded sector” means the sectors of the Scottish economy which are covered by trading schemes within the meaning of section 44 of the 2008 Act.>
Section 7A

Stewart Stevenson

22 In section 7A, page 5, line 16, after <must> insert <endeavour to>

Stewart Stevenson

23 In section 7A, page 5, line 19, at end insert—

<(2A) For the purposes of ascertaining whether the domestic effort target has been met, any reduction to the net Scottish emissions account as a result of the crediting to that account of a net amount of European carbon units mentioned in subsection (2B) is to be treated as though it is a reduction in net Scottish emissions.

(2B) In subsection (2A), “European carbon units” means carbon units which are surrendered by participants in—

(a) the European Union Emissions Trading Scheme (“EUETS”); or

(b) such other trading scheme making provision equivalent to the EUETS as the Scottish Ministers may, by order, specify.

(2C) In subsection (2B), “trading scheme” means a trading scheme within the meaning of section 44 of the 2008 Act.>

Stewart Stevenson

24 In section 7A, page 5, line 23, leave out subsection (4) and insert—

<(  ) The Scottish Ministers must, before laying a draft of a statutory instrument containing an order under subsection (3) before the Scottish Parliament, request advice from the relevant body.>

Section 12

Malcolm Chisholm

107* In section 12, page 8, line 17, at end insert—

<(  ) The regulations referred to in subsection (2) must contain provision for ensuring that any carbon units purchased by the Scottish Ministers—

(a) represent a reduction in greenhouse gas emissions (or a removal of greenhouse gas from the atmosphere) that would not otherwise have occurred; and

(b) relate to projects which benefit, and promote sustainable development in, the country in which the reduction in emissions referred to in paragraph (a) is taking place (or in which the activities giving rise to the removal of greenhouse gases referred to in that paragraph are taking place).>

Section 12A

Patrick Harvie

108 In section 12A, page 8, line 19, leave out subsections (1) and (2)
Stewart Stevenson

25 In section 12A, page 8, line 23, at end insert—

<( ) The Scottish Ministers may only credit to the net Scottish emissions account for a year in the period 2013-2017 any carbon units purchased by them up to a limit of 20% of the reduction in the amount of the net Scottish emissions account planned for that year.>

Section 14

Patrick Harvie

109 In section 14, page 8, line 33, leave out from <may> to end of line 38 and insert—

<(a) must make provision for emissions from international aviation and international shipping of—

(i) in the case of the first order under that subsection, each greenhouse gas; and

(ii) in the case of any subsequent order under subsection (1), any gas added to the list of greenhouse gases in section 9(1) since the last such order was made,

> to be taken into account as Scottish emissions of each such gas in the period starting with the 1 January following the order being approved by the Scottish Parliament and ending on 31 December 2050;

(a) may make provision as to any past period in which emissions of a greenhouse gas are to be taken into account as Scottish emissions of that gas;

(ab) may not, once emissions from international aviation and international shipping of a greenhouse gas are, by virtue of a previous order under subsection (1), being taken into account as Scottish emissions of that gas, provide for such emissions to cease to be taken into account as Scottish emissions of that gas;

(b) must, subject to subsection (2ZA), make provision as to the manner in which emissions from international aviation and international shipping of each greenhouse gas are to be taken into account in determining Scottish emissions of that gas—

(i) for the year that is the baseline year for that gas; and

(ii) in the period during which such emissions of that gas are to be taken into account as Scottish emissions of that gas.

(2ZA) Provision made by virtue of subsection (2)(b) must include the use, for each greenhouse gas, of a multiplier which reflects the direct and indirect non-carbon dioxide climate change impacts of emissions at altitude from international aviation.>

Des McNulty

110 In section 14, page 8, line 39, after <(1)> insert <in relation to international aviation>
A draft of a statutory instrument containing the first order under subsection (1) in relation to international shipping must be laid before the Scottish Parliament no later than 1 June 2011.

Stewart Stevenson

146* In section 14, page 9, line 1, after <(2A),> insert <or, as the case may be, subsection (2AA),>

Patrick Harvie

112 In section 14, page 9, line 5, at end insert <(including advice as to an appropriate multiplier for each greenhouse gas for the purposes of subsection (2ZA))>

Section 18A

Stewart Stevenson

26 In section 18A, page 10, line 27, leave out subsection (A1)

Stewart Stevenson

27 In section 18A, page 10, line 34, at end insert—

<(  ) for the period 2013-2017, no later than 31 December 2011;>

Malcolm Chisholm

113 In section 18A, page 11, line 7, leave out subsection (4)

Section 19

Sarah Boyack

Supported by: Des McNulty

114* In section 19, page 12, line 12, leave out <2> and insert <(Setting and modification of interim target)(1)> 

Stewart Stevenson

28 In section 19, page 12, line 14, after <27> insert <and 45C>

Section 22

Stewart Stevenson

29 In section 22, page 13, line 26, leave out from <as> to <view> in line 27 and insert—

<(  ) in the case of annual targets proposed for years in the period 2010-2020, as to whether those targets are consistent with a reduction over that period of net Scottish emissions accounts which would allow the interim target and the 2050 target to be met;>
( ) in the case of annual targets proposed for years in the period 2021-2050, as to whether those targets are consistent with a reduction over that period of net Scottish emissions accounts which would allow the 2050 target to be met;

( ) in any case, as to what annual targets are appropriate>

**Stewart Stevenson**

30 In section 22, page 14, line 6, at end insert—

<\( )\> When providing advice under subsection (1)(a), the advisory body may also express a view as to any other matter that body considers appropriate including, in particular, as to any sectors of the Scottish economy in which there are particular opportunities for contributions to be made towards meeting annual targets through reductions in emissions of greenhouse gases.>

**Shirley-Anne Somerville**

116 In section 22, page 14, line 6, at end insert—

<\( )\> When providing advice under subsection (1)(a), the advisory body must also express a view as to the cumulative amount of net Scottish emissions for the period 2010-2050 that is consistent with a reduction over that period of net Scottish emissions accounts which would allow the 2050 target to be met.>

**Section 29**

**Stewart Stevenson**

31 In section 29, page 17, line 16, leave out <the amount of the net Scottish emissions account for an earlier target year> and insert <an amount mentioned in subsection (3)(a) or subsection (4A)(a) or (b) for an earlier period>

**Section 30**

**Stewart Stevenson**

32* In section 30, page 17, line 27, at end insert—

<\(1A\)\> The Scottish Ministers must, before laying a report under this section before the Scottish Parliament, lay a draft of the report before the Parliament.

\(1B\) The Scottish Ministers may not lay the report before the expiry of the period for Parliamentary consideration.

\(1C\) In subsection \(1B\), the “period for Parliamentary consideration” means the period of 60 days, of which no fewer than 30 must be days on which the Parliament is not dissolved or in recess.

\(1D\) The Scottish Ministers must, before laying the report before the Parliament, have regard to—

\(a\) any representations on the draft report made to them;

\(b\) any resolution relating to the draft report passed by the Parliament; and
(c) any report relating to the draft report published by any committee of the Parliament for the time being appointed by virtue of standing orders.

(1E) The Scottish Ministers must, when laying the report before the Parliament, lay a statement setting out—
   (a) details of any representations, resolutions or reports mentioned in subsection (1D);
   (b) the changes (if any) they have made to the report in response to such representations, resolutions or reports and the reasons for those changes.

(1F) The Scottish Ministers must, as soon as reasonably practicable after laying a report under this section, and in so far as reasonably practicable, make a statement to the Parliament relating to the report.

Stewart Stevenson

33 In section 30, page 17, line 33, at end insert—
   <( ) The report must also set out the Scottish Ministers’ proposals and policies regarding the respective contributions towards meeting the annual targets that should be made by—
   (a) energy efficiency;
   (b) energy generation;
   (c) land use;
   (d) transport.>

After section 31A

Liam McArthur

147* After section 31A, insert—
   <Reports on impact on emissions on exercise of electricity generation related functions
   (1) The Scottish Ministers must lay before the Scottish Parliament a report in respect of each year in the period 2010-2050 containing the following information.
   (2) The report must, in so far as reasonably practicable, set out the impact on net Scottish emissions during that year resulting from the exercise by the Scottish Ministers of the functions conferred on them by virtue of any enactment relating to electricity generation.>

Section 31B

Stewart Stevenson

34 In section 31B, page 18, line 21, after <reducing> insert <net Scottish>

Stewart Stevenson

35 In section 31B, page 18, line 22, leave out <time of the net Scottish emissions account> and insert <the period 2010-2020 of net Scottish emissions accounts>
Section 34

Stewart Stevenson
36 In section 34, page 20, leave out line 3

Stewart Stevenson
37 In section 34, page 20, line 13, leave out subsection (4) and insert—

<(  ) The Scottish Ministers must have regard to—

(a) any resolution passed by the Scottish Parliament;
(b) any report published by any committee of the Parliament for the time being appointed by virtue of standing orders,
relating to the content of any report referred to in subsection (2).>

Section 36

Stewart Stevenson
38 In section 36, page 20, line 27, leave out subsections (A1) and (A2) and insert—

<(A1) A relevant public body must, in so far as reasonably practicable, exercise its functions in a manner which reduces the emissions of greenhouse gases that are attributable to its activities.

(A2) A relevant public body must, in complying with subsection (A1), take into account the need to do so in a way that contributes to the achievement of sustainable development.

(A3) The duty in subsection (A1) applies only in so far as it is consistent with the proper exercise of the relevant public body’s functions.>

Stewart Stevenson
39 In section 36, page 20, line 36, after <on> insert <relevant>

Stewart Stevenson
40 In section 36, page 20, line 36, after <of> insert <further>

Stewart Stevenson
41 In section 36, page 21, line 1, leave out <duties> and insert <duty>

Stewart Stevenson
42 In section 36, page 21, line 2, leave out <Act> and insert <Part>

Stewart Stevenson
43 In section 36, page 21, line 3, leave out subsection (2)
In section 36, page 21, line 7, after <all> insert <relevant>

In section 36, page 21, line 8, at beginning insert <relevant>

In section 36, page 21, line 9, after <individual> insert <relevant>

In section 36, page 21, line 10, after second <different> insert <relevant>

In section 36, page 21, line 11, after <of> insert <relevant>

In section 36, page 21, line 21, at end insert—
<(7) In this Part, a “relevant public body” is—
   (a) a local authority;
   (b) a devolved public body within the meaning of section 28(1) of and schedule 3 to
       the Ethical Standards in Public Life etc. (Scotland) Act 2000 (asp 7).>

Section 38

In section 38, page 22, line 3, leave out <is taking> and insert <has taken, is taking or intends to take>

In section 38, page 22, line 6, at end insert—
<(1A) A report required by virtue of subsection (1)(a) must, in particular, contain information
      relating to how—
      (a) procurement policies of relevant public bodies; and
      (b) procurement activity by relevant public bodies,
      have contributed to compliance with climate change duties.>
Section 45D

Sarah Boyack
Supported by: Des McNulty

119 In section 45D, page 26, line 5, leave out <2> and insert <(Setting and modification of interim target)(1)>.

Section 47

Sarah Boyack
Supported by: Des McNulty

120 In section 47, page 27, line 11, leave out <2> and insert <(Setting and modification of interim target)(1)>.

Stewart Stevenson

53 In section 47, page 27, line 22, leave out <, trust established or person appointed> and insert <or trust established>.

Section 48

Sarah Boyack

121 In section 48, page 27, line 35, at end insert—
<(  ) The plan must also include details of how the Scottish Ministers intend to update planning and building regulations to ensure that all new buildings avoid a specified and rising proportion of the projected greenhouse gas emissions from their use, calculated on the basis of the approved design and plans for the specific building, through the installation and operation of low and zero-carbon generating technologies.>.

Des McNulty

122 In section 48, page 28, line 21, after <materials> insert <and equipment>.

Des McNulty

123 In section 48, page 28, line 22, after <materials> insert <and equipment>.

Section 49A

Stewart Stevenson

54 Leave out section 49A.

Section 50

Stewart Stevenson

55 In section 50, page 31, line 27, leave out from beginning to <other> in line 28 and insert <such>
Stewart Stevenson

56  In section 50, page 31, line 28, at end insert—

<(  ) The regulations may provide for the functions of the enforcement authority to be exercised by two or more such authorities and about the functions of each such authority.>

Stewart Stevenson

57  In section 50, page 31, line 31, at end insert—

<(  ) The Scottish Ministers must, no later than 12 months after the day on which this section comes into force, publish a report setting out—

(a) what measures they intend to take to reduce emissions from non-domestic buildings; and

(b) when they intend to make provision as mentioned in paragraphs (ha) and (hb) of subsection (2).>

Section 50A

Stewart Stevenson

58  In section 50A, page 32, line 3, leave out <may> and insert <must>

Stewart Stevenson

59  In section 50A, page 32, line 3, leave out <make provision relating to the assessment and improvement> and insert—

<(  ) provide for the assessment>

Stewart Stevenson

60  In section 50A, page 32, line 6, leave out <living> and insert <or otherwise associated with such>

Stewart Stevenson

61  In section 50A, page 32, line 6, at end insert—

<(  ) require owners of such accommodation to take steps, identified by such assessments, to—

(i) improve the energy performance of such accommodation;

(ii) reduce such emissions.>

Stewart Stevenson

62  In section 50A, page 32, line 15, leave out <the> and insert <or otherwise associated with>

Stewart Stevenson

63  In section 50A, page 32, line 18, at end insert—
<(ha) the form of any recommendations, contained in such certificates, as to the improvement of the energy performance of, and the reduction of emissions produced by or otherwise associated with, living accommodation;

(hb) the manner in which and periods within which persons must take steps to comply with any recommendations contained in such certificates;

(hc) the registration of such certificates;

(hd) the disclosure of information which is entered in the register;>

Stewart Stevenson

64 In section 50A, page 32, line 25, at end insert—

<( ) The regulations may provide for the functions of the enforcement authority to be exercised by two or more such authorities and about the functions of each such authority.>

Stewart Stevenson

65 In section 50A, page 32, line 28, at end insert—

<( ) The Scottish Ministers must, no later than 12 months after the day on which this section comes into force, publish a report setting out—

(a) what measures they intend to take to reduce emissions from living accommodation; and

(b) when they intend to make provision as mentioned in paragraphs (ha) and (hb) of subsection (2).>

Stewart Stevenson

66 In section 50A, page 32, line 28, at end insert—

<( ) In this section, “living accommodation”—

(a) means a dwelling; and

(b) includes—

(i) any building having a total useful floor area of 50m² or more; and

(ii) any common areas, associated with such a dwelling.>

After section 50A

Stewart Stevenson

67 After section 50A, insert—

<Energy efficiency discount schemes

Power of local authorities to establish energy efficiency discount schemes

(1) The Local Government Finance Act 1992 (c.14) is amended as follows.

(2) After section 80 (reduced amounts payable in respect of council tax), insert—
Local authority’s power to reduce amount of tax payable

(1) A local authority may, if it considers it appropriate to do so, establish a scheme for reducing the amounts which persons are liable to pay in respect of council tax where improvements are made to the energy efficiency of chargeable dwellings.

(2) A scheme established under subsection (1) is an “energy efficiency discount scheme”.

(3) An energy efficiency discount scheme may make such provision as the local authority considers appropriate, including, in particular, provision about—

(a) the energy efficiency improvements to which the scheme applies;
(b) the chargeable dwellings to which the scheme applies;
(c) the valuation band or bands in which such dwellings must be listed;
(d) the area or areas to which the scheme applies;
(e) the reduction, which may be made under the scheme, in the amount which persons are liable to pay in respect of council tax;
(f) applications under the scheme.

(4) But, under an energy efficiency discount scheme, the amount which a person is liable to pay in respect of council tax may be reduced only where each of the conditions mentioned in subsection (5) is met (whatever other conditions may require to be met under the scheme).

(5) Those conditions are—

(a) the person is liable to pay council tax in respect of a chargeable dwelling and any day;
(b) the dwelling is situated in an area to which the scheme applies;
(c) improvements are made to the energy efficiency of that dwelling (whether by the person liable to pay or not);
(d) those improvements are made during the same financial year to which the reduction of the amount which the person is liable to pay in respect of council tax relates;
(e) the amount which the person is liable to pay in respect of that year has not already been reduced under the scheme in respect of those improvements;
(f) the amount which any other person is liable to pay in respect of council tax in respect of that dwelling and that year has not been reduced under the scheme in respect of those improvements.

(6) In ascertaining whether the condition in subsection (5)(f) is met, no account is to be taken of any person who is jointly and severally liable, with the person mentioned in subsection (5)(a), to pay council tax in respect of the dwelling.

(7) The local authority may, under an energy efficiency discount scheme, reduce the amount which a person is liable to pay in respect of a dwelling to nil.

(8) In this section—

“energy efficiency” includes the use of—
(a) technologies reliant on sources of energy other than fossil fuel and nuclear fuel;
(b) materials the manufacture or use of which produces or involves lower emissions of greenhouse gases than other materials; and
(c) surplus heat from electricity generation or other industrial sources for district heating or other purposes;

“fossil fuel” means—

(a) coal;
(b) lignite;
(c) peat;
(d) natural gas (within the meaning of the Energy Act 1976 (c.76));
(e) crude liquid petroleum;
(f) petroleum products (within the meaning of that Act);
(g) any substance produced directly or indirectly from a substance mentioned in paragraphs (a) to (f);

“greenhouse gas” has the meaning given by section 9(1) of the Climate Change (Scotland) Act 2009 (asp 00).”.

(3) In schedule 2, after paragraph 21 (effect of reduction of liability to pay council tax under section 13A), insert—

“22 (1) This paragraph applies where a local authority exercises the power under section 80A to establish an energy efficiency discount scheme.
(2) Where, under an energy efficiency discount scheme, the amount which a person is liable to pay in respect of council tax is reduced, any amount in relation to which the reduction applies is to be treated for the purposes of this schedule as subject to a discount equal to the amount of the reduction.”.

Lewis Macdonald
67A As an amendment to amendment 67, line 7, leave out <may, if it considers it is appropriate to do so,> and insert <must>

Lewis Macdonald
67B As an amendment to amendment 67, leave out line 17

Lewis Macdonald
67C As an amendment to amendment 67, leave out line 18

Lewis Macdonald
67D As an amendment to amendment 67, leave out line 29

Stewart Stevenson
67F* As an amendment to amendment 67, line 43, insert—
<(6A) The minimum reduction which may be provided for under an energy efficiency discount scheme must be—

(a) where the amount which the person is liable to pay in respect of council tax is £50 or more, no less than £50;

(b) where the amount which the person is liable to pay in respect of council tax is less than £50, an amount equal to that person’s liability.>

Lewis Macdonald

67E As an amendment to amendment 67, line 67, leave out from <exercises> to end of line 68 and insert <establishes an energy efficiency discount scheme under section 80A.>

Lewis Macdonald

125 After section 50A, insert—

<Review of energy efficiency discount schemes

(1) The Scottish Ministers must, as soon as practicable after 31 March 2012 and annually thereafter, lay before the Scottish Parliament a report on the operation of energy discount schemes established under section 80A of the Local Government Finance Act 1992 (c.14), which must include an assessment of whether the reductions thereby provided for have contributed effectively to promoting energy efficiency improvements and technologies reliant on renewable sources of energy or heat.

(2) The Scottish Ministers may by regulations amend the provisions for energy efficiency discount schemes set out in this Act.>

Stewart Stevenson

125A*As an amendment to amendment 125, line 4, after <energy> insert <efficiency>

Stewart Stevenson

125B*As an amendment to amendment 125, line 7, leave out from <improvements> to end of line 10 and insert—

<(2) The Scottish Ministers may, if they consider it appropriate, by order amend section 80A of the Local Government Finance Act 1992 for the purpose of improving the contribution of energy efficiency discount schemes to promoting energy efficiency.>

Section 50B

Sarah Boyack

126 In section 50B, page 34, line 11, at end insert—

<( ) provision for the use of surplus heat from electricity generation or other industrial processes for district heating or other sources;>

Stewart Stevenson

68 Leave out section 50B
Section 50C

Sarah Boyack

127 In section 50C, page 34, leave out lines 19 to 29 and insert <determined by the local authority but may be no less than £50.>

Sarah Boyack

128 In section 50C, page 34, line 29, at end insert—

<(  ) The local authority may reduce the amount of council tax which a person is liable to pay in respect of a dwelling to nil.>

Sarah Boyack

129 In section 50C, page 34, line 29, at end insert—

<(  ) In the Local Government Finance Act 1992 (c.14), in Schedule 2, after paragraph 21 (effect of reduction of liability to pay council tax under section 13A), insert—

“22 (1) This paragraph applies where a local authority exercises the power created by regulations under section 80 to establish an energy efficiency discount scheme.

(2) Where, under an energy efficiency discount scheme, the amount which a person is liable to pay in respect of council tax is reduced, any amount in relation to which the reduction applies is to be treated for the purposes of this schedule as subject to a discount equal to the amount of the reduction.”>

Stewart Stevenson

69 Leave out section 50C

Section 50D

Sarah Boyack

130 In section 50D, page 35, line 1, leave out subsections (2) and (3) and insert—

<(  ) Further to a report under subsection (1), the Scottish Ministers may, by regulations, amend section 50C.>

Stewart Stevenson

70 Leave out section 50D

After section 50D

Sarah Boyack

131 After section 50D, insert—

<Non-domestic rates reductions to promote energy efficiency

After section 25A of the Local Government (Scotland) Act 1966 (c.51), insert—>
“25B  Reduction in rates for energy efficiency improvements or installation of technologies reliant on renewable sources of energy or heat

(1) Where a rating authority is satisfied that an energy efficiency improvement has been made during any qualifying financial year to qualifying lands or heritages, the rates payable in respect of those lands and heritages in the next financial year shall be reduced (from the amount they would be otherwise than by virtue of this subsection) in accordance with subsection (4).

(2) Where a rating authority is satisfied that—
   (a) qualifying lands and heritages meet a reasonable standard of energy efficiency; and
   (b) a qualifying technology reliant on renewable sources of energy or heat system has been installed in or on the lands and heritages during any qualifying financial year,

the rates payable for the next financial year shall be reduced (from the amount they would be otherwise than by virtue of this subsection) in accordance with subsection (4).

(3) Subject to subsection (4)—
   (a) any reduction made by virtue of either subsection (1) or (2) is without prejudice to any reduction made by virtue of the other of those subsections, whether those reductions apply in the same financial year, or in different financial years; and
   (b) any reduction made by virtue of subsection (1) is without prejudice to any further reduction made by virtue of that subsection, whether those reductions apply in the same financial year, or in different financial years.

(4) The Scottish Ministers shall by regulations specify—
   (a) an appropriate amount of reduction;
   (b) a maximum number of reductions;
   (c) a maximum total reduction,

in the amount of rates payable in respect of the same lands and heritages in any one financial year.

(5) The Scottish Ministers shall by regulations make provision specifying the sort of evidence that a rating authority is to accept as demonstrating that—
   (a) an energy efficiency improvement has been made to qualifying lands and heritages;
   (b) qualifying lands and heritages meet a reasonable standard of energy efficiency;

and may provide that evidence sufficient to demonstrate that specified energy efficiency improvements, or specified combinations of such improvements, have been made to lands and heritages is sufficient to demonstrate that the lands and heritages meet a reasonable standard of energy efficiency.

(6) A statutory instrument containing regulations made under this section shall be subject to annulment pursuant to a resolution of the Scottish Parliament.

(7) In this section—
“energy efficiency improvement” and “technologies reliant on renewable sources of energy” have the same meanings given by section 50B of the Climate Change (Scotland) Act 2009;

“qualifying financial year” means the financial year beginning on 1 April 2010 or any subsequent financial year;

“qualifying lands and heritages” means such lands and heritages, or such classes of lands and heritages, as are specified in regulations made under this section.”.

Alex Johnstone

132 After section 50D, insert—

<Non-domestic rates: discounts for energy efficiency etc.

In section 153 (power to prescribe amount of non-domestic rate) of the Local Government etc. (Scotland) Act 1994 (c.39), in subsection (3)—

(a) the words “whose rateable value exceeds, and those whose rateable value does not exceed, a prescribed figure” become paragraph (a), and

(b) at the end insert—

“(b) whose energy efficiency and greenhouse gas emissions fall into different categories prescribed for the purpose of this paragraph in rules under subsection (1).

(3A) Regulations under this section may make provision in relation to how lands and heritages are to be determined to fall within a category prescribed for the purpose of subsection (3)(b) in rules under subsection (1).”.

Lewis Macdonald

133 After section 50D, insert—

<Combined heat and power district heating equipment

Rateable value of plant and distribution system associated with combined heat and power plants

(1) The Scottish Ministers must bring forward an amendment to the Valuation for Rating (Plant and Machinery) (Scotland) Regulations 2000 (SSI 2000/58).

(2) The amendment required under subsection (1) must specify the circumstances in which combined heat and power district heating equipment which meets the CHPQA standard does or does not fall within the definition of “lands and heritages” in section 42 of the Lands Valuation (Scotland) Act 1854 (c.91).

(3) Regulations making the amendment required under subsection (1) must be laid before the Scottish Parliament no later than 6 months after the day on which this section comes into force.

(4) Before bringing forward the amendment required under subsection (1), the Scottish Ministers must consult, and seek to reach agreement on the contents of the amendment, with organisations which in the opinion of the Scottish Ministers represent relevant business interests, including, in particular, organisations representing the combined heat and power industry.
In this section, “CHPQA” refers to the Combined Heat and Power Quality Assurance Standard, Issue 1, November 2000 originally published by the Department for the Environment, Transport and the Regions (the “Standard”) (including the later of version Final 1.0 or 2.0 of CHPQA Guidance Notes(c) 0 to 4 (including 2(S), 3(S) and 4(S)), 10 to 28 and 30).

Lewis Macdonald

134 After section 50D, insert—

<Repairing standard

Tenanted housing: inclusion of energy efficiency in the repairing standard

In section 13 (the repairing standard) of the Housing (Scotland) Act 2006 (asp 1)—

(a) in subsection (1)—

(i) the word “and” immediately following paragraph (e) is repealed; and

(ii) after paragraph (f), insert “, and

(g) the house achieves a satisfactory standard of energy efficiency”.

(b) after subsection (5), insert—

“(6) The Scottish Ministers must, by regulations, define what constitutes a satisfactory standard of energy efficiency for the purposes of subsection (1)(g).

(7) In drawing up the regulations under subsection (6), the Scottish Ministers must have regard to any guidance they have issued on the energy efficiency of living accommodation.

(8) The regulations mentioned in subsection (6) must, in particular, include provision about—

(a) the procedure and methodology for assessing the energy performance of the house, and

(b) the minimum energy performance standard that must be achieved in relation to the house.”.

Sarah Boyack

135 After section 50D, insert—

<Climate change burdens

Climate change burdens

After section 46 (health care burdens) of the Title Conditions (Scotland) Act 2003 (asp 9), insert—

“Climate change burdens

46A Climate change burdens

(1) On and after the day on which this section comes into force, it shall be competent to create a real burden in favour of a public body or trust, or of the Scottish Ministers, for the purpose of reducing greenhouse gas emissions; and any such burden shall be known as a “climate change burden”.

24
(2) A climate change burden may only consist of an obligation, in the event of the 
burdened property being developed, for the property to meet specified 
mitigation and adaptation standards.

(3) For the purposes of this section, a “public body” means a body listed in Part I 
or II of the Schedule to the Title Conditions (Scotland) Act 2003 (Conservation 
Bodies) Order 2003 (SSI 2003/453).”.

Section 51A

Stewart Stevenson

71 In section 51A, page 35, line 28, leave out subsection (1) and insert—

<(1) The Scottish Ministers must exercise their functions under sections 30 and 31 of the 
Town and Country Planning (Scotland) Act 1997 (c.8) so as to make provision 
specifying the circumstances in which development of the class mentioned in subsection 
(2) is granted planning permission by virtue of an order under section 30 of that Act.>

Stewart Stevenson

72 In section 51A, page 35, line 31, leave out from beginning to <replacement> in line 32 and 
insert—

<(2) That class is the installation, alteration or replacement, within the curtilage of a 
dwellinghouse or building containing one or more flats.>

Stewart Stevenson

73 In section 51A, page 35, leave out lines 35 to 37

Stewart Stevenson

74 In section 51A, page 35, line 38, leave out from beginning to <Parliament> in line 39 and insert 
<The Scottish Ministers must comply with subsection (1)>

Stewart Stevenson

75 In section 51A, page 35, line 39, leave out <six> and insert <6>

Stewart Stevenson

76 In section 51A, page 36, line 1, leave out <making the amendment required under> and insert 
<complying with>

Stewart Stevenson

77 In section 51A, page 36, line 2, leave out from <with> to end of line 6 and insert—

<(  ) such persons appearing to them to represent the producers and suppliers of the 
equipment mentioned in paragraphs (a) and (b) of subsection (2); and

(  ) such other persons as the Scottish Ministers consider appropriate.>
Section 51B

Stewart Stevenson

78 In section 51B, page 36, line 11, leave out <powers> and insert <functions>

Stewart Stevenson

79 In section 51B, page 36, line 12, leave out from <of> to end of line 13 and insert <specifying the circumstances in which development of the class mentioned in subsection (2) is granted planning permission by virtue of an order under section 30 of that Act.>

Stewart Stevenson

80 In section 51B, page 36, line 14, leave out from first <provision> to <replacement> in line 15 and insert <class is the installation, alteration or replacement, within the curtilage of a non-domestic building.>

Stewart Stevenson

81 In section 51B, page 36, line 15, leave out from <within> to end of line 17

Stewart Stevenson

82 In section 51B, page 36, line 20, leave out from <and> to end of line 26 and insert—

\[(\ )\) such persons appearing to them to represent the producers and suppliers of the equipment mentioned in subsection (2); and

\[(\ )\) such other persons as the Scottish Ministers consider appropriate.>

Stewart Stevenson

83 In section 51B, page 36, line 28, leave out from <meaning> to end of line 29 and insert <same meaning as in section 51A(5)>;

Stewart Stevenson

84 In section 51B, page 36, line 30, leave out <meaning given> and insert <same meaning as>

After section 51B

Sarah Boyack

137 After section 51B, insert—

<Development plans>

Development plans: inclusion of greenhouse gas emissions policies

After section 3E of the Town and Country Planning (Scotland) Act 1997 (c.8) insert—
“3F  Greenhouse gas emissions policies
A planning authority, in any local development plan prepared by them, must include policies requiring all developments in the local development plan area to be designed so as to ensure that all new buildings avoid a specified and rising proportion of the projected greenhouse gas emissions from their use, calculated on the basis of the approved design and plans for the specific development, through the installation and operation of low and zero-carbon generating technologies.”.

Sarah Boyack
137A As an amendment to amendment 137, line 6, after <A> insert—

<(  ) strategic development planning authority, in their strategic development plan; and

(  )>

Sarah Boyack
137B* As an amendment to amendment 137, line 7, after <the> insert <strategic development plan area or, as the case may be, the>

Sarah Boyack
138 After section 51B, insert—

<Annual report on operation of section (Development plans: inclusion of greenhouse gas emissions policies)

(1) The Scottish Ministers must—

(a) not later than one year after the day on which section (Development plans: inclusion of greenhouse gas emissions policies) comes into force; and

(b) annually thereafter,

lay before the Scottish Parliament a report on the operation of the requirement on relevant planning authorities to include policies within development plans under that section, including an assessment of whether those requirements have contributed effectively to the reduction of greenhouse gas emissions from developments.

(2) The fourth and subsequent reports under subsection (1) must include an assessment of the continuing need or otherwise for the requirement on relevant planning authorities to include policies within development plans; and if the requirement is considered by the Scottish Ministers to be no longer necessary, the Scottish Ministers may by order repeal section (Development plans: inclusion of greenhouse gas emissions policies) and this section.>

Stewart Stevenson
138A* As an amendment to amendment 138, line 16, leave out <section (Development plans: inclusion of greenhouse gas emissions policies)> and insert <section 3F of the Town and Country Planning (Scotland) Act 1997>
After section 51B, insert—

Promotion of water conservation and water-use efficiency

Duty of Scottish Water to promote water conservation and water-use efficiency

In section 56(1) of the Water Industry (Scotland) Act 2002 (asp 3), after paragraph (a) insert—

“(aa) requiring it to promote water conservation and water-use efficiency,”.

Section 51C

In section 51C, page 36, line 35, leave out <newly constructed>

In section 51C, page 36, line 38, at end insert—

( ) The Scottish Ministers may, by regulations, provide that the duty under subsection (1) does not apply in respect of specified buildings or categories of buildings.

Section 53

In section 53, page 39, line 12, leave out from <one> to <Assent> in line 13 and insert <12 months after the day on which this section comes into force>

Section 59

Leave out section 59

Before section 61A

Before section 61A, insert—

Public engagement

(1) The Scottish Ministers must prepare and publish a strategy (a “public engagement strategy”) setting out the steps they intend to take to—

(a) inform persons in Scotland about the targets specified by virtue of this Act;

(b) encourage them to contribute to the achievement of those targets.
(2) The public engagement strategy must, in particular, identify actions which persons in Scotland may take to contribute to the achievement of the targets referred to in subsection (1)(a).

(3) The public engagement strategy must be published no later than 31 December 2010.

(4) The Scottish Ministers—
   (a) may, from time to time; and
   (b) must, before the end of the period mentioned in subsection (5), review the strategy.

(5) The period referred to in subsection (4)(b) is the period of 5 years beginning with the date on which—
   (a) the strategy is first published; or
   (b) the strategy was last reviewed under subsection (4).

(6) Where, following a review under subsection (4), the Scottish Ministers vary the public engagement strategy, they must, as soon as reasonably practicable after so doing, publish the strategy as so varied.

(7) A strategy published under subsection (6) must contain an assessment of the progress made towards implementing the steps set out in earlier strategies.

(8) The public engagement strategy may be published in such manner as the Scottish Ministers consider appropriate.

(9) The Scottish Ministers must lay the public engagement strategy before the Scottish Parliament as soon as reasonably practicable after it is published.

Section 62

Cathy Peattie
5 In section 62, page 48, line 7, at end insert—
<( ) public bodies (as defined in section 36(A2))>

Stewart Stevenson
5A As an amendment to amendment 5, leave out line 2 and insert—
<( ) relevant public bodies>

After section 62

Patrick Harvie
141 After section 62, insert—
<Scottish Executive budget: impact on greenhouse gases
(1) The Scottish Ministers must, at the same time as laying before the Scottish Parliament any document setting out draft proposals for the use of resources in any financial year, lay before the Scottish Parliament a document describing the direct and indirect impact on greenhouse gas emissions of the activities to be funded by virtue of the proposals.>
(2) In this section, “use of resources” has the meaning given in section 1(3) of the Public Finance and Accountability (Scotland) Act 2000 (asp 1).

Alison McInnes

142 After section 62, insert—

<Judicial review

(1) In any application for judicial review relating to or arising out of the provisions of this Act, it will be enough for any party to show sufficient interest in order to satisfy the common law tests of title and interest.

(2) “Sufficient interest” is to be interpreted in accordance with the criteria laid out in Article 9 of the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters signed at Aarhus on 25 June 1998 (“the Aarhus Convention”).

(3) In relation to the expenses associated with any judicial review proceedings under this Act, the court may impose a cap on, or otherwise regulate, the extent of liability for expenses between the parties; and such applications may be competently made at any stage of the proceedings.

(4) When determining an application made under subsection (3) above, the court is to have regard to the need to remove or reduce financial or other barriers to access to justice, in accordance with the principles laid out in Article 9 of the Aarhus Convention.

(5) In any application for judicial review under this Act, the court may competently consider both the substantive and the procedural legality of the decision, act or omission under review.>

Section 64

Stewart Stevenson

87 In section 64, page 48, line 29, after <(8)> insert <and to section (Subordinate legislation: pre-laying procedure)>

Stewart Stevenson

88 In section 64, page 49, line 17, leave out subsections (9) to (11)

Des McNulty

3 In section 64, page 49, line 17, leave out <sections 52 to 59> and insert <section 58>

Des McNulty

4 In section 64, page 49, line 17, leave out <52 to> and insert <58 and>

After section 64

Stewart Stevenson

89 After section 64, insert—
Subordinate legislation: pre-laying procedure

(1) This section applies where the Scottish Ministers propose to lay before the Scottish Parliament a draft of a statutory instrument containing the first regulations under section 58 or 59 (other than a draft containing regulations mentioned in section 64(7)(d) or (e) to which section 64(5) applies).

(2) The Scottish Ministers must, before doing so, lay before the Parliament—
   (a) a copy of the proposed regulations; and
   (b) a statement setting out their reasons for proposing to make those regulations.

(3) The Scottish Ministers must, when laying such a copy, specify a period (the “representation period”) during which representations on the proposed regulations may be made to them.

(4) The representation period must be at least 90 days, of which no fewer than 30 must be days on which the Parliament is not dissolved or in recess.

(5) The Scottish Ministers must, as soon as reasonably practicable after laying a copy of the proposed regulations, publicise them in such manner as they consider appropriate.

(6) The Scottish Ministers must, before laying the proposed regulations before the Parliament, have regard to—
   (a) any representations on the proposed regulations made to them;
   (b) any resolution relating to those regulations passed by the Parliament; and
   (c) any report relating to those regulations published by any committee of the Parliament for the time being appointed by virtue of standing orders, before the expiry of the representation period.

(7) The Scottish Ministers must, when laying such proposed regulations, lay a statement setting out—
   (a) details of any representations, resolutions or reports mentioned in subsection (6);
   (b) the changes (if any) they have made to the proposed regulations in response to such representations, resolutions or reports and the reasons for those changes.

(8) In this section, “proposed regulations” means a draft of a statutory instrument to which subsection (1) applies.

Section 65

Stewart Stevenson

90 In section 65, page 50, line 22, at end insert—
<“domestic effort target” has the meaning given by section 7A(2);>

Sarah Boyack
Supported by: Des McNulty

143 In section 65, page 50, line 26, leave out <2(2)> and insert <(Setting and modification of interim target)(2)>
In section 65, page 50, line 37, leave out <36(2)> and insert <36(7)>

Stewart Stevenson

Section 67

Sarah Boyack

In section 67, page 51, line 18, after <45C> insert <, 51A>

Stewart Stevenson

In section 67, page 51, line 19, after <after> insert <the day on which the Bill for>

Sarah Boyack

In section 67, page 51, line 21, at end insert—

<( ) Section 51A comes into force on the day after the Bill for this Act receives Royal Assent.>

Long Title

Stewart Stevenson

In the long title, page 1, line 5, after <efficiency> insert <, including provision enabling council tax discounts>
Climate Change (Scotland) Bill

Groupings of Amendments for Stage 3

This document provides procedural information which will assist in preparing for and following proceedings on the above Bill. The information provided is as follows:

- the list of groupings (that is, the order in which amendments will be debated). Any procedural points relevant to each group are noted;
- the text of amendments to be debated on the day of Stage 3 consideration, set out in the order in which they will be debated. THIS LIST DOES NOT REPLACE THE MARSHALLED LIST, WHICH SETS OUT THE AMENDMENTS IN THE ORDER IN WHICH THEY WILL BE DISPOSED OF.

Groupings of amendments

Note: The time limits indicated are those set out in the timetabling motion to be considered by the Parliament before the Stage 3 proceedings begin. If that motion is agreed to, debate on the groups above each line must be concluded by the time indicated, although the amendments in those groups may still be moved formally and disposed of later in the proceedings.

Group 1: The 2050 target
6

Group 2: Setting and modification of interim target
94, 94A, 7, 8, 95, 96, 97, 9, 10, 98, 99, 100, 101, 108, 114, 119, 120, 143

Notes on amendments in this group
Amendments 7 and 8 are direct alternatives
Amendment 96 pre-empts amendments 97, 9, 10, 98, 99

Debate to end no later than 45 minutes after proceedings begin

Group 3: Setting annual target – amounts
11, 12, 13, 14, 15, 16, 17, 18

Notes on amendments in this group
Amendment 12 pre-empts amendments 13 and 14

Group 4: Setting annual targets – criteria
102, 103, 104, 105, 116

Group 5: Role of relevant body in relation to annual targets
19, 20, 20A, 20AA, 21, 106, 29, 30
Group 6: Achievement of annual targets – respective contributions of domestic effort target and crediting of carbon units
22, 23, 24, 25, 26, 27, 90

Debate to end no later than 1 hour 40 minutes after proceedings begin

Group 7: Type of carbon units that may be purchased by Scottish Ministers
107, 113

Group 8: Scottish share of emissions from international aviation and international shipping
109, 110, 111, 146, 112

Group 9: Minor amendments and drafting changes
28, 31, 34, 35, 51

Group 10: Parliamentary consideration of reports etc.
32, 33, 36, 37

Group 11: Energy generating stations – efficiency guidance
147, 54

Debate to end no later than 2 hours 30 minutes after proceedings begin

Group 12: Public bodies – climate change duties
38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 52, 5, 5A, 91, 92

Group 13: Application of biodiversity duty
53

Group 14: Contribution of planning and building regulation to reduction of emissions
121, 137, 137A, 137B, 138, 138A

Group 15: Definition of “energy efficiency”
122, 123

Group 16: Assessment of energy performance of buildings
55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66

Debate to end no later than 3 hours 10 minutes after proceedings begin

Group 17: Council tax and non-domestic rates – energy efficiency discounts

Group 18: District heating
133
Group 19: Energy efficiency – modification of repairing standard for tenanted housing
134

Debate to end no later than 4 hours after proceedings begin

Group 20: Climate change burdens
135

Group 21: Permitted development rights – microgeneration equipment
71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 144, 145

Group 22: Promotion of water conservation and water-use efficiency
136

Group 23: Energy performance of Scottish civil estate
139, 140

Group 24: Waste regulations
85, 87, 88, 3, 4, 89

Notes on amendments in this group
Amendment 88 pre-empts amendments 3 and 4
Amendment 3 pre-empts amendment 4

Debate to end no later than 4 hours 50 minutes after proceedings begin

Group 25: Charges for supply of carrier bags
2

Group 26: Public engagement
86

Group 27: Scottish Executive budget – impact on greenhouse gases
141

Group 28: Judicial review
142

Debate to end no later than 5 hours 30 minutes after proceedings begin
Note: (DT) signifies a decision taken at Decision Time.

**Business Motion:** Bruce Crawford, on behalf of the Parliamentary Bureau, moved S3M-4483—That the Parliament agrees—

(a) the following revision to the programme of business for Wednesday 24 June 2009—

delete

2.30 pm Continuation of Stage 3 Proceedings: Climate Change (Scotland) Bill

and insert

1.45 pm Continuation of Stage 3 Proceedings: Climate Change (Scotland) Bill

and (b) the following revision to the programme of business for Thursday 25 June 2009—

after

*followed by* Stage 1 Debate: Arbitration (Scotland) Bill

insert

*followed by* Legislative Consent Motion: Holocaust (Return of Cultural Objects) Bill – UK Legislation

The motion was agreed to.

**Business Motion:** Bruce Crawford, on behalf of the Parliamentary Bureau, moved S3M-4488—That the Parliament agrees that, during Stage 3 of the Climate Change (Scotland) Bill, debate on groups of amendments shall, subject to Rule 9.8.4A, be brought to a conclusion by the time limits indicated, each time limit being calculated from when the Stage begins and excluding any periods when other business is under consideration or when a meeting of the Parliament is suspended (other than a suspension following the first division in the Stage in the morning and afternoon being called) or otherwise not in progress:
Groups 1 and 2: 45 minutes
Groups 3 to 6: 1 hour 40 minutes
Groups 7 to 11: 2 hours 30 minutes
Groups 12 to 16: 3 hours 10 minutes
Groups 17 to 19: 4 hours
Groups 20 to 24: 4 hours 50 minutes
Groups 25 to 28: 5 hours 30 minutes.

The motion was agreed to.

Climate Change (Scotland) Bill - Stage 3: The Bill was considered at Stage 3.


The following amendments were agreed to (by division)—

18(For 79, Against 43, Abstentions 0)
20AA(For 101, Against 18, Abstentions 0)
23(For 60, Against 59, Abstentions 0)
85(For 77, Against 45, Abstentions 0)

The following amendments were disagreed to (by division)—

6(For 2, Against 119, Abstentions 0)
11(For 18, Against 104, Abstentions 0)
12(For 18, Against 103, Abstentions 0)
15(For 19, Against 103, Abstentions 0)
17(For 2, Against 120, Abstentions 0)
107(For 60, Against 61, Abstentions 0)
108(For 3, Against 118, Abstentions 0)
113(For 60, Against 60, Abstentions 0; amendment disagreed to on casting vote)
38(For 60, Against 62, Abstentions 0)
49(For 60, Against 62, Abstentions 0)
2(For 60, Against 62, Abstentions 0)

The following amendments were moved and, with the agreement of the Parliament, withdrawn: 22, 133, 134 and 142.

The following amendments were pre-empted: 3 and 4.

The following amendments were not moved: 7, 8, 96, 101, 105, 110, 111, 146, 40, 41, 42, 43, 44, 45, 46, 47, 48, 126, 127, 128, 129, 130, 131, 137A, 137B, 5A and 91.
Climate Change (Scotland) Bill: The Cabinet Secretary for Finance and Sustainable Growth (John Swinney) moved S3M-4464—That the Parliament agrees that the Climate Change (Scotland) Bill be passed.

After debate, the motion was agreed to (DT).
The Presiding Officer (Alex Fergusson): The next item of business is consideration of business motion S3M-4483, in the name of Bruce Crawford, on behalf of the Parliamentary Bureau, setting out a revised business programme for this week.

Motion moved,

That the Parliament agrees—

(a) the following revision to the programme of business for Wednesday 24 June 2009—

delete

2.30 pm Continuation of Stage 3 Proceedings: Climate Change (Scotland) Bill

and insert

1.45 pm Continuation of Stage 3 Proceedings: Climate Change (Scotland) Bill

and (b) the following revision to the programme of business for Thursday 25 June 2009—

after followed by Stage 1 Debate: Arbitration (Scotland) Bill

insert followed by Legislative Consent Motion: Holocaust (Return of Cultural Objects) Bill – UK Legislation—[Bruce Crawford.]

Motion agreed to.

The Presiding Officer: The next item of business is stage 3 proceedings on the Climate Change (Scotland) Bill. In dealing with amendments, members should have the bill as amended at stage 2—that is, Scottish Parliament bill 17A. They should also have the marshalled list, which was revised yesterday—that is, SP bill 17A-ML revised—and the groupings, which I, as Presiding Officer, have agreed. The division bell will sound and proceedings will be suspended for five minutes for the first division this morning and the first division this afternoon. The period of voting for the first division will be 30 seconds. Thereafter, I will allow a voting period of one minute for the first division after a debate, and 30 seconds for all other divisions.

Section 1—The 2050 target

The Presiding Officer: We start with group 1. Amendment 6, in the name of Patrick Harvie, is the only amendment in the group.

Patrick Harvie (Glasgow) (Green): After working on the Climate Change (Scotland) Bill for so many months, I am gratified that, throughout the process, the debate has been characterised by an almost universal acceptance that our approach to climate change must be science led and based on an acceptance of the urgency of the task that is before us and its importance to the future of human civilisation on our planet.

At stage 2, a number of amendments were debated in committee that specified the trajectory of the emissions cuts that we seek to achieve. That implies a recognition that the end point is not enough, and that we need to think about how many greenhouse gases we emit in the period between now and any target dates; about the relationship between annual targets and long-term targets; and about the points at which those long-term targets should be set.

It is now clear that although we have broad agreement on the principles, we are basing our work on science that is already out of date. We are basing our work on the assumption—which the United Kingdom Government holds, and from which the Scottish Government has not demurred—that the global objective must be to limit climate change to 2°C of warming throughout the world, as that is the generally accepted danger zone and the tipping point beyond which much more unstable change becomes very likely.
To give ourselves any chance of keeping warming to 2°, a debate is needed about the overall level of greenhouse gases in the atmosphere and the amount that we can emit over a period of time. It is clear that the scientific community has already moved beyond the report of the Intergovernmental Panel on Climate Change, which effectively informed the 80 per cent long-term target that the Scottish Government is proposing for 2050. If we are going to include specific targets in the bill, they should be the right targets rather than the wrong ones.

Those who have studied the subject in detail now understand that an 80 per cent target is already out of date and will need to be changed. I suggest, on the basis of evidence from the Tyndall centre, which is the UK’s leading research centre on climate change, that 90 per cent is a more appropriate target at the current time. As the bill makes clear, it will still be necessary to continue to receive advice on the developing science from the UK Committee on Climate Change or from a successor body, and to revise that target as we go along. However, we could just say that in the bill. We could say that we will take whatever target the Committee on Climate Change suggests.

If we are to include a specific target for 2050, we should make it the right one. My suggestion is that a reduction of 90 per cent is a more appropriate target for 2050, and in the debates on future groups, I will argue for other aspects of that trajectory, including a 50 per cent interim target and a more ambitious annual target. If we all accept that the objective is to keep global warming within the 2° danger zone, we should include in the bill numbers that have a credible chance of achieving that objective.

I move amendment 6.

The Minister for Transport, Infrastructure and Climate Change (Stewart Stevenson): Like Patrick Harvie, I acknowledge a degree of satisfaction that there has been universal acceptance of the importance of the climate change agenda, of the need for urgency and of the need for science to lead us. There has also been acknowledgement of the overwhelming contribution that human effects have made to the issue, so it is clear that we open our consideration of this important part of the Climate Change (Scotland) Bill with a broad agreement on principle, as Patrick Harvie said. We do not diverge from the need to contain the rise in temperature to the range 2° to 2.4°, and it is important that we keep hold of that.

Amendment 6 would raise the 2050 target from a reduction in emissions of at least 80 per cent to one of at least 90 per cent. It is identical to an amendment that Robin Harper lodged at stage 2, which only Patrick Harvie supported. There is no great division on the need for us to use expert advice. We need advice from the UK Committee on Climate Change that is specific to Scottish circumstances and which gives us targets that relate specifically to us. It is premature to deviate from the 80 per cent figure, which is founded on the Intergovernmental Panel on Climate Change’s definitive and internationally recognised fourth assessment report. Similarly, the UK Committee on Climate Change has advised that the UK’s 2050 target should be set at 80 per cent.

The 80 per cent target in the bill is, of course, a minimum requirement. The annual target for 2050 will not be set until 2036, which is 27 years from now. I am sure that we can all agree that our understanding of climate change has come a very long way over the past 27 years, and it will undoubtedly continue to grow over the next 27 years. We should not prejudge that future understanding. As it stands, the bill allows for an annual target of 80 per cent to be set for 2050. If we need to increase it, that is rightly a decision for our successors. I ask members not to support amendment 6.

Patrick Harvie: It is clear to me and, to be honest, it is probably clear to members across the political spectrum who have been greatly involved in considering the bill that there is a serious mismatch between the pace at which our scientific knowledge of the subject develops and the pace at which global or even domestic political consensus can move forward.

The minister sets great store by the IPCC’s fourth assessment report. Even the majority of the people who contributed to that report have already acknowledged that its findings are out of date. Its findings were not wrong at the time, but the science and our understanding have moved on, and the task before us is more urgent than it was then understood to be. The minister also sets great store by seeking the advice of the UK Committee on Climate Change. I again express my surprise and disappointment that he has not yet formally sought its advice on any matter in the bill. Despite that, he seems quite happy to interpret its letters according to his own whim.

I will press amendment 6, not in expectation of a sudden conversion, but simply as a marker of the fact that our position is that the science has moved on, that an 80 per cent target is inadequate and that that will be shown to be the case over the coming months and years.

The Presiding Officer: The question is, that amendment 6 be agreed to. Are we agreed?

Members: No.

The Presiding Officer: There will be a division. As this is the first division, there will be a five-minute suspension.
Meeting suspended.

On resuming—

The Presiding Officer: We move now to the division on amendment 6.

FOR

Harper, Robin (Lothians) (Green)
Harvie, Patrick (Glasgow) (Green)

AGAINST

Adam, Brian (Aberdeen North) (SNP)
Aitken, Bill (Glasgow) (Con)
Alexander, Ms Wendy (Paisley North) (Lab)
Allan, Alasdair (Western Isles) (SNP)
Baille, Jackie (Dumbarton) (Lab)
Baker, Claire (Midlothian) (Lab)
Baker, Richard (North East Scotland) (Lab)
Boyack, Sarah (Edinburgh Central) (Lab)
Brankin, Rhona (Midlothian) (Lab)
Brocklebank, Ted (Mid Scotland and Fife) (Con)
Brown, Gavin (Lothians) (Con)
Brown, Keith (Ochil) (SNP)
Brown, Robert (Glasgow) (LD)
Brownlee, Derek (South of Scotland) (Con)
Butler, Bill (Glasgow Anniesland) (Lab)
Campbell, Aileen (South of Scotland) (SNP)
Carlaw, Jackson (West of Scotland) (SNP)
Chisholm, Malcolm (Edinburgh North and Leith) (Lab)
Coffey, Willie (Kilmarnock and Loudoun) (SNP)
Constance, Angela (Livingstone) (SNP)
Craigie, Cathie (Cumbernauld and Kilsyth) (Lab)
Crawford, Bruce (Stirling) (SNP)
Cunningham, Roseanna (Perth) (SNP)
Curran, Margaret (Glasgow Baillieston) (Lab)
Don, Nigel (North East Scotland) (SNP)
Doris, Bob (Glasgow) (SNP)
Eadie, Helen (Dunfermline East) (Lab)
Ewing, Fergus (Inverness East, Nairn and Lochaber) (SNP)
Fabiani, Linda (Central Scotland) (SNP)
Ferguson, Patricia (Glasgow Maryhill) (Lab)
Finnie, Ross (West of Scotland) (LD)
FitzPatrick, Joe (Dundee West) (SNP)
Foulkes, George (Lothians) (Lab)
Gibson, Kenneth (Cunninghame North) (SNP)
Gibson, Rob (Highlands and Islands) (SNP)
Gillon, Karen (Clydesdale) (Lab)
Glen, Martyn (North East Scotland) (Lab)
Godman, Trish (West Renfrewshire) (Lab)
Goldie, Annabel (West of Scotland) (Con)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Graham, Christine (South of Scotland) (SNP)
Grant, Rha (Highlands and Islands) (Lab)
Gray, Iain (East Lothian) (Lab)
Harvie, Christopher (Mid Scotland and Fife) (SNP)
Henry, Hugh (Paisley South) (Lab)
Hepburn, Jamie (Central Scotland) (SNP)
Hume, Jim (South of Scotland) (LD)
Hyslop, Fiona (Lothians) (SNP)
Ingram, Adam (South of Scotland) (SNP)
Jamieson, Cathy (Carrick, Cumnock and Doon Valley) (Lab)
Johnstone, Alex (North East Scotland) (Con)
Kelly, James (Glasgow Rutherglen) (Lab)
Kerr, Andy (East Kilbride) (Lab)
Kidd, Bill (Glasgow) (SNP)
Lamont, Johann (Glasgow Pollok) (Lab)
Lamont, John (Roxburgh and Berwickshire) (Con)
Livingstone, Marilyn (Kirkaldy) (Lab)
Lochhead, Richard (Moray) (SNP)
MacAskill, Kenny (Edinburgh East and Musselburgh) (SNP)
Macdonald, Lewis (Aberdeen Central) (Lab)
Macintosh, Ken (Eastwood) (Lab)
Martin, Paul (Glasgow Springburn) (Lab)
Marwick, Tricia (Central Fife) (SNP)
Mather, Jim (Argyll and Bute) (SNP)
Matheson, Michael (Falkirk West) (SNP)
Maxwell, Stewart (West of Scotland) (SNP)
McArthur, Liam (Orkney) (LD)
McConnell, Jack (Motherwell and Wishaw) (Lab)
McGrigor, Jamie (Highlands and Islands) (Con)
McInnes, Alison (North East Scotland) (LD)
McKee, Ian (Lothians) (SNP)
McKelvie, Christina (Central Scotland) (SNP)
McLaughlin, Anne (Glasgow) (SNP)
McLetchie, David (Edinburgh Pentlands) (Con)
McMahon, Michael (Hamilton North and Bellshill) (Lab)
McMillan, Stuart (West of Scotland) (SNP)
McNeill, Duncan (Greenock and Inverclyde) (Lab)
McNeill, Pauline (Glasgow Kelvin) (Lab)
McNulty, Des (Clydebank and Milngavie) (Lab)
Milne, Nanette (North East Scotland) (Con)
Mitchell, Margaret (Central Scotland) (Con)
Morgan, Alasdair (South of Scotland) (SNP)
Mulligan, Mary (Linlithgow) (Lab)
Munro, John Farquhar (Ross, Skye and Inverness West) (LD)
Neil, Alex (Central Scotland) (SNP)
O'Donnell, Hugh (Central Scotland) (LD)
Park, John (Mid Scotland and Fife) (Lab)
Paterson, Gil (West of Scotland) (SNP)
Peacock, Peter (Highlands and Islands) (Lab)
Peatlive, Cathy (Falkirk East) (Lab)
Pringle, Mike (Edinburgh South) (LD)
Purvis, Jeremy (Tweddale, Ettrick and Lauderdale) (LD)
Robison, Shona (Dundee East) (SNP)
Rumbles, Mike (West Aberdeenshire and Kincardine) (LD)
Salmond, Alex (Gordon) (SNP)
Scallon, Mary (Highlands and Islands) (Con)
Scott, John (Ayr) (Con)
Scott, Tavish (Shetland) (LD)
Simpson, Dr Richard (Mid Scotland and Fife) (Lab)
Smith, Elaine (Coatbridge and Chryston) (Lab)
Smith, Elizabeth (Mid Scotland and Fife) (Con)
Smith, Iain (North East Fife) (LD)
Smith, Margaret (Edinburgh West) (LD)
Somerville, Shirley-Anne (Lothians) (SNP)
Stephen, Nicol (Aberdeen South) (LD)
Stevenson, Stewart (Banff and Buchan) (SNP)
Stewart, David (Highlands and Islands) (Lab)
Stone, Jamie (Caithness, Sutherland and Easter Ross) (LD)
Sturgeon, Nicola (Glasgow Govan) (SNP)
Swinney, John (North Tayside) (SNP)
Thompson, Dave (Highlands and Islands) (SNP)
Toison, Jim (Dunfermline West) (LD)
Watt, Maureen (North East Scotland) (SNP)
Welsh, Andrew (Angus) (SNP)
White, Sandra (Glasgow) (SNP)
Whitefield, Karen (Airdrie and Shotts) (Lab)
Whitton, David (Strathkelvin and Bearsden) (Lab)
Wilson, Bill (West of Scotland) (SNP)
Wilson, John (Central Scotland) (SNP)

The Presiding Officer: The result of the division is: For 2, Against 119, Abstentions 0.

Amendment 6 disagreed to.
Before section 2

The Presiding Officer: We move to group 2. Amendment 94, in the name of Sarah Boyack, is grouped with amendments 94A, 7, 8, 95 to 97, 9, 10, 98 to 101, 108, 114, 119, 120 and 143. I remind members that, if they wish to participate in a debate on a group of amendments, they should press their request-to-speak buttons when I call the grouping. I draw members’ attention to the additional information in the groupings paper on pre-emptions in this group.

Sarah Boyack (Edinburgh Central) (Lab): A week is a long time in politics. Last Monday, John Swinney was adamant, in setting out the delivery plan for the bill’s provisions to my colleague Iain Gray, that the Scottish Government could deliver a target of 34 per cent and no more for emissions reductions by 2020, without a Copenhagen agreement. However, Alex Salmond admitted to members in the chamber last Thursday that the figure was 36 per cent. At both stage 1 and stage 2, Labour members argued for earlier and tougher targets. We said then that we would lodge amendments at stage 3 because we wanted a more ambitious trajectory.

Our reading of the delivery plan is that it is still business as usual in many respects. However, the science says that we must be more ambitious. If we all believe that our bill should be more ambitious and world leading, that must be demonstrated in the bill’s detail. The chief executive of the UK Committee on Climate Change made clear the position when he gave evidence on the bill to the Transport, Infrastructure and Climate Change Committee. He said:

“The preliminary assessment does not reflect specific circumstances in Scotland. That is something that we need to bottom out. We have said clearly in our report that the figure would not be an appropriate basis for target setting, because further work is needed to tailor it to the specific situation in Scotland.”—[Official Report, Transport, Infrastructure and Climate Change Committee, 27 January 2009; c 1399.] The guidance that the UK committee came up with was clearly an initial assessment and does not cover all areas of the Scottish economy, so more work needs to be carried out. The Minister for Transport, Infrastructure and Climate Change agreed with that point when Des McNulty put it to him at stage 2.

The figures cannot be a back-of-an-envelope job. In that respect, I call on the minister to publish the letter that he sent to the Committee on Climate Change only last Wednesday. I think that we are all intrigued about what questions he asked.

We have set out clear criteria in amendment 94, which is important.

Stewart Stevenson: I am entirely happy to publish the letter to which Sarah Boyack referred.

Sarah Boyack: It would have been good to have it before the debate, because we have seen all the other bits of the exchange.

We have said consistently that a tougher interim target will be challenging, but we need it now to drive the change that we need in the early, not later, years. We need the Committee on Climate Change to do a serious piece of work and the Scottish Government to report back to us in Parliament. The bill that we will pass today will provide a range of policy options—many more than were included in the bill as introduced. For example, the council tax provision has the potential to transform attitudes and to deliver carbon reductions. We need to send a clear and honest message to the Copenhagen conference.

When I set the first environment target in the early days of the Parliament, I was told by officials, in true “Yes Minister” style, that it was a bold target. We need to be ambitious today, but we must ensure that we follow through with the policies—that is the critical bit. There should not be a bidding war. I welcome the Government’s shift from its position of last week, but it would be useful to get clarity from the minister on where he now stands, given the letter that he sent out yesterday to MSPs. He was adamant that the transport delivery plan was as much as the Government could do. Indeed, Alex Salmond said last week that the Government could not do more unless Scotland had complete independence. We think that that is an excuse, because we could do much more now with our devolved powers.

It is vital that the Government’s commitment is not a heat-of-the-moment one just to get the Government through today’s debate; it must be followed by radical action in the weeks and months following the passing of the bill. The Stop Climate Chaos Coalition has built up a huge coalition of support. Amendment 94 will help us to drive the change that we need in the early, not late, years. We need to be ambitious today, but we must ensure that we follow through with the policies—that is the critical bit. There should not be a bidding war. I welcome the Government’s shift from its position of last week, but it would be useful to get clarity from the minister on where he now stands, given the letter that he sent out yesterday to MSPs. He was adamant that the transport delivery plan was as much as the Government could do. Indeed, Alex Salmond said last week that the Government could not do more without Scotland having complete independence. We think that that is an excuse, because we could do much more now with our devolved powers.

I move amendment 94.

The Presiding Officer: I call the minister to move amendment 94A.

Stewart Stevenson: I have just been informed that we have already published the letter to which Sarah Boyack referred—it is on the Scottish Government website, with the response from the
Committee on Climate Change. [Interuption.] The First Minister is saying, “Instant action”, which is what he wants from his ministers.

This is an important part of the debate. The implications of the choices that we make during the debate fall on the real world of our futures. The wrong choices will cripple our economy and will mean that we no longer have the financial resources to fight climate change. The debate is therefore not an arid, possibly point-scoring exercise about numbers. The decisions that we make here will shape the bill and the future of Scotland. That is why politicians’ decisions on targets must be based on expert advice whereby scientists, economists and others examine the evidence and make recommendations to which we should have regard.

The UK Committee on Climate Change, our present adviser, is funded by all Governments in the UK, but it is our independent source. The committee has advised the UK Government that a 34 per cent reduction by 2020 is necessary and achievable. A 42 per cent reduction becomes achievable, with considerable difficulty, when—I strongly doubt that it is “if”—the European Union amends its efforts through the EU emission trading scheme to raise the 2020 target to 30 per cent.

For the UK and Scotland, that change is vital to our ambition. Nearly half of all CO₂ that will be booked to the Scottish and UK emissions accounts will come from the trading scheme. We changed the bill at stage 2 to incorporate the 42 per cent target, but we properly made that contingent on EU trading scheme change and provided 34 per cent as the target that we would absolutely commit to now.

Sarah Boyack’s amendment 94 offers us the chance to promote 40 per cent as the target in the bill, with the power to revise that later if expert advice says that we should. We considered that approach at stage 2, but we thought that, in the circumstances, the UK Committee on Climate Change’s 42 per cent figure remained one that we should make contingent.

In my amendment 94A, which I believe and hope the Labour Party will support, we recommend to Parliament that the UK Committee on Climate Change’s 42 per cent figure be used. That is not about outbidding anyone, but about the integrity that comes from using only figures that are based on expert advice. Miss Boyack’s amendment 94 would establish for the first time the ability, based on expert advice, to reduce a target in the bill. Such a power should be very carefully regulated and controlled. We have maintained that that can happen only if there is insufficient EU agreement to increase the level of effort that is required and capable of being put in place.

Miss Boyack said that a week is a long time in politics. Well, we are planning for the very long term. There is a challenge for us all in the period to 2050.

Let me therefore confirm now that this Government will not use any powers to vary the 2020 target by introducing a figure that is lower than expert advice; let me make the commitment now that this Government will not use those powers beyond a single occasion; and let me make the commitment now that this Government will not use the powers at all if the EU raises its 2020 target to at least 30 per cent. We are pleased that a broad if not universal consensus has emerged on this subject.

Finally, I should explain that amendments 9 and 10 seek simply to consolidate the 42 per cent figure and that amendments 97 to 99 seek to strengthen the Government’s commitment. I also support amendment 101 in the name of Shirley-Anne Somerville.

I should also point out that although Patrick Harvie has committed to following expert advice, the 50 per cent figure that is set out in his amendment 7 deviates from that commitment. Similarly, amendment 8, in the name of Alison McInnes, seeks to apply the 42 per cent target at the outset and in advance of expert advice.

I move amendment 94A.

Patrick Harvie: A week is, indeed, a long time in politics; a few weeks are even longer. Sarah Boyack says that the Labour Party argued for tougher targets at stage 2; it is a shame that Labour members did not vote for them. If they had taken the opportunity at stage 2 to vote for the 42 per cent target, we would this morning be discussing a bill that had already been amended in that respect.

Labour members also had the opportunity to vote for a 42 per cent target, full stop, instead of a 42 per cent target with all the caveats, loopholes and get-out clauses that the Labour Party’s amendment 94 would introduce. That is my real concern. The amendment would not only introduce the power to vary or reduce the target, but relegate science to one of nine criteria that should be considered, which include economic competitiveness. I do not think that the Government—this Government, anyway—needs very much encouragement to put the environment second to economic competitiveness.

Agreeing to amendment 94 would merely delay the key vote, which would no longer be on this amendment or on the bill, but on any proposal to reduce the target that ministers might put before
Parliament. I have no doubt that, even within the limits of the commitment that Stewart Stevenson has just made, the Government will be perfectly capable of beefing up its delivery plan just that wee bit with a list of policy measures that it could implement to achieve a 42 per cent reduction—if it had the powers to do so. The UK Committee on Climate Change will say, “Yes, those measures might achieve a 42 per cent reduction,” at which the SNP will turn the whole matter into an argument between London and Edinburgh. In speaking to amendment 94, Sarah Boyack acknowledged that she expects such an excuse to be used. My challenge, therefore, to the Labour Party is this. If the rest of us accept amendment 94 as the best that we will get, even though we need better, will the Labour Party make a commitment to block any attempt by the SNP Government—or a future Labour Government—to reduce the target on the basis that certain powers are not within Scotland’s remit? It is clear that we have the powers to implement various policy measures, including a radical approach to demand-management in transport, energy use and other areas, to achieve the radical cuts that we need. Will the Labour Party make that commitment?

Many of the other amendments in this group would amend sections 2 or 2A, and will become redundant if amendment 94, as amended, is agreed to. However, I draw the chamber’s attention to amendment 108 in my name, which would limit the Government’s opportunity to use international credits in the short term if, in future, the minister does as I fear he wishes and reduces the target to 34 per cent.

**Alison McInnes (North East Scotland) (LD):** I am afraid that I rise to speak with a slight sense of anticlimax, given that amendment 94 and the Government’s amendment 94A, which the Liberal Democrats will very shortly vote for, more or less gazump my amendment 8.

I make it very clear that the Liberal Democrats want the bill to be as strong as is realistically possible and, although I have no doubt that amendment 8 would be the best option in that respect, I can do the maths as well as anyone and I realise that we should get behind amendment 94.

I hope that, finally, we are all agreed that a 34 per cent reduction by 2020 is not enough. After all, the route that we take towards the 2050 target of an 80 per cent reduction on 1990 emissions levels is just as important as reaching that destination. To explain what I mean, I will link my comments to my later amendments on cumulative emissions. Although we can reach the same end via a 34 per cent or 42 per cent target—or indeed any number in between—our impact on the earth’s atmosphere depends very much on our chosen route. Such point-in-time targets are not simply abstract numbers but represent real quantifiable amounts of emissions, and the greater the early action that we take, the better our chance of limiting the damage of climate change.

Early action is vital. A weaker interim target means not only more emissions between now and 2020, but more emissions in every year between 2020 and 2050. As a result, the target will affect not only the next 10 years but the next 40.

I am concerned about the framing of amendment 94. For example, I am by no means encouraged by its reference to 40 per cent as the target “for the time being”; I am not encouraged by its separation of the reference to “a higher figure” from the reference to “a figure provided by the relevant body”.

in referring to any modification of the interim target—a caveat, I might add, that opens the door to lowering the target after today’s figure grabs the headlines; and I am not encouraged by yesterday’s letter from the UK Committee on Climate Change to the minister that suggests that its initial view is that an appropriate target might be “slightly below 34%”. That view appears to be based on limited information and on matters that have not been fully investigated. I trust that, given time, the Committee on Climate Change will come to realise that Scotland can do more. That Scotland must do more is by now, I hope, a given.

We will back the Government’s amendment 94A, which seeks to increase the “for the time being” target to 42 per cent, as that is the figure backed by the science and represents the cut that the evidence says is required. It will be difficult to reach that target, but we must make the effort to do so. I hope that, after today, sense will prevail and that an order weakening the target that we will agree to will not be made. I would oppose any such move, and I am certain that the rest of Scotland would too.

The bill is a signature piece of legislation for the Scottish Parliament. Given that the interim target is a key element of it, we should not be afraid to aim high. We certainly must not be so afraid of failure that we aim at nothing at all.

**Shirley-Anne Somerville (Lothians) (SNP):** The Scottish ministers have committed to seeking the UK Committee on Climate Change’s advice on the most appropriate level for the 2020 interim target, and amendment 101 would make that commitment a statutory requirement. Under its terms, ministers would also have to publish the advice that they receive to ensure that the decision-making process is open and transparent.
At stage 2, we on the Transport, Infrastructure and Climate Change Committee were advised that we should not

“pick a percentage for Scotland but that we should pose to the relevant advisory body the right question—what is the most that we can do to make the bill as strong as it can be? We should make the figure”—[Interruption.] We should make that—[Interruption.]

George Foulkes (Lothians) (Lab): Can you not read your writing?

Members: Oh!
The Presiding Officer: Order.

Shirley-Anne Somerville: Thank you, George.

“We should make the figure that that body provides our target. ... The target is not a subject for political point scoring; our objective in the bill should be the highest level that is consistent with what is achievable.”—[Official Report, Transport, Infrastructure and Climate Change Committee, 26 May 2009; c 1770-1.]

I probably got the words mixed up, because they are not mine, but Des McNulty’s. Perhaps his English is not as good as mine. Regardless of his use of punctuation and grammar, however, I support his point.

Amendment 101 sets out an appropriate way of ensuring that the 2020 interim target is as demanding as possible while still being based on the expert analysis of how it can realistically be delivered. After all, such targets must be challenging but credible.

The bill will lose credibility with the public and, more important, the policies that any future Administration will need to put in place to achieve these targets will struggle to carry their favour if people pick up nothing from the coverage of today’s debate other than an argument over numbers. That is why I am pleased not only to speak to amendment 101 but to support the Government’s amendment 94A, which seeks to ensure that the only numbers that appear in the bill are those that have been mentioned by the UK Committee on Climate Change.

Amendment 101 would complement the Government’s approach and ensure that the UK Committee on Climate Change is given its rightful place in advising on the interim target. This is about the experts advising the politicians on what Scotland can achieve and the politicians listening to and acting on that advice.

Malcolm Chisholm (Edinburgh North and Leith) (Lab): This is the most important debate on the bill; indeed, this has been the key issue throughout the whole process. We all know that cumulative emissions are what matter and that, as a result, early action is crucial.

It looks as if we can show that the Parliament is united around the key issue of the interim target. Of course, there are debates to come about whether it will be modified. I am on the side of the argument that is reluctant to change from 42 per cent. The 34 per cent target was always rather unambitious because the trajectory from 1990, if we had reduced at the rate that we have been reducing, would have led us to a 32 per cent reduction by 2020. We need to be far more ambitious than that. The whole point of a target is to stretch and change behaviour.

Of course we must listen to the expert advice, but the experts will be influenced by the policy options that we are prepared to bring forward. That is why the months that follow are crucial. We must think outside the box and be more ambitious in bringing forward policy changes that will make achievable a target that is far more ambitious than 34 per cent. Even the Government’s delivery plan shows that far more than 34 per cent can be achieved, so let us concentrate our minds after today to ensure that we do not have to change the 42 per cent target in the bill, which we can all welcome today.

Alex Johnstone (North East Scotland) (Con): I am one of those people who are instinctively opposed in a range of policy areas to the setting of targets. Consequently, it is more difficult for me to deal with a bill that is largely centred on the setting of targets, but I accept that the process is necessary.

The danger with the bill was always that, at one point or another, we would get involved in an unseemly bidding war. That happened at the outset when the Government plucked the 80 per cent figure out of the air. Some might have argued that that figure was chosen simply to compete with a lower figure in the south. However, time has moved on and we have all acquiesced around the figure—something we have consolidated through the decisions that we have already taken this morning.

In introducing her amendment, Sarah Boyack made it clear that she has been influenced by the lobbying that has taken place during the passage of the bill. I, too, have been influenced by lobbying. I have been most impressed by the work that the Stop Climate Chaos Coalition has done, but I have also been lobbied by a number of representative bodies that cover public authorities and business interests, who are concerned that we do not set an interim target that stretches too far and causes a negative impact on the Scottish economy at a time when we can ill afford it.

I have to be persuaded that the process that we are about to go through is the correct one. Having read amendment 94, and the amendment to it, amendment 94A, I believe that it can be argued
that taking the step today can be justified. However, I must warn that supporting or acquiescing to the process will consolidate my resolve to stick much more rigidly to the other targets in the bill as approved at stage 2.

Consequently, I will support the Government’s amendment to the amendment and subsequently amendment 94 in the name of Sarah Boyack, but I do so understanding that I will have to continue to justify that course of action to a range of interests in Scotland who are concerned that we do not set an unachievable target for 2020.

Jack McConnell (Motherwell and Wishaw) (Lab): Like Malcolm Chisholm, I believe that the issue that we are discussing is the key one that we will consider today. I want to make a brief case for having the most ambitious targets possible. We should be guided by science and listen to expert advice, but expert advice can be contradictory. If we had listened to all the expert advice back in early 2002, in my first months as First Minister, we would not have set the high targets that were set for renewable energy. If we had not set those targets, we would not have met them and the Government that is in place today would not have had the opportunity to set even more ambitious targets for industry to meet and public authorities to comply with.

In the area of climate change, perhaps above all others, the setting of ambitious targets forces people in industry, public authorities and experts to consider how they can be met. As Malcolm Chisholm said, targets can shape behaviour and effect change. We are talking about a future that most of us in the Parliament will not be here to see, but which the Parliament will change fundamentally. We need to ensure that the future is not just cleaner, greener and safer, but more sustainable. By setting ambitious targets today, we will set out our stall as a Parliament. People throughout Scotland and elsewhere will follow us if we give that lead.

Expert opinion is important and scientific advice can guide us, but ultimately the political decisions that we make as a Parliament are far more important. Today, we should set a lead for Scotland.

10:00

Des McNulty (Clydebank and Milngavie) (Lab): The context in which we are debating the matter is the SNP’s manifesto commitment to set a 3 per cent year-by-year target, which was abandoned. We should remember that. The other context is that, in considering the bill, we managed to bring forward the date of the interim target from 2030, which was the original date, to 2020, so we have made significant progress in pegging back what was lost when the SNP shifted its position.

I am pleased that the various parties, in making their contributions, have accepted the position that I put forward at stage 2, which is that it is difficult for us as politicians to select a particular number without having an up-to-date and focused consideration by an expert committee—in this case, the UK Committee on Climate Change. To me, it makes logical sense to go back to the UK committee and ask it not just for an assessment of the global conditions but for an assessment of Scotland’s potential—what Scotland can do to take forward its climate change contribution—and the policies that we need to put in place to push the target up. We can boost the target only by taking policy actions to deliver it. What we say does not make a lot of difference. It is what we do, fundamentally, that makes a difference.

Patrick Harvie is right. When the Committee on Climate Change comes back, there will be a debate in the chamber about the figure that it puts forward, but there will also be a debate about the policies that are needed to take action forward. We must prepare for that debate. If the answer is that if we just do what we are doing we can achieve percentage X, I do not think that we will simply accept percentage X. We will have a debate about the policies and how we can take that argument forward.

I do not see the logic of the SNP’s position. Having said that 34 per cent is the maximum that is possible, it is now putting forward a case for 42 per cent. To me, however, the important thing is that there is a scientific mechanism.

The Cabinet Secretary for Finance and Sustainable Growth (John Swinney): Let me explain the logic of the Government’s position to Mr McNulty. What the Government is setting out is exactly what we set out at stage 2—that we can achieve 42 per cent if we get the necessary support that we all hope for from the EU discussions later this year. What we propose today, with Mr Stevenson’s clarifying amendment 94A, is to put a scientific target of 42 per cent in the bill. That can be realised if the agreement that we all hope for at the EU level is delivered.

Des McNulty: I do not think that the issue is purely about what is delivered in the EU commitment. The issue is about what we can deliver here in Scotland. We believe that more than 34 per cent can be delivered and that referring to the UK Committee on Climate Change for a considered view on what can be achieved is the right approach. On the basis of the expert advice, we will come back to the chamber and decide how to go forward. I support Sarah Boyack’s amendment 94.
**Stewart Stevenson**: Patrick Harvie said that he would open with the science, but he then appeared to ask us to disregard the science and the expert opinion on the 34 per cent and 42 per cent targets.

Of course we have to ask for the advice of the UK Committee on Climate Change in relation to Scotland’s particular circumstances.

Alison McInnes said that the bill is the Parliament’s signature piece of legislation. I am happy to agree with her and I suspect that there will be no dissent from that view.

Shirley-Anne Somerville must read Des McNulty’s words more carefully.

Malcolm Chisholm made an important point. Of course we will be influenced by policy options that are presented, particularly on the subject of cumulative emissions. That is right and proper. It is also proper that the Government be challenged to bring forward policy options to address where the bill should take us after it has been enacted. However, we accept that, as Malcolm Chisholm pointed out, within our delivery programme we can go beyond 34 per cent, and the 36 per cent figure that has been used is an option. Further policy options will allow us to go forward.

Alex Johnstone made an important point about continuing engagement. This is not the end of the process; if it is anything, it is the end of the beginning.

Jack McConnell made good points. Given his involvement in the matter, I was surprised that he did not take the opportunity to say that part of what we are doing is making a moral case on behalf of nations that will be more adversely affected by climate change than Scotland will be, such as those in sub-Saharan Africa, in particular. There is a moral as well as a practical imperative to what we are doing.

Amendment 94A agreed to.

Amendment 94, as amended, agreed to.

**Section 2—The interim target**

Amendment 7 not moved.

Amendment 8 not moved.

Amendment 95 moved—[Sarah Boyack]—and agreed to.

**Section 2A—Modifying the interim target**

The Presiding Officer: I remind members that if amendment 96 is agreed to, amendments 97, 9, 10, 98 and 99 will be pre-empted.

Amendment 96 not moved.

Amendments 97, 9, 10, 98 and 99 moved—[Stewart Stevenson]—and agreed to.

Amendment 100 moved—[Sarah Boyack]—and agreed to.

After section 2A

**Section 3—Annual targets**

The Presiding Officer: Group 3 is on the setting of annual targets. Amendment 11, in the name of Alison McInnes, is grouped with amendments 12 to 18. I draw members’ attention to the additional information on pre-emptions in the group, which is in the groupings paper.

Alison McInnes: I will speak to amendment 11 and to amendments 12 and 15, in the name of Patrick Harvie, because I would have lodged such amendments if he had not beaten me to it.

I have a question for members. When is 3 per cent not 3 per cent? Perhaps that is not the most challenging riddle. We all know the answer: when it is inconvenient for the SNP.

Mr Swinney said that the Government was “committed to an 80 per cent reduction in our emissions by 2050. That target is equivalent to a reduction of 3 per cent each year.”—[Official Report, 21 June 2007; c 1039.]

I hesitate to challenge the mathematics of Scotland’s Cabinet Secretary for Finance and Sustainable Growth, but I must do so. An 80 per cent reduction by 2050 is equivalent to 3 per cent annual reductions if and only if the 80 per cent target is met by making annual reductions of 3 per cent.

I will explain, and I must again talk about cumulative emissions. Let us imagine two trajectories towards the 80 per cent target: in one, the interim target is 34 per cent, and 3 per cent annual reductions kick in after 2020; in the other, the interim target is 42 per cent and the 3 per cent annual reductions happen from the outset. Those trajectories are not equivalent. The start and end points are the same, but the bit in the middle—the important bit—is far from the same. On the first trajectory, we emit nearly 1,500 million tonnes of CO₂ equivalent. On the second, we emit just more than 1,300 million tonnes. The difference is about 142 million tonnes of CO₂ equivalent, or nearly three times the total emissions for Scotland in 2006. The two trajectories are not equivalent.

That is why it is vital that we take early action. We need 3 per cent annual reductions now. SNP members have just voted for a 42 per cent interim target. Now they have the chance to show us that that was not just political manoeuvring. Let them show us that they intend to achieve the target.
Annual emissions reductions of 3 per cent will enable us to reach the 42 per cent reduction target by 2020. If the SNP is serious about that goal, I am confident that amendment 11 will gain support. If the SNP is not serious about the goal, Scotland will soon know it.

I move amendment 11.

Patrick Harvie: Alison McInnes made a good job of explaining something that is easier to explain in a graph than in a speech. The question that we must ask ourselves is not simply about point-in-time targets. Such targets are part of the issue, but if we are to determine what impact we are having on the climate we must also think about the trajectory and overall greenhouse gas emissions over the course of that trajectory.

The question is then very clear. We have stiffened the task and steepened the trajectory by bringing the interim target forward from 2030 to 2020 and raising it—albeit that during the coming months we must wait to see whether the Government wants to reduce it again. If by passing the bill the Parliament is defining a more ambitious trajectory, the annual targets must automatically be made stronger.

On first reading, amendments 15 and 17, in my name, and amendment 11, in the name of Alison McInnes, might seem slightly confusing, if only because some of them follow on from amendments that we debated earlier. Members are presented with a series of options. We can consider the 3 per cent annual target, to which the SNP committed in its manifesto and in Government for a while—although not for long enough to include it in the bill. The Labour Party has criticised the SNP for dropping its commitment to 3 per cent annual reductions. Let us now commit to ensuring that such reductions are made, rather than simply accepting that the target has been dropped.

We have an opportunity to raise the annual target to 4.5 per cent. I have argued that that is necessary for a more ambitious trajectory. The Parliament rejected amendment 6, which would have set the 2050 target at 90 per cent, so it might well also reject a 4.5 per cent annual target.

We also have an opportunity to ensure that the 3 per cent target is brought forward, so that we do not have to wait until 2020 before it comes into effect. Members who are not convinced that we can achieve 3 per cent in the first couple of years can support amendment 12, which would remove section 3(2)(b).

We have supported a steeper and more ambitious trajectory. We will fail to achieve that trajectory unless we improve the annual targets. I urge members to be as bold as they can be.

Stewart Stevenson: The amendments in my name in group 3 are concerned with correcting drafting anomalies and inconsistencies that have crept into the bill as a result of amendments at stage 2. Section 18A introduced the concept of periods of individual net Scottish emissions accounts, rather than an overall net Scottish emissions account that would have covered the entire period from 2010 to 2030. The approach more accurately reflected the concepts that are enshrined in the bill.

Amendment 13 will amend section 3(2)(b) to refer to multiple net Scottish emissions accounts, rather than to a single account. Amendment 14 will extend the scope of an amendment that Des McNulty made at stage 2, so that the annual targets for 2011 to 2019 are set at amounts that are consistent with achieving the 2050 target as well as the interim target. Amendment 16 will apply to the annual targets for 2020 to 2050 requirements that are similar to those that section 3(2)(b) applies to the targets for 2011 to 2019.

Amendment 18 will delete section 4(3). I am not seeking to remove the important provision that the Scottish ministers “must … have regard” to annual targets. The amendments that were agreed to at stage 2, and the amendments that have been lodged at stage 3 in relation to section 3(2) of the bill will require that annual targets be set at amounts that are consistent over time and which will allow the interim target and the 2050 target to be met.

10:15

The duty is now stronger than the duty that was in the bill as originally introduced. The requirement in section 4(3) is that, when setting annual targets, ministers “must … have regard” to the interim target and the 2050 target. However, the duty in section 4(3) has now been superseded. The subsection is therefore unnecessary, and amendment 18 seeks to delete it.

I will now consider the group 3 amendments lodged by Alison McInnes and Patrick Harvie—which I note were not supported in the Transport, Infrastructure and Climate Change Committee.

The effect of Alison McInnes’s amendment 11 would be that the annual target for 2010 was “at least 3%” lower than the estimated emissions for 2009. In a similar way, Patrick Harvie’s amendment 17 would include the figure of “4.5%”. As I explained to the Transport, Infrastructure and Climate Change Committee at stage 2, accelerating our annual reductions, from the current average of approximately 1.2 per cent to a figure of 3 per cent or more, is simply not immediately possible. I whole-heartedly agree that we have to build towards the level of annual...
reductions suggested as soon as possible, but we cannot make it happen overnight.

I will welcome any and all reasonable suggestions as to how we can achieve the reductions in emissions as quickly as possible. We published our climate change delivery plan last week; I have yet to see the plans of the Scottish Green Party or the Liberal Democrats. We will continue to draw on the expert advice of the UK Committee on Climate Change, which will be valuable as we set our annual targets at challenging but realistic levels, designed to meet both the interim and the long-term targets that are set out in the bill.

I am sorry that I will be unable to support amendments 11, 12, 15 and 17.

Alison McInnes: I simply repeat that early and sustained action is the sensible way forward. The path that we choose in order to move towards the end point will be important. If we do not go for 3 per cent from the outset, we will face a much harder struggle further down the line.

When the Transport, Infrastructure and Climate Change Committee was taking evidence on the bill, many representations were made to us about giving a clear message to industry and to our partners in Scotland. Certainty is needed if investment is to flow. That investment, and the green jobs that would be created, would be of great benefit to Scotland at this time. I therefore hope that members will support amendment 11.

The Deputy Presiding Officer (Alasdair Morgan): The question is, that amendment 11 be agreed to. Are we agreed?

Members: No.

The Deputy Presiding Officer: There will be a division.

For
Brown, Robert (Glasgow) (LD)
Finnie, Ross (West of Scotland) (LD)
Harper, Robin (Lothians) (Green)
Harvie, Patrick (Glasgow) (Green)
Hume, Jim (South of Scotland) (LD)
McArthur, Liam (Orkney) (LD)
McInnes, Alison (North East Scotland) (LD)
Munro, John Farquhar (Ross, Skye and Inverness West) (LD)
O’Donnell, Hugh (Central Scotland) (LD)
Pringle, Mike (Edinburgh South) (LD)
Purvis, Jeremy (Tweeddale, Ettrick and Lauderdale) (LD)
Rumbles, Mike (West Aberdeenshire and Kincardine) (LD)
Scott, Tavish (Shetland) (LD)
Smith, Iain (North East Fife) (LD)
Smith, Margaret (Edinburgh West) (LD)
Stephen, Nicol (Aberdeen South) (LD)
Stone, Jamie (Caithness, Sutherland and Easter Ross) (LD)
Tolson, Jim (Dunfermline West) (LD)

AGAINST
Adam, Brian (Aberdeen North) (SNP)
Aitken, Bill (Glasgow) (Con)
Alexander, Ms Wendy (Paisley North) (Lab)
Allan, Alasdair (Western Isles) (SNP)
Bailie, Jackie (Dumbarton) (Lab)
Baker, Claire (Mid Scotland and Fife) (Lab)
Baker, Richard (North East Scotland) (Lab)
Boyack, Sarah (Edinburgh Central) (Lab)
Brankin, Rhona (Midlothian) (Lab)
Broacklebank, Ted (Mid Scotland and Fife) (Con)
Brown, Gavin (Lothians) (Con)
Brown, Keith (Ochil) (SNP)
Brownlee, Derek (South of Scotland) (Con)
Butler, Bill (Glasgow Anniesland) (Lab)
Campbell, Aileen (South of Scotland) (SNP)
Carlaw, Jackson (West of Scotland) (Con)
Chisholm, Malcolm (Edinburgh North and Leith) (Lab)
Coffey, Willie (Kilmarnock and Loudoun) (SNP)
Constance, Angela (Livingston) (SNP)
Craigie, Cathie (Cumbernauld and Kilsyth) (Lab)
Crawford, Bruce (Stirling) (SNP)
Cunningham, Roseanna (Perth) (SNP)
Curran, Margaret (Glasgow Baillieston) (Lab)
Don, Nigel (North East Scotland) (SNP)
Doris, Bob (Glasgow) (SNP)
Edie, Helen (Dunfermline East) (Lab)
Ewing, Fergus (Inverness East, Nairn and Lochaber) (SNP)
Fabiani, Linda (Central Scotland) (SNP)
Ferguson, Patricia (Glasgow Maryhill) (Lab)
FitzPatrick, Joe (Dundee West) (SNP)
Foulkes, George (Lothians) (Lab)
Fraser, Murdo (Mid Scotland and Fife) (Con)
Gibson, Kenneth (Cunninghame North) (SNP)
Gibson, Rob (Highlands and Islands) (SNP)
Gillon, Karen (Clydesdale) (Lab)
Glen, Marilyn (North East Scotland) (Lab)
Godman, Trish (West Renfrewshire) (Lab)
Goldie, Annabel (West of Scotland) (Con)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Graham, Christine (South of Scotland) (SNP)
Grant, Rhoda (Highlands and Islands) (Lab)
Gray, Iain (East Lothian) (Lab)
Harvie, Christopher (Mid Scotland and Fife) (SNP)
Henry, Hugh (Paisley South) (Lab)
Hepburn, Jamie (Central Scotland) (SNP)
Hyslop, Fiona (Lothians) (SNP)
Ingram, Adam (South of Scotland) (SNP)
Jamieson, Cathy (Carrick, Cumnock and Doon Valley) (Lab)
Johnstone, Alex (North East Scotland) (Con)
Kelly, James (Glasgow Rutherglen) (Lab)
Kerr, Andy (East Kilbride) (Lab)
Kidd, Bill (Glasgow) (SNP)
Lamont, Johann (Glasgow Pollok) (Lab)
Lamont, John (Roxburgh and Berwickshire) (Con)
Livingstone, Marilyn (Kirkcaldy) (Lab)
Lochhead, Richard (Moray) (SNP)
MacAskill, Kenny (Edinburgh East and Musselburgh) (SNP)
Macdonald, Lewis (Aberdeen Central) (Lab)
Macintosh, Ken (Eastwood) (Lab)
Martin, Paul (Glasgow Springfield) (Lab)
Marwick, Tricia (Central Fife) (SNP)
Mather, Jim (Argyll and Bute) (SNP)
Matheson, Michael (Falkirk West) (SNP)
Maxwell, Stewart (West of Scotland) (SNP)
McAveety, Mr Frank (Glasgow Shettleston) (Lab)
McConnell, Jack (Motherwell and Wishaw) (Lab)
McGrigor, Jamie (Highlands and Islands) (Con)
McKee, Ian (Lothians) (SNP)
McKelvie, Christina (Central Scotland) (SNP)
McLaughlin, Anne (Glasgow) (SNP)
Amendment 12 moved—[Patrick Harvie].

The Deputy Presiding Officer: The question is, that amendment 12 be agreed to. Are we agreed?

Members: No.

The Deputy Presiding Officer: The result of the division is: For 18, Against 104, Abstentions 0.

Amendment 11 disagreed to.

The Deputy Presiding Officer: Amendment 12, in the name of Patrick Harvie, has already been debated with amendment 11. I remind members that if amendment 12 is agreed to, it will pre-empt amendments 13 and 14.

Amendment 12 moved—[Patrick Harvie].

The Deputy Presiding Officer: The result of the division is: For 18, Against 104, Abstentions 0.

Amendment 11 disagreed to.

The Deputy Presiding Officer: The question is, that amendment 12 be agreed to. Are we agreed?

Members: No.

The Deputy Presiding Officer: The result of the division is: For 18, Against 104, Abstentions 0.

Amendment 11 disagreed to.

The Deputy Presiding Officer: The question is, that amendment 12 be agreed to. Are we agreed?

Members: No.

The Deputy Presiding Officer: The result of the division is: For 18, Against 104, Abstentions 0.

Amendment 11 disagreed to.
Amendment 12 disagreed to.

Amendments 13 and 14 moved—[Stewart Stevenson]—and agreed to.

Amendment 15 moved—[Patrick Harvie].

The Deputy Presiding Officer: The result of the division is: For 18, Against 103, Abstentions 0.

The Deputy Presiding Officer: The question is, that amendment 15 be agreed to. Are we agreed?

Members: No.

The Deputy Presiding Officer: There will be a division.

FOR

Brown, Robert (Glasgow) (LD)
Chisholm, Malcolm (Edinburgh North and Leith) (Lab)
Finnie, Ross (West of Scotland) (LD)
Harper, Robin (Lothians) (Green)
Harvie, Patrick (Glasgow) (Green)
Hume, Jim (South of Scotland) (LD)
McArthur, Liam (Orkney) (LD)
McInnes, Alison (North East Scotland) (LD)
Munro, John Farquhar (Ross, Skye and Inverness West) (LD)
O'Donnell, Hugh (Central Scotland) (LD)
Pringle, Mike (Edinburgh South) (LD)
Purvis, Jeremy (Tweeddale, Etrick and Lauderdale) (LD)
Rumbles, Mike (West Aberdeenshire and Kincardine) (LD)
Scott, Tavish (Shetland) (LD)
Smith, Iain (North East Fife) (LD)
Smith, Margaret (Edinburgh West) (LD)
Stephen, Nicol (Aberdeen South) (LD)
Stone, Jamie (Caithness, Sutherland and Easter Ross) (LD)
Tolson, Jim (Dunfermline West) (LD)

AGAINST

Adam, Brian (Aberdeen North) (SNP)
Aitken, Bill (Glasgow) (Con)
Alexander, Ms Wendy (Paisley North) (Lab)
Allan, Alasdair (Western Isles) (SNP)
Bailie, Jackie (Dumbarton) (Lab)
Baker, Claire (Mid Scotland and Fife) (Lab)
Baker, Richard (North East Scotland) (Lab)
Boyack, Sarah (Edinburgh Central) (Lab)
Brankin, Rhona (Midlothian) (Lab)
Brocklebank, Ted (Mid Scotland and Fife) (Con)
Brown, Gavin (Lothians) (Con)
Brown, Keith (Ochil) (SNP)
Brownliee, Derek (South of Scotland) (Con)
Butler, Bill (Glasgow Anniesland) (Lab)
Campbell, Aileen (South of Scotland) (SNP)
Carlaw, Jackson (West of Scotland) (Con)
Coffey, Willie (Kilmarnock and Loudoun) (SNP)
Constance, Angela (Livingston) (SNP)
Craigie, Cathie (Cumbernauld and Kilsyth) (Lab)
Crawford, Bruce (Stirling) (SNP)
Cunningham, Roseanna (Glasgow South) (SNP)
Curran, Margaret (Glasgow Baillieston) (Lab)
Don, Nigel (North East Scotland) (SNP)
Doris, Bob (Glasgow) (SNP)
Eadie, Helen (Dunfermline East) (Lab)
Ewing, Fergus (Inverness East, Nairn and Lochaber) (SNP)
Fabian, Linda (Central Scotland) (SNP)
Ferguson, Patricia (Glasgow Maryhill) (Lab)
FitzPatrick, Joe (Dundee West) (SNP)
Foulkes, George (Lothians) (Lab)
Fraser, Murdo (Mid Scotland and Fife) (Con)
Gibson, Kenneth (Cunninghame North) (SNP)
Gibson, Rob (Highlands and Islands) (SNP)
Gillon, Karen (Clydesdale) (Lab)
Glen, Marilyn (North East Scotland) (Lab)
Goldie, Annabel (West of Scotland) (Con)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Grahame, Christine (South of Scotland) (SNP)
Grant, Rhoda (Highlands and Islands) (Lab)
Gray, Iain (East Lothian) (Lab)
Harvie, Christopher (Mid Scotland and Fife) (SNP)
Henry, Hugh (Paisley South) (Lab)
Hepburn, Jamie (Central Scotland) (SNP)
Hyslop, Fiona (Lothians) (SNP)
Ingram, Adam (South of Scotland) (SNP)
Jamieson, Cathy (Carrick, Cumnock and Doon Valley) (Lab)
Johnstone, Alex (North East Scotland) (Con)
Kelly, James (Glasgow Rutherglen) (Lab)
Kerr, Andy (East Kilbride) (Lab)
Kidd, Bill (Glasgow) (SNP)
Lamont, Johann (Glasgow Pollok) (Lab)
Lamont, John ( Roxburgh and Berwickshire) (Con)
Livingstone, Marilyn (Kirkcaldy) (Lab)
Lochhead, Richard (Moray) (SNP)
MacAekill, Kenny (Edinburgh East and Musselburgh) (SNP)
Macdonald, Lewis (Aberdeen Central) (Lab)
Macintosh, Ken (Eastwood) (Lab)
Martin, Paul (Glasgow Springburn) (Lab)
Marwick, Tricia (Central Fife) (SNP)
Mather, Jim (Argyll and Bute) (SNP)
Matheson, Michael (Falkirk West) (SNP)
Maxwell, Stewart (West of Scotland) (SNP)
Amendment 17 moved—[Patrick Harvie].

The Deputy Presiding Officer: The question is, that amendment 17 be agreed to. Are we agreed?

Members: No.

Amendment 15 disagreed to.

Amendment 16 moved—[Stewart Stevenson]—and agreed to.

Amendment 17 moved—[Patrick Harvie].
McNulty, Des (Clydebank and Milngavie) (Lab)
Miline, Nanette (North East Scotland) (Con)
Mitchell, Margaret (Central Scotland) (Con)
Mulligan, Mary (Linlithgow) (Lab)
Munro, John Farquhar (Ross, Skye and Inverness West) (LD)
Neil, Alex (Central Scotland) (SNP)
O'Donnell, Hugh (Central Scotland) (LD)
Oldfather, Irene (Cunninghame South) (Lab)
Park, John (Mid Scotland and Fife) (Lab)
Paton, Gil (West of Scotland) (SNP)
Peacock, Peter (Highlands and Islands) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Pringle, Mike (Edinburgh South) (LD)
Purvis, Jeremy (Tweeddale, Ettrick and Lauderdale) (LD)
Robison, Shona (Dundee East) (SNP)
Rumbles, Mike (West Aberdeen and Kincardine) (LD)
Salmond, Alex (Gordon) (SNP)
Scanlon, Mary (Highlands and Islands) (Con)
Scott, John (Ayr) (Con)
Scott, Tavish (Shetland) (LD)
Simpson, Dr Richard (Mid Scotland and Fife) (Lab)
Smith, Elaine (Coatbridge and Chyston) (Lab)
Smith, Elizabeth (Mid Scotland and Fife) (Con)
Smith, Iain (North East Fife) (LD)
Smith, Margaret (Edinburgh West) (LD)
Somerville, Shirley-Anne (Lothians) (SNP)
Stephen, Nic (Aberdeen South) (LD)
Stevenson, Stewart (Banff and Buchan) (SNP)
Stewart, David (Highlands and Islands) (Lab)
Stone, Jamie (Caithness, Sutherland and Easter Ross) (LD)
Sturgeon, Nicola (Glasgow Gowan) (SNP)
Swinney, John (North Tayside) (SNP)
Thompson, Dave (Highlands and Islands) (SNP)
Tolson, Jim (Dunfermline West) (LD)
Watt, Maureen (North East Scotland) (SNP)
Welsh, Andrew (Angus) (SNP)
White, Sandra (Glasgow) (SNP)
Whitefield, Karen (Ardrie and Shotts) (Lab)
Whitton, David (Strathkelvin and Bearsden) (Lab)
Wilson, Bill (West of Scotland) (SNP)
Wilson, John (Central Scotland) (SNP)

**The Deputy Presiding Officer:** The result of the division is: For 2, Against 120, Abstentions 0.

Amendment 17 disagreed to.

Section 4—Setting annual targets

Amendment 18 moved—[Stewart Stevenson].

**The Deputy Presiding Officer:** The question is, that amendment 18 be agreed to. Are we agreed?

**Members:** No.

**The Deputy Presiding Officer:** There will be a division.

**For**
Adam, Brian (Aberdeen North) (SNP)
Aitken, Bill (Glasgow) (Con)
Allan, Alasdair (Western Isles) (SNP)
Brocklebank, Ted (Mid Scotland and Fife) (Con)
Brown, Gavin (Lothians) (Con)
Brown, Keith (Ochil) (SNP)
Brown, Robert (Glasgow) (LD)
Brownlee, Derek (South of Scotland) (Con)
Campbell, Alen (South of Scotland) (SNP)
Carlaw, Jackson (West of Scotland) (Con)
Coffey, Willie (Kilmarnock and Loudoun) (SNP)
Constance, Angela (Livingston) (SNP)
Crawford, Bruce (Stirling) (SNP)
Cunningham, Roseanna (Perth) (SNP)
Don, Nigel (North East Scotland) (SNP)
Doris, Bob (Glasgow) (SNP)
Ewing, Fergus (Inverness East, Nairn and Lochaber) (SNP)
Fabian, Linda (Central Scotland) (SNP)
Finnie, Ross (West of Scotland) (LD)
FitzPatrick, Joe (Dundee West) (SNP)
Fraser, Murdo (Mid Scotland and Fife) (Con)
Gibson, Kenneth (Cunninghame North) (SNP)
Gibson, Rob (Highlands and Islands) (SNP)
Goldie, Annabel (West of Scotland) (Con)
Graham, Christine (South of Scotland) (SNP)
Harman, Robin (Lothian) (Green)
Harvie, Christopher (Mid Scotland and Fife) (SNP)
Harvie, Patrick (Glasgow) (Green)
Hepburn, Jamie (Central Scotland) (SNP)
Hume, Jim (South of Scotland) (LD)
Hyslop, Fiona (Lothians) (SNP)
Ingram, Adam (South of Scotland) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Kidd, Bill (Glasgow) (SNP)
Lamont, John (Roxburgh and Berwickshire) (Con)
Lochhead, Richard (Moray) (SNP)
MacAskill, Kenny (Edinburgh East and Musselburgh) (SNP)
Marwick, Tricia (Central Fife) (SNP)
Matther, Jim (Argyll and Bute) (SNP)
Matheson, Michael (Falkirk West) (SNP)
Maxwell, Stewart (West of Scotland) (SNP)
McArthur, Liam (Orkney) (LD)
McGrigor, Jamie (Highlands and Islands) (Con)
McInnes, Alison (North East Scotland) (LD)
McKee, Ian (Lothians) (SNP)
McKelvie, Christina (Central Scotland) (SNP)
McLaughlin, Anne (Glasgow) (SNP)
McLetchie, David (Edinburgh Pentlands) (Con)
McMillan, Stuart (West of Scotland) (SNP)
Milne, Nanette (North East Scotland) (Con)
Mitchell, Margaret (Central Scotland) (Con)
Munro, John Farquhar (Ross, Skye and Inverness West) (LD)
Neil, Alex (Central Scotland) (SNP)
O'Donnell, Hugh (Central Scotland) (LD)
Paton, Gill (West of Scotland) (SNP)
Pringle, Mike (Edinburgh South) (LD)
Purvis, Jeremy (Tweeddale, Ettrick and Lauderdale) (LD)
Robison, Shona (Dundee East) (SNP)
Rumbles, Mike (West Aberdeen and Kincardine) (LD)
Salmond, Alex (Gordon) (SNP)
Scanlon, Mary (Highlands and Islands) (Con)
Scott, John (Ayr) (Con)
Scott, Tavish (Shetland) (LD)
Smith, Elizabeth (Mid Scotland and Fife) (Con)
Smith, Iain (North East Fife) (LD)
Smith, Margaret (Edinburgh West) (LD)
Somerville, Shirley-Anne (Lothians) (SNP)
Stephen, Nic (Aberdeen South) (LD)
Stevenson, Stewart (Banff and Buchan) (SNP)
Stewart, David (Highlands and Islands) (Lab)
Stone, Jamie (Caithness, Sutherland and Easter Ross) (LD)
Sturgeon, Nicola (Glasgow Gowan) (SNP)
Swinney, John (North Tayside) (SNP)
Thompson, Dave (Highlands and Islands) (SNP)
Tolson, Jim (Dunfermline West) (LD)
Watt, Maureen (North East Scotland) (SNP)
Welsh, Andrew (Angus) (SNP)
White, Sandra (Glasgow) (SNP)
Whitefield, Karen (Ardrie and Shotts) (Lab)
Whitton, David (Strathkelvin and Bearsden) (Lab)
Wilson, Bill (West of Scotland) (SNP)
Wilson, John (Central Scotland) (SNP)
The Deputy Presiding Officer: The result of the division is: For 79, Against 43, Abstentions 0.

Amendment 18 agreed to.

The Deputy Presiding Officer: Group 4 is on setting annual targets—criteria. Amendment 102, in the name of Shirley-Anne Somerville, is grouped with amendments 103 to 105 and 116.

Shirley-Anne Somerville: During the passage of the bill, we have heard a lot about the need to take early action to tackle climate change. We have already taken such action by agreeing to certain amendments this morning. However, we must also consider the total amount of greenhouse gas emissions that we will produce between now and 2050.

I very much welcomed the amendment that was lodged by Cathy Peattie at stage 2 to place a duty on ministers to report on cumulative emissions. As a result, the bill contained—for the first time—a duty on cumulative emissions. The amendment picked up on a great deal of evidence that the committee heard on the need to take cumulative emissions into account.

I am keen for the bill to be even more ambitious, and I want to build on Cathy Peattie’s good work. That is why I have lodged amendments 102, 105 and 116, which will oblige the Scottish ministers to request and consider advice from the UK Committee on Climate Change on what the cumulative amount of net Scottish emissions should be for Scotland for the duration of the effect of the bill. The Scottish ministers should be obliged to request such information each time they set annual targets, so that we can obtain advice at the earliest opportunity.

Of course, it will not be enough simply to request advice; ministers will have to act on it. The amendments cover that point too. Once available, that information will prove to be a significant factor in determining the level of future annual targets, and will focus the minds of future Administrations on their obligations for the years right up until 2050.

The amendments in the name of Alison McInnes are along the same lines and, indeed, take us a step further. They are a welcome addition to the amendments in my name, and I urge the chamber to support them as well.

I move amendment 102.

Alison McInnes: I will support the amendments in the name of Shirley-Anne Somerville. They are a good start, but I hope that the chamber will also agree to amendments 103 and 104, in my name, which further define and enhance the role that a cumulative emissions budget would play.

I reassure the chamber that the amendments are not overly prescriptive. They do not set an arbitrary budget. They call for the best scientific evidence that is available to direct the Government with regard to what an appropriate total would be. Already this morning, there has been much emphasis on the idea of using the best scientific evidence that is available. In doing so, we will strengthen the fundamental target-setting role of the bill and move from a basis of doing what we need to do.

Unfortunately, because of the way in which the groupings of amendments have worked out, I feel as though I am repeating myself when I address the chamber this morning. However, as I have already said, when we set targets, it is impossible to examine the interim target, the annual targets and the cumulative targets in isolation; they are all, ultimately, stepping stones and tools along the course to the 80 per cent target—we cannot have one without the others. That is especially the case when we consider the question of cumulative emissions. I cannot emphasise enough that, for
the bill to be truly effective, we cannot be totally reliant on point-in-time targets; we must ensure that we know how much damaging greenhouse gas it is safe for Scotland to emit. We already know the critical concentration of atmospheric greenhouse gases beyond which there will necessarily be significant and damaging climate change events. We also know how much more emissions there can be in total before we reach that figure, which means that we can calculate a fair share for Scotland. I welcome the fact that Shirley-Anne Somerville has come to that view as well.

I cannot put it more simply than this: if we do not calculate an overall emissions budget based entirely on science and not on the addition of point-in-time targets, we simply cannot know whether those targets are right and we cannot know whether our annual targets will have the desired impact.

Stewart Stevenson: The amendments in the names of Shirley-Anne Somerville and Alison McInnes are concerned with Scotland’s cumulative emissions over the period from 2010 to 2050. I recognise the widespread desire for the bill to acknowledge the issue of Scotland’s cumulative emissions. I believe that the amendments in the name of Shirley-Anne Somerville provide a way for cumulative emissions to be incorporated in the bill in a way that is sufficiently flexible not to interfere with the emissions reduction trajectory that will be published in line with the batches of annual targets that ministers must set. I am therefore content to accept amendments 102, 105 and 116.

We have considered the amendments in the name of Alison McInnes. Although, from a technical point of view, we would have preferred some aspects of the amendments to be drafted differently—there might be some small practical difficulties with them—they basically express policy positions that we wish to pursue, so we are happy to commend them to the chamber as well.

Shirley-Anne Somerville: This is an important section. It ensures that we approach our early action with an eye to 2050 in a way that ensures that we do not emit more than our fair share in the years to come. As Alison McInnes has said, the section ties the two parts of our efforts together. It ensures that, when we set our annual targets, we focus on our cumulative and total emissions up to 2050. I urge the chamber to support all the amendments in the group.

Amendment 102 agreed to.

Amendments 103 and 104 moved—[Alison McInnes]—and agreed to.

Section 5—Advice before setting annual targets

The Deputy Presiding Officer: Group 5 is on the role of the relevant body in relation to annual targets. Amendment 19, in the name of the minister, is grouped with amendments 20, 20A, 20AA, 21, 106, 29 and 30.

10:30

Stewart Stevenson: Amendments 19 to 21 and 29 are necessary as a consequence of the amendments that require annual targets to be set at amounts that are consistent with achieving the interim and 2050 targets. That is necessary as a result of changes that were made at stage 2—and, perhaps, at stage 3—to section 3(2).

Amendments 19 to 21 amend section 5 to require that the Scottish ministers ask the relevant body for appropriate advice in that respect and publish it after they receive it.

Amendment 29 has a similar effect, in that it places a corresponding duty on the advisory body to provide that advice, as opposed to the duty on the Scottish ministers to ask for it.

On amendment 30, at stage 2, Des McNulty inserted paragraph (ba) into section 22(3) of the bill. The effect of the new paragraph is to require the advisory body, when providing advice under section 22(1)(a), to express its view about the respective contributions towards meeting the annual targets that should be made by energy efficiency, energy generation, land use and transport.

At stage 2, I indicated that I was broadly content with the proposal, and that remains the case. There is, however, a risk that paragraphs (a), (b) and (ba) of section 22(3) could be read as limiting the total extent of the areas about which the advisory body can give advice. Clearly, that is not meant to be the case, so amendment 30 seeks to insert a paragraph after paragraph (ba) that makes it clear that the advisory body has the freedom to express its views on any area in which it considers that there are particular opportunities to reduce the emission of greenhouse gases.

The Scottish ministers are comfortable with the first three paragraphs that amendment 20A, in the name of Patrick Harvie, proposes, as they simply cover the same subject matter areas as section 22, which sets out the things on which the advisory body must express a view. However, we have a difficulty with the last three proposed paragraphs. Two of them would in effect require ministers to seek advice from the relevant body on an emissions performance standard for electricity generating stations in Scotland that could be
different from any equivalent standard in England and Wales.

As I explained to the Transport, Infrastructure and Climate Change Committee at stage 2, the Government has not ruled out the introduction of an emissions performance standard for new electricity generating stations. However, that would need to be done in line with the UK approach to the development of carbon capture and storage technology. The UK Government is currently consulting on a CCS levy, which could be used to fund the substantial investment that will be necessary from the public sector. That levy will require new UK legislation, but spending it will be a devolved process. The Scottish Parliament will have its opportunity to give its consent to that in the autumn, when there will be an opportunity to discuss the matter in detail.

I intend to say more on this subject when we debate amendment 54 in group 15 but, for the reasons that I have outlined, the two paragraphs on electricity generation in amendment 20A are unnecessary, given the on-going work on the emissions performance standard.

The language that is used in the paragraph about cumulative emissions budgets is inconsistent with the language that is used about cumulative emissions elsewhere in the bill, and we should exercise caution in that regard.

Amendment 20A is also flawed in that it places a duty on the Scottish ministers to ask the relevant body for advice on cumulative emissions but places no equivalent duty on the body to provide that advice.

As I stated at the outset, we have no difficulty with the first three proposed paragraphs of amendment 20A. Accordingly, I have lodged amendment 20AA, which will allow those paragraphs into the bill while excluding the ones that create difficulties. If members are willing to agree amendment 20AA, ministers will be happy to support amendment 20A. If not, we cannot do so.

Amendment 106, in the name of Patrick Harvie, imports the definition of trading schemes from section 44 of the UK Climate Change Act 2008 and applies it as a definition of the traded sector in amendment 20A. Similar provision is already included in section 22(5) of the bill, and it also appears in the equivalent advice provisions in the UK act. Therefore, the Government is content to accept amendment 106.

I move amendment 19.

Patrick Harvie: I am grateful that the minister accepts amendment 106, but I was rather hoping that he would accept the rest of amendment 20A. Amendment 20A has multiple purposes—it tries to achieve three things. First, it deals with an issue of the language in provisions that originate from the Government and from a Labour amendment at stage 2, and which relate to advice on the respective contributions from energy efficiency, energy generation, land use and transport. There is a risk that those provisions would not come into play until a Scottish advisory body was established. The Stop Climate Chaos Coalition has argued that that part of amendment 20A is necessary to avoid a loophole, so I am glad that the minister accepts it.

The minister argues that the language in the final paragraph in amendment 20A, which is on cumulative emissions, is different from that in the rest of the bill. I welcome amendment 104, in the name of Alison McInnes, which has been agreed to and which uses the same language. The amendment in my name talks about stabilising “greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.”

I argue that that is complementary language and that that paragraph of amendment 20A is compatible with amendments that have already been agreed to.

On electricity generation and emissions performance, there is probably broad agreement that an emissions performance standard is required. I welcome the fact that work is happening on that at UK level. However, we should be able to contemplate agreeing to amendment 20A ahead of that work progressing. It certainly cannot be argued that the amendment is not competent or not within devolved powers, as it would simply mean that the Government would seek advice on “the average greenhouse gas emissions per megawatt hour of electricity generated in Scotland that would be compatible with” the targets that the Parliament will agree to in passing the bill.

Stewart Stevenson emphasised carbon capture and storage, but that should be put into context. The Government has a great reliance on and trust in the idea that carbon capture and storage will be developed and will be technically achievable and commercially viable. I hope that the Government is right about that, but I do not know that it is. The risk exists that new coal-fired power stations will be up and running before carbon capture and storage is operational, or in the absence of carbon capture and storage. In that context, I argue that that aspect of amendment 20A is desirable, as it would help to ensure that the Government focused its mind on the emissions per megawatt hour of electricity that is generated in Scotland. I ask members to support amendment 20A, but to resist amendment 20AA.
The Deputy Presiding Officer: I call the minister to wind up. Does the minister wish to wind up? It is not compulsory.

Stewart Stevenson: The minister was so enthralled by the debate that he was continuing to listen, in the expectation that Mr Harvie had more to say.

Everything has been said. I encourage members to support amendment 19 and, when we come to it, amendment 20AA.

Amendment 19 agreed to.

Amendment 20 moved—[Stewart Stevenson].

Amendment 20A moved—[Patrick Harvie].

Amendment 20AA moved—[Stewart Stevenson].

The Deputy Presiding Officer: The question is, that amendment 20AA be agreed to. Are we agreed?

Members: No.

The Deputy Presiding Officer: There will be a division.

For
Adam, Brian (Aberdeen North) (SNP)
Aitken, Bill (Glasgow) (Con)
Alexander, Ms Wendy (Paisley North) (Lab)
Allan, Alasdair (Western Isles) (SNP)
Baillie, Jackie (Dumbarton) (Lab)
Baker, Claire (Mid Scotland and Fife) (Lab)
Baker, Richard (North East Scotland) (Lab)
Boyack, Sarah (Edinburgh Central) (Lab)
Brocklebank, Ted (Mid Scotland and Fife) (Con)
Brown, Gavin (Lothians) (Con)
Brown, Keith (Ochil) (SNP)
Brownlee, Derek (South of Scotland) (Con)
Butler, Bill (Glasgow Anniesland) (Lab)
Campbell, Aileen (South of Scotland) (SNP)
Carlaw, Jackson (West of Scotland) (SNP)
Chisholm, Malcolm (Edinburgh North and Leith) (Lab)
Coffey, Willie (Kilmarnock and Loudoun) (SNP)
Constance, Angela (Livingston) (SNP)
Craigie, Cathie (Cumbernauld and Kilsyth) (Lab)
Crawford, Bruce (Stirling) (SNP)
Cunningham, Roseanna (Perth) (SNP)
Curran, Margaret (Glasgow Baillieston) (Lab)
Don, Nigel (North East Scotland) (SNP)
Doris, Bob (Glasgow) (SNP)
Eadie, Helen (Dunfermline East) (Lab)
Ewing, Fergus (Inverness East, Nairn and Lochaber) (SNP)
Fabian, Linda (Central Scotland) (SNP)
Ferguson, Patricia (Glasgow Maryhill) (Lab)
FitzPatrick, Joe (Dundee West) (SNP)
Foulkes, George (Lothians) (Lab)
Fraser, Murdo (Mid Scotland and Fife) (Con)
Gibson, Kenneth (Cunninghame North) (SNP)
Gibson, Robin (Highlands and Islands) (SNP)
Gillies, Karen (Clydesdale) (Lab)
Glen, Marlyn (North East Scotland) (Lab)
Goldie, Annabel (West of Scotland) (Con)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Graham, Christine (South of Scotland) (SNP)
Grant, Rhoda (Highlands and Islands) (Lab)
Gray, Iain (East Lothian) (Lab)

Against
Harvie, Christopher (Mid Scotland and Fife) (SNP)
Henry, Hugh (Paisley South) (Lab)
Hepburn, Jamie (Central Scotland) (SNP)
Hyslop, Fiona (Lothians) (SNP)
Ingram, Adam (South of Scotland) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Kelly, James (Glasgow Rutherglen) (Lab)
Kerr, Andy (East Kilbride) (Lab)
Kidd, Bill (Glasgow) (SNP)
Lamont, Johann (Glasgow Pollok) (Lab)
Lamont, John (Roxburgh and Berwickshire) (Con)
Livingstone, Marilyn (Kirkcaldy) (Lab)
Lochhead, Richard (Moray) (SNP)
MacAskill, Kenny (Edinburgh East and Musselburgh) (SNP)
Macdonald, Lewis (Aberdeen Central) (Lab)
Macintosh, Ken (East Lothian) (Lab)
Martin, Paul (Glasgow Springburn) (Lab)
Marwick, Tricia (Central Fife) (SNP)
Mather, Jim (Argyll and Bute) (SNP)
Matheson, Michael (Falkirk West) (SNP)
Maxwell, Stewart (West of Scotland) (SNP)
McAveety, Mr Frank (Glasgow Shettleston) (Lab)
McConnell, Jack (Motherwell and Wishaw) (Lab)
McGrigor, Jamie (Highlands and Islands) (Con)
McKee, Ian (Lothians) (SNP)
McKelvie, Christina (Central Scotland) (SNP)
McLaughlin, Anne (Glasgow) (SNP)
McLetchie, David (Edinburgh Pentlands) (Con)
McMahon, Michael (Hamilton North and Bellshill) (Lab)
McMillan, Stuart (West of Scotland) (SNP)
McNeil, Duncan (Greenock and Inverclyde) (Lab)
McNeill, Pauline (Glasgow Kelvin) (Lab)
McNulty, Des (Clydebank and Milngavie) (Lab)
Milne, Nanette (North East Scotland) (Con)
Mitchell, Margaret (Central Scotland) (Con)
Mulligan, Mary (Linlithgow) (Lab)
Neill, Alex (Central Scotland) (SNP)
Oldfather, Irene (Cunninghame South) (Lab)
Park, John (Mid Scotland and Fife) (Lab)
Paterson, Gil (West of Scotland) (SNP)
Peacock, Peter (Highlands and Islands) (Lab)
Peatle, Cathy ( Falkirk East) (Lab)
Robison, Shona (Dundee East) (SNP)
Salmond, Alex (Gordon) (SNP)
Scanlon, Mary (Highlands and Islands) (Con)
Scott, John (Ayr) (Con)
Simpson, Dr Richard (Mid Scotland and Fife) (Lab)
Smith, Elaine (Coatbridge and Chryston) (Lab)
Smith, Elizabeth (Mid Scotland and Fife) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)
Stevenson, Stewart (Banff and Buchan) (SNP)
Stewart, David (Highlands and Islands) (Lab)
Swinney, John (North Tayside) (SNP)
Thomson, Dave (Highlands and Islands) (SNP)
Watt, Maureen (North East Scotland) (SNP)
Welsh, Andrew (Angus) (SNP)
White, Sandra (Glasgow) (SNP)
Whitefield, Karen (Airdrie and Shotts) (Lab)
Whitton, David (Strathkelvin and Bearsden) (Lab)
Wilson, Bill (West of Scotland) (SNP)
Wilson, John (Central Scotland) (SNP)
O'Donnell, Hugh (Central Scotland) (LD)  
Pringle, Mike (Edinburgh South) (LD)  
Purvis, Jeremy (Tweeddale, Ettrick and Lauderdale) (LD)  
Rumbles, Mike (West Aberdeenshire and Kincardine) (LD)  
Scott, Tavish (Shetland) (LD)  
Smith, Iain (North East Fife) (LD)  
Smith, Margaret (Edinburgh West) (LD)  
Stephen, Nicol (Aberdeen South) (LD)  
Stone, Jamie (Caithness, Sutherland and Easter Ross) (LD)  
Tolson, Jim (Dunfermline West) (LD)  

**The Deputy Presiding Officer:** The result of the division is: For 101, Against 18, Abstentions 0.

**Amendment 20A, as amended, agreed to.**

**Amendment 20, as amended, agreed to.**

**Amendment 21 moved—[Stewart Stevenson]—and agreed to.**

**Amendment 105 not moved.**

**Amendment 106 moved—[Patrick Harvie]—and agreed to.**

**Section 7A—Achievement of annual targets: domestic effort target**

**The Deputy Presiding Officer:** Group 6 is on the achievement of annual targets. Amendment 22, in the name of the minister, is grouped with amendments 23 to 27 and 90.

**Stewart Stevenson:** I will move amendment 22, but I intend later to seek permission to withdraw it, because we do not intend to proceed with it. I will move it only to allow the debate to proceed.

Amendments 22 to 24 and 90 relate to the domestic effort target that was added to the bill at stage 2 in section 7A. Ministers have gone on record many times to state that our preference is to reduce emissions from sources in Scotland rather than to purchase offset credits. Money that is spent on international credits is money that is not spent on investing in Scotland. However, as Sir Nicholas Stern emphasised in his report “The Economics of Climate Change”, global carbon markets are a key component of attempts to curb rising global emissions. Members will appreciate that the use of carbon units to offset excess emissions will be necessary, within statutory restrictions, at certain points up to 2050.

In response to a recommendation in the Transport, Infrastructure and Climate Change Committee’s stage 1 report, the Government introduced amendments to the bill that set limits on the total amount of carbon units that ministers may credit to the net Scottish emissions account. However, those limits do not apply to carbon units that are derived from the European Union emission trading scheme, for good reasons, concerning how that scheme works. More than 40 per cent, or perhaps as much as half, of Scotland’s emissions fall within the traded sector and therefore are affected by carbon markets such as that created by the EU scheme. The fundamental problem with the domestic effort target in section 7A is that it makes no distinction between carbon units that the Scottish ministers use and the units that Scottish companies use in the scheme.

Amendments 22 and 23 offer alternative ways of addressing the problem. The important point is that the 2050, interim and annual targets are achieved in the first place. Placing disproportionate emphasis on a flawed domestic effort target could risk those targets being missed.

The Government’s preference is for amendment 23, which is the best way of fixing the issue. The carbon units that are surrendered by Scottish installations within the EU emission trading scheme would fall within the 20 per cent allowance that the domestic effort target gives the Scottish ministers for using carbon units. The challenge is that we do not use those units—individual installations such as power stations throughout Scotland do so. The Scottish ministers will simply carry out the accounting in relation to the EU ETS, ensuring that its operation in Scotland is not ignored when calculating progress towards the targets that are set in the bill. If Scottish installations bought a large number of units in one year—which is understandable practice, as there is a finite number of credits within the scheme as a whole—the domestic effort target would almost certainly be breached and the Scottish ministers simply could not do anything about it. It is therefore vital that the power companies ensure that they make a strong contribution to delivering on their obligations.

10:45

The importance of carbon reduction not interfering with the EU ETS is also recognised by the expert Committee on Climate Change. In its advice to the UK Government that was published last December, the committee recommended that any restriction on the use of carbon units should not extend to units generated within the EU.

We have already voted to raise the 2020 target to 42 per cent. In lobbying for that, WWF Scotland indicated that the purchasing of carbon units could cover any shortfall. As it stands, the domestic effort provision in section 7A means that it would be impossible for the Scottish Government to buy sufficient credits to cover the shortfall between the expected reduction and the interim target.

There will be times when buying carbon units is the most cost-effective way of ensuring that Scotland’s climate change targets are achieved,
but forcing ministers to take unnecessarily expensive measures to tackle emissions would, in effect, be a new tax on the people of Scotland.

Amendment 23 will avoid that problem by removing EU ETS credits from the restriction on the use of carbon units inherent within the domestic effort target. The domestic effort target is intended to encourage ministers to focus on reducing emissions in Scotland. It would be perverse if it acted to prevent all the other targets in the bill from being met.

I should also highlight that section 7A contains a flaw, as it refers to the Scottish ministers “making an order”. The power is subject to the affirmative procedure, so advice should be sought before ministers lay a draft, rather than make an order. Amendment 24 will correct that drafting flaw by referring instead to the Scottish ministers “laying a draft of a statutory instrument containing an order”.

As regards domestic effort, amendment 90 simply adds the term “domestic effort target” to those listed in section 65, “Interpretation”.

Amendments 25 and 26 are tidying-up amendments, which move section 18A(A1) into section 12A. Essentially, the distinction is that section 18A as a whole is about all limits on carbon units for multiyear periods, while section 18A(A1) is about capping at 20 per cent the amount of carbon units that may comprise the reductions in individual years. Section 12A, which was introduced by one of Des McNulty’s amendments at stage 2, does essentially the same thing as section 18A(A1), so it makes sense to move section 18A(A1) into section 12A.

When section 18A was amended at stage 2 to insert subsection (A1), Des McNulty also deleted section 18A(2)(b), which would have required the Scottish ministers to set a limit on the net amount of carbon units that may be credited to the net emissions account during the period 2013 to 2017. Mr McNulty might have thought that section 18A(2)(b) was unnecessary on the basis that new section 18A(A1) would define the total amount of carbon units that may be used, as would be the case if section 18A(2)(b) had not been deleted. That weakens the bill, which we do not think is what Mr McNulty intended.

In addition—I am coming to a conclusion, Presiding Officer—given that the years 2010 to 2012 are covered in section 18A, as are all the years from 2018 to 2050, it could be inconsistent and confusing for ministers not to set a limit on the total amount of carbon units that they may use in respect of the period 2013 to 2017. Amendment 27 seeks to correct that anomaly.

We will listen carefully to the debate on this complex and technical group of amendments and we will see where we get to.

I move amendment 22.

Des McNulty: As Mr Stevenson said, we introduced section 7A into the bill at stage 2. It is a significant section, because it sets out the framework within which the domestic effort target is established. We established clear parameters around what can and cannot be done through buying international credits. That was very much at the forefront of Stop Climate Chaos’s consideration and the consideration of groups that are particularly interested in international development issues, in which I have a long-standing involvement and interest.

It seems strangely paradoxical that in order to boost the targets here, we could end up boosting emissions in other countries, which is not where we want to be. I want to focus Scotland’s attention on reducing emissions here. We will have to use some international credits, but we should set clear limits on how and parameters within which that can be done.

I am content to accept the minister’s amendments 24 to 27 and 90, which are tidying-up amendments. I heard the minister say that he did not want to pursue amendment 22. Seeking to introduce the words “endeavour to” into section 7A(1) seems an obvious attempt to dilute what that section is trying to do. I hope that the minister accepts that the use of the word “must” is the right mechanism.

There is a debate to be had about how we deal with European carbon units, but we are not at the stage where we have to accept amendment 23. Stop Climate Chaos’s view is that amendment 23 would dilute significantly the intention and purpose of section 7A. I therefore ask members to reject amendment 23, but to accept the other amendments in the group that are going to be pursued.

Stewart Stevenson: We have to be careful about the use of the word “must”, because it limits the ability to do things on occasion. However, that is a drafting issue.
Amendment 23 remains vital. The power companies have engaged significantly in the debate, so we know that they are very much up for it. However, we have to be careful not to allow ourselves to be hostages to the traded sector, which in Scotland—and for that matter the UK—accounts for 40 to 50 per cent of total emissions. Amendment 23 is necessary at this stage. We cannot postpone the discussion, although we will have a discussion in the autumn on a legislative consent motion. That is the proper time to visit the matter in the context of what we know is happening. If we do not pass amendment 23, we will be unable to make amendments, except by primary legislation, in the light of what happens at UK level. This is one policy area where we can barely put a cigarette paper between UK and Scottish ambitions, although there is difference in the detail. Therefore, we will work closely with the UK Administration on this subject.

I have said all that I have to say. I seek Parliament’s leave to withdraw amendment 22.

Amendment 22, by agreement, withdrawn.

The Deputy Presiding Officer: The question is, that amendment 23 be agreed to. Are we agreed?

Members: No.

The Deputy Presiding Officer: There will be a division.

FOR

Adam, Brian (Aberdeen North) (SNP)
Aitken, Bill (Glasgow) (Con)
Allan, Alasdair (Western Isles) (SNP)
Brocklebank, Ted (Mid Scotland and Fife) (Con)
Brown, Gavin (Lothians) (Con)
Brown, Keith (Ochil) (SNP)
Brownlee, Derek (South of Scotland) (Con)
Campbell, Aileen (South of Scotland) (SNP)
Carlaw, Jackson (West of Scotland) (Con)
Coffey, Willie (Kilmarnock and Loudoun) (SNP)
Constance, Angela (Livingston) (SNP)
Crawford, Bruce (Stirling) (SNP)
Cunningham, Roseanna (Perth) (SNP)
Don, Nigel (North East Scotland) (SNP)
Doris, Bob (Glasgow) (SNP)
Ewing, Fergus (Inverness East, Nairn and Lochaber) (SNP)
Fabiani, Linda (Central Scotland) (SNP)
FitzPatrick, Joe (Dundee West) (SNP)
Fraser, Murdo (Mid Scotland and Fife) (Con)
Gibson, Kenneth (Cunninghame North) (SNP)
Gibson, Rob (Highlands and Islands) (SNP)
Goldie, Annabel (West of Scotland) (Con)
Grahame, Christine (South of Scotland) (SNP)
Harvie, Christopher (Mid Scotland and Fife) (SNP)
Hepburn, Jamie (Central Scotland) (SNP)
Hyslop, Fiona (Lothians) (SNP)
Ingram, Adam (South of Scotland) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Kidd, Bill (Glasgow) (SNP)
Lamont, John (Roxburgh and Berwickshire) (Con)
Lochhead, Richard (Moray) (SNP)
MacAskill, Kenny (Edinburgh East and Musselburgh) (SNP)
Marwick, Tricia (Central Fife) (SNP)
Mather, Jim (Argyll and Bute) (SNP)
Matheson, Michael (Falkirk West) (SNP)
Maxwell, Stewart (West of Scotland) (SNP)
McGrigor, Jamie (Highlands and Islands) (Con)
Mckee, Ian (Lothians) (SNP)
McKelvie, Christina (Central Scotland) (SNP)
McLaughlin, Anne (Glasgow) (SNP)
McLetchie, David (Edinburgh Pentlands) (Con)
McMillan, Stuart (West of Scotland) (SNP)
Milne, Nanette (North East Scotland) (Con)
Mitchell, Margaret (Central Scotland) (Con)
Neil, Alex (Central Scotland) (SNP)
Paton, Gil (West of Scotland) (SNP)
Robison, Shona (Dundee East) (SNP)
Salmond, Alex (Gordon) (SNP)
Scanlon, Mary (Highlands and Islands) (Con)
Scott, John (Ayr) (Con)
Smith, Elizabeth (Mid Scotland and Fife) (Con)
Somervell, Shirley-Anne (Lothians) (SNP)
Stevenson, Stewart (Banff and Buchan) (SNP)
Swinney, John (North Tayside) (SNP)
Thompson, Dave (Highlands and Islands) (SNP)
Watt, Maureen (North East Scotland) (SNP)
Welsh, Andrew (Angus) (SNP)
White, Sandra (Glasgow) (SNP)
Wilson, Bill (West of Scotland) (SNP)
Wilson, John (Central Scotland) (SNP)

AGAINST

Alexander, Ms Wendy (Paisley North) (Lab)
Balillie, Jackie (Dumbarton) (Lab)
Baker, Claire (Mid Scotland and Fife) (Lab)
Baker, Richard (North East Scotland) (Lab)
Boyack, Sarah (Edinburgh Central) (Lab)
Brankin, Rhona (Midlothian) (Lab)
Brown, Robert (Glasgow) (LD)
Butler, Bill (Glasgow Anniesland) (Lab)
Chisholm, Malcolm (Edinburgh North and Leith) (Lab)
Craigie, Cathie (Cumbernauld and Kilsyth) (Lab)
Curran, Margaret (Glasgow Baillieston) (Lab)
Eddie, Helen (Dunfermline East) (Lab)
Ferguson, Patricia (Glasgow Maryhill) (Lab)
Finnie, Ross (West of Scotland) (LD)
Foulkes, George (Lothians) (Lab)
Gillan, Karen (Clydesdale) (Lab)
Glen, Marilyn (North East Scotland) (Lab)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Gray, Iain (East Lothian) (Lab)
Harper, Robin (Lothians) (Green)
Harvie, Patrick (Glascow) (Green)
Henry, Hugh (Paisley South) (Lab)
Hume, Jim (South of Scotland) (LD)
Kelly, James (Glasgow Rutherglen) (Lab)
Kerr, Andy (East Kilbride) (Lab)
Lamont, Johann (Glasgow Pollok) (Lab)
Livingstone, Marilyn (Kirkcaldy) (Lab)
Macdonald, Lewis (Aberdeen Central) (Lab)
Macintosh, Ken (Eastwood) (Lab)
Martin, Paul (Glasgow Springburn) (Lab)
McArthur, Liam (Orkney) (LD)
McAveety, Mr Frank (Glascow Shettleston) (Lab)
McConnell, Jack (Motherwell and Wishaw) (Lab)
McInnes, Alison (North East Scotland) (LD)
McMahen, Michael (Hamilton North and Bellshill) (Lab)
McNeil, Duncan (Greenock and Inverclyde) (Lab)
McNeill, Pauline (Glasgow Kelvin) (Lab)
McNulty, Des (Clydebank and Milngavie) (Lab)
Mulligan, Mary (Linlithgow) (Lab)
Munro, John Farquhar (Ross, Skye and Inverness West) (LD)
O'Donnell, Hugh (Central Scotland) (LD)
Oldfather, Irene (Cunninghame South) (Lab)
Park, John (Mid Scotland and Fife) (Lab)
Peacock, Peter (Highlands and Islands) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Pringle, Mike (Edinburgh South) (LD)
Putvis, Jeremy (Tweeddale, Ettrick and Lauderdale) (Lab)
Rumbles, Mike (West Aberdeenshire and Kincardine) (LD)
Scott, Tavish (Shetland) (LD)
Simpson, Dr Richard (Mid Scotland and Fife) (Lab)
Smith, Elaine (Coatbridge and Chryston) (Lab)
Smith, Iain (North East Fife) (LD)
Smith, Margaret (Edinburgh West) (LD)
Smith, lain (North East Fife) (LD)
Smith, Margaret (Edinburgh West) (LD)
Stephen, Nicol (Aberdeen South) (LD)
Stewart, David (Highlands and Islands) (Lab)
Stone, Jamie (Caithness, Sutherland and Easter Ross) (LD)
Simpson, Dr Richard (Mid Scotland and Fife) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Pringle, Mike (Edinburgh South) (LD)
Peacock, Peter (Highlands and Islands) (Lab)
Park, John (Mid Scotland and Fife) (Lab)
Oldfather, Irene (Cunninghame South) (Lab)

The Deputy Presiding Officer: The result of the division is: For 60, Against 59, Abstentions 0.

Amendment 23 agreed to.

Amendment 24 moved—[Stewart Stevenson]—and agreed to.

Section 12—The net Scottish emissions account

The Deputy Presiding Officer: Group 7 is on the type of carbon units that may be purchased by the Scottish ministers. Amendment 107, in the name of Malcolm Chisholm, is grouped with amendment 113.

Malcolm Chisholm: As Des McNulty said in the debate on group 6, carbon credits should be used to meet the emissions reduction targets in the bill only as a last resort. Our first priority must be to reduce our own emissions and take our fair share of the global effort that is required to avoid dangerous climate change.

As was also said in the debate on the previous group, the Scottish Government cannot interfere with carbon credits that installations in Scotland purchase under the EU emission trading scheme, but it can ensure that any carbon units that it buys are truly additional and contribute to sustainable development in the countries where they arose.

Two major concerns have been levelled at the use of carbon credits under Kyoto mechanisms—whether the clean development mechanism or the joint implementation mechanism. The first concern is about additionality. Academic research from Stanford University has shown that between one third and two thirds of all clean development mechanism offsets represent not real emissions cuts but activities that would have taken place anyway.

The second concern relates to sustainable development. The Stern report goes into great detail on some of the problems in implementing the clean development mechanism. It says that the mechanism is

"in its current form … making only a small difference to investment in long-lived energy and transport infrastructure … While a substantial international flow of funds is being generated through"

the clean development mechanism,

"it falls significantly short of the scale and nature of incentives required to reduce future emissions in developing countries."

According to the World Bank, only 10 per cent of CDM projects by volume in the 15 months to March this year involved energy efficiency, fuel switch, biomass or other renewables activities, which Stern says are critical to the long-term reduction of greenhouse gas emissions.

I would like the Government to give a commitment to take on board those concerns. If the Government has doubts about the credits that it should buy, it can refer to the Gold Standard Foundation, which is an international non-profit organisation that operates a certification scheme for gold-standard carbon credits.

Amendment 113 would delete section 18A(4), which allows ministers arbitrarily to designate some categories of credits as not counting against the limit on the Government purchase of credits. In effect, that would make the Government’s power to purchase credits unlimited. We recognise and welcome the Government’s stated intent to keep the purchase of credits to a minimum, but we call on it to accept that the bill must support that aim and not create loopholes that would allow future Governments to reject that commitment and indulge in the excessive purchasing of credits, at the cost of action in Scotland.

Section 18A(4) appears to be a giant loophole, but I look forward to any explanation that the minister has for it. In particular, I look for a commitment in relation to amendment 107.

I move amendment 107.

Des McNulty: I hoped to speak after the minister had given some of the assurances that Malcolm Chisholm has sought, but I will reinforce the points that he made. Section 18A(4) could be a large loophole. I am sure that the minister does not want that impression to continue, as he said that a cigarette paper should not be able to pass the points that he made. Section 18A(4) could be a large loophole. I am sure that the minister does not want that impression to continue, as he said that a cigarette paper should not be able to pass through the parties or between the Scottish Government and the UK Government on these issues.

I raised at stage 2 a similar issue to that which amendment 107 addresses. At that time, the minister gave assurances about how he would proceed. It would help if he repeated those assurances and went a bit further than he did at stage 2 to inform the Parliament about the
approach that the Scottish Government wishes to take.

11:00

Stewart Stevenson: I respect absolutely the principle that underpins amendment 107. Broadly, I think that members in the Parliament do not differ on the policy objectives that they wish to pursue. However, the amendment is unnecessary, because ministers can act at their own hand on the matter. Also, the amendment has a flaw that makes it impossible to agree to.

I will explain the flaw. Paragraph (a) in amendment 107 would mean that ministers could credit the net Scottish emissions account with carbon units that represented

“a reduction in greenhouse gas emissions (or a removal of greenhouse gas from the atmosphere) that would not otherwise have occurred”.

I appreciate that Malcolm Chisholm has sought to address issues that we identified at stage 2 when the Transport, Infrastructure and Climate Change Committee discussed an amendment from Des McNulty. However, amendment 107 would prevent the Scottish ministers from using one of the most fundamental carbon units that is available under the Kyoto mechanisms—the assigned amount unit.

Paragraph (b) in amendment 107 would create a specific sustainability duty in relation to the origin of carbon units. However, such a duty is made unnecessary by the duty in section 61A, which was created by a combination of Labour, Liberal Democrat and Government amendments at stage 2. Section 61A says that, in exercising the functions that the bill confers on them, the Scottish ministers have a duty to

“take into account the need to do so in a way that contributes to the achievement of sustainable development.”

That will apply to the crediting of carbon units to the net Scottish emissions account.

I recognise absolutely that Malcolm Chisholm does not come lightly or early to the issue. His reference to the Gold Standard Foundation is important. That is a measure of what we should be looking at. I hope that he is reassured about sustainability and that he acknowledges the drafting problems that I described in amendment 107 that would affect ministers’ ability to use assigned amount units to credit the net Scottish emissions account. I hope that he is satisfied with my assurances and that he will seek leave to withdraw the amendment on that basis. If he says in closing that there were gaps in what I have said, I might be able to shed further light.

Amendment 113 would delete section 18A(4), which allows specified units to be excluded from counting towards any limit that the Scottish ministers are required to set on the quantity of carbon units that may be credited to the net Scottish emissions account in given periods. Having the ability to exclude some types of carbon units from counting towards the section 18A limits is extremely important. In practice, it is intended to prevent carbon units that are used by installations that participate in emission trading schemes such as the EU emission trading scheme from counting towards section 18A limits. Carbon trading is one way in which the international community expects to reduce emissions. The joint effort that has been put into the EU ETS and the joint commitment to it throughout Europe will lead to early reductions in the most polluting sectors throughout Europe. That is important.

The traded sector in Scotland accounts for more than 40 per cent of our emissions. Even though the Scottish ministers do not participate directly in the EU scheme, they cannot ignore it. We are simply the accountants to the scheme. Of course, our approach is entirely consistent with that of the UK Government in the carbon accounting regulations that it has made under the UK Climate Change Act 2008. In the advice to the UK Government that it published in December, the Committee on Climate Change recommended that any restriction should not extend to units such as those from the EU. If section 18A(4) were deleted, EU units would take up most of the carbon units that we would be allowed to credit to the account and in some years would even breach that amount. That would create very serious difficulties and, of course, run counter to the advice of the expert Committee on Climate Change. Given Parliament’s future scrutiny of the regulations and the problems that are inherent in amendment 113, I ask Malcolm Chisholm not to move it.

Malcolm Chisholm: The wording of amendment 107 refers to the Scottish ministers purchasing units rather than just accounting for them. The more substantive point relates to the assigned amount units to which the minister
referred. It was somewhat disingenuous of him to say that they are an allowance and not a reduction. The fact that they are made available results from a reduction somewhere else in the world. I understand his point, but he did not tell the whole story.

As I indicated in my opening speech, we are talking not only about assigned amount units but about emission reduction units under Kyoto joint implementation projects, certified emission reductions from the clean development mechanism, and renewable units under Kyoto on the basis of land use change and forestry. I am slightly reassured by the minister’s remarks on sustainable development, but I am not totally persuaded by the case that he made.

The minister said that amendment 113 was a way of revisiting the last debate. Given that he won the vote by 60 to 59, it is worth testing the Parliament again, just in case any member happened to be having coffee or in the toilet at the time of the vote. I understand his reasoning, but not deleting section 18A(4) has the potential to create a dangerous loophole. I will press my amendments in the group.

The Deputy Presiding Officer: The question is, that amendment 107 be agreed to. Are we agreed?

Members: No.

The Deputy Presiding Officer: There will be a division.

For
Alexander, Ms Wendy (Paisley North) (Lab)
Bailie, Jackie (Dumbarton) (Lab)
Baker, Claire (Mid Scotland and Fife) (Lab)
Baker, Richard (North East Scotland) (Lab)
Boyack, Sarah (Edinburgh Central) (Lab)
Brankin, Rhona (Midlothian) (Lab)
Brown, Robert (Glasgow) (LD)
Butler, Bill (Glasgow Anniesland) (Lab)
Chisholm, Malcolm (Edinburgh North and Leith) (Lab)
Craigie, Cathie (Cumbernauld and Kilsyth) (Lab)
Curran, Margaret (Glasgow Baillieston) (Lab)
Eadie, Helen (Dunfermline East) (Lab)
Ferguson, Patricia (Glasgow Maryhill) (Lab)
Finnie, Ross (West of Scotland) (LD)
Foulkes, George (Lothians) (Lab)
Gillon, Karen (Clydesdale) (Lab)
Glen, Marilyn (North East Scotland) (Lab)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Grant, Rhoda (Highlands and Islands) (Lab)
Gray, Iain (East Lothian) (Lab)
Harper, Robin (Lothians) (Green)
Harvie, Patrick (Glasgow) (Green)
Henry, Hugh (Paisley South) (Lab)
Hume, Jim (South of Scotland) (LD)
Kelly, James (Glasgow Rutherglen) (Lab)
Kerr, Andy (East Kilbride) (Lab)
Lamont, Johann (Glasgow Pollok) (Lab)
Livingstone, Marilyn (Kirkcaldy) (Lab)
Macdonald, Lewis (Aberdeen Central) (Lab)
Macintosh, Ken (Eastwood) (Lab)
Martin, Paul (Glasgow Springburn) (Lab)
McArthur, Liam (Orkney) (LD)
McAveety, Mr Frank (Glasgow Shettleston) (Lab)
McConnell, Jack (Motherwell and Wishaw) (Lab)
McInnes, Alison (North East Scotland) (LD)
McMahon, Michael (Hamilton North and Bellshill) (Lab)
McNeil, Duncan (Greenock and Inverclyde) (Lab)
McNeill, Pauline (Glasgow Kelvin) (Lab)
McNulty, Des (Clydebank and Milngavie) (Lab)
Mulligan, Mary (Linthgow) (Lab)
Munro, John Farquhar (Ross, Skye and Inverness West) (LD)
O’Donnell, Hugh (Central Scotland) (LD)
Oldfather, Irene (Cunninghame South) (Lab)
Park, John (Mid Scotland and Fife) (Lab)
Peacock, Peter (Highlands and Islands) (Lab)
Peatling, Cathy (Falkirk East) (Lab)
Pringle, Mike (Edinburgh South) (LD)
Purvis, Jeremy (Tweeddale, Ettrick and Lauderdale) (LD)
Rumbles, Mike (West Aberdeenshire and Kincardine) (LD)
Scott, Tavish (Shetland) (LD)
Simpson, Dr Richard (Mid Scotland and Fife) (Lab)
Smith, Elaine (Coatbridge and Chryston) (Lab)
Smith, Iain (North East Fife) (LD)
Smith, Margaret (Edinburgh West) (LD)
Stephen, Nicol (Aberdeen South) (LD)
Stewart, David (Highlands and Islands) (Lab)
Stone, Jamie (Caithness, Sutherland and Easter Ross) (LD)
Tolson, Jim (Dunfermline West) (LD)
Whitefield, Karen (Airdrie and Shotts) (Lab)
Whiton, David (Strathkelvin and Bearsden) (Lab)

Against
Adam, Brian (Aberdeen North) (SNP)
Aitken, Bill (Glasgow) (Con)
Allan, Alasdair (Western Isles) (SNP)
Brocklebank, Ted (Mid Scotland and Fife) (Con)
Brown, Gavin (Lothians) (Con)
Brown, Keith (Ochil) (SNP)
Brownlee, Derek (South of Scotland) (Con)
Campbell, Aileen (South of Scotland) (SNP)
Carlaw, Jackson (West of Scotland) (Con)
Colfey, Willie (Kilmarnock and Loudoun) (SNP)
Constance, Angela (Livingston) (SNP)
Crawford, Bruce (Stirling) (SNP)
Cunningham, Roseanna (Perth) (SNP)
Don, Nigel (North East Scotland) (SNP)
Doris, Bob (Glasgow) (SNP)
Ewing, Fergus (Inverness East, Nairn and Lochaber) (SNP)
Fabiani, Linda (Central Scotland) (SNP)
FitzPatrick, Joe (Dundee West) (SNP)
Fraser, Murdo (Mid Scotland and Fife) (Con)
Gibson, Kenneth (Cunninghame North) (SNP)
Gibson, Rob (Highlands and Islands) (SNP)
Goldie, Annabel (West of Scotland) (Con)
Grahame, Christine (South of Scotland) (SNP)
Harvie, Christopher (Mid Scotland and Fife) (SNP)
Hepburn, Jamie (Central Scotland) (SNP)
Hyslop, Fiona (Lothians) (SNP)
Ingram, Adam (South of Scotland) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Kidd, Bill (Glasgow) (SNP)
Lamont, John ( Roxburgh and Berwickshire) (Con)
Lochhead, Richard (Moray) (SNP)
MacAskill, Kenny (Edinburgh East and Musselburgh) (SNP)
MacDonald, Margo (Lothians) (Ind)
Marwick, Tricia (Central Fife) (SNP)
Mather, Jim (Argyll and Bute) (SNP)
Matheson, Michael (Falkirk West) (SNP)
Maxwell, Stewart (West of Scotland) (SNP)
McGrigor, Jamie (Highlands and Islands) (Con)
McKee, Ian (Lothians) (SNP)
The Deputy Presiding Officer: The result of the division is: For 60, Against 61, Abstentions 0.

Amendment 107 disagreed to.

Section 12A—Restriction on use in 2010-2012 of carbon units purchased by Scottish Ministers

Amendment 108 moved—[Patrick Harvie].

The Deputy Presiding Officer: The question is, that amendment 108 be agreed to. Are we agreed?

Members: No.

The Deputy Presiding Officer: There will be a division.

FOR
Harper, Robin (Lothians) (Green)
Harvie, Patrick (Glasgow) (Green)
MacDonald, Margo (Lothians) (Ind)

AGAINST
Adam, Brian (Aberdeen North) (SNP)
Aitken, Bill (Glasgow) (Con)
Alexander, Ms Wendy (Paisley North) (Lab)
Allan, Alasdair (Western Isles) (SNP)
Baillie, Jackie (Dumbarton) (Lab)
Baker, Claire (Mid Scotland and Fife) (Lab)
Baker, Richard (North East Scotland) (Lab)
Boyack, Sarah (Edinburgh Central) (Lab)
Brankin, Rhona (Midlothian) (Lab)
Brocklebank, Ted (Mid Scotland and Fife) (Con)
Brown, Gavin (Lothians) (Con)
Brown, Keith (Ochil) (SNP)
Brown, Robert (Glasgow) (LD)
Brownlee, Derek (South of Scotland) (Con)
Butler, Bill (Glasgow Anniesland) (Lab)
Campbell, Aileen (South of Scotland) (SNP)
Cartlaig, Jackson (West of Scotland) (Con)
Chisholm, Malcolm (Edinburgh North and Leith) (Lab)
Coffey, Willie (Kilmarnock and Loudoun) (SNP)
Constance, Angela (Livingston) (SNP)
Craigie, Cathie (Cumbernauld and Kilsyth) (Lab)
Crawford, Bruce (Stirling) (SNP)
Cunningham, Roseanna (Perth) (SNP)

Curran, Margaret (Glasgow Bailleieston) (Lab)
Don, Nigel (North East Scotland) (SNP)
Doris, Bob (Glasgow) (SNP)
Eddie, Helen (Dunfermline East) (Lab)
Ewing, Fergus (Inverness East, Nairn and Lochaber) (SNP)
Fabiani, Linda (Central Scotland) (SNP)
Ferguson, Patricia (Glasgow Maryhill) (Lab)
Finnie, Ross (West of Scotland) (LD)
FitzPatrick, Joe (Dundee West) (SNP)
Foulkes, George (Lothians) (Lab)
Fraser, Murdo (Mid Scotland and Fife) (Con)
Gibson, Kenneth (Cunninghame North) (SNP)
Gibson, Rob (Highlands and Islands) (SNP)
Gillon, Karen (Clydesdale) (Lab)
Glen, Marilyn (North East Scotland) (Lab)
Goldie, Annabel (West of Scotland) (SNP)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Grahaime, Christine (South of Scotland) (SNP)
Grant, Rhoda (Highlands and Islands) (Lab)
Gray, Iain (East Lothian) (Lab)
Harvie, Christopher (Mid Scotland and Fife) (SNP)
Henry, Hugh (Paisley South) (Lab)
Hepburn, Jamie (Central Scotland) (SNP)
Hume, Jim (South of Scotland) (LD)
Hyslop, Fiona (Lothians) (SNP)
Ingram, Adam (South of Scotland) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Kelly, James (Glasgow Rutherglen) (Lab)
Kerr, Andy (East Kilbride) (Lab)
Kidd, Bill (Glasgow) (SNP)
Lamont, Johann (Glasgow Pollok) (Lab)
Lamont, John (Roxburgh and Berwickshire) (Con)
Livingstone, Marilyn (Kirkcaldy) (Lab)
Lochhead, Richard (Moray) (SNP)
MacAskill, Kenny (Edinburgh East and Musselburgh) (SNP)
Macdonald, Lewis (Aberdeen Central) (Lab)
Macintosh, Ken (Eastwood) (Lab)
Martin, Paul (Glasgow Springfield) (Lab)
Marwick, Tricia (Central Fife) (SNP)
Mather, Jim (Argyll and Bute) (SNP)
Matheson, Michael (Falkirk West) (SNP)
Maxwell, Stewart (West of Scotland) (SNP)
McArthur, Liam (Orkney) (LD)
McAveety, Mr Frank (Glasgow Shettleston) (Lab)
McConnell, Jack (Motherwell and Wishaw) (Lab)
McGrigor, Jamie (Highlands and Islands) (Con)
McInnes, Alison (North East Scotland) (LD)
McKee, Ian (Lothians) (SNP)
McKelvie, Christina (Central Scotland) (SNP)
McLaughlin, Anne (Glasgow) (SNP)
McLetchie, David (Edinburgh Pentlands) (Con)
McMahon, Michael (Hamilton North and Bellshill) (Lab)
McMillan, Stuart (West of Scotland) (SNP)
McNeill, Duncan (Greenock and Inverclyde) (Lab)
McNeill, Pauline (Glasgow Kelvin) (Lab)
McNulty, Des (Clydebank and Milngavie) (Lab)
Milne, Nanette (North East Scotland) (Con)
Mitchell, Margaret (Central Scotland) (Con)
Mulligan, Mary (Linlithgow) (Lab)
Munro, John Farquhar (Ross, Skye and Inverness West) (LD)
Neil, Alex (Central Scotland) (SNP)
O'Donnell, Hugh (Central Scotland) (LD)
Oldfather, Irene (Cunninghame South) (Lab)
Park, John (Mid Scotland and Fife) (Lab)
Paton, Gill (West of Scotland) (SNP)
Peacock, Peter (Highlands and Islands) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Pringle, Mike (Edinburgh South) (LD)
Purvis, Jeremy (Tweeddale, Ettrick and Lauderdale) (LD)
Robison, Shona (Dundee East) (SNP)
Rumbles, Mike (West Aberdeenshire and Kincardine) (LD)
Amendment 108 disagreed to.

Amendment 25 moved—[Stewart Stevenson]—and agreed to.

Section 14—Scottish share of emissions from international aviation and international shipping

The Deputy Presiding Officer: Group 8 is on Scottish share of emissions from international aviation and international shipping. Amendment 109, in the name of Patrick Harvie, is grouped with amendments 110, 111, 146 and 112.

Patrick Harvie: During stage 1, the committee heard clear evidence—albeit that there was a range of views, there was broad agreement on the principle—that aviation and shipping emissions should be included in the bill. It was also agreed that aviation emissions have a disproportionate impact on climate change.

The inclusion of aviation and shipping emissions was one of the earliest demands that the non-governmental organisation community made in lobbying on the bill. Indeed, early in the process, the Government agreed with campaigners that that was an area for inclusion. The committee was pleased to welcome that. We also welcomed the assurance that aviation and shipping emissions would be included not only at some point in the system that we are putting in place, but at the outset.

However, as it stands, the drafting of the bill says that ministers “may ... make provision” to include aviation and shipping emissions. My amendment 109 seeks to change the word “may” to “must”. It would ensure that ministers “must make provision for emissions from international aviation and international shipping”.

It also seeks to ensure that ministers can take account of “any gas added to the list of greenhouse gases” some time down the line and that they cannot reverse their decision. In other words, amendment 109 would ensure that ministers cannot introduce a subsequent order to remove the counting of aviation and shipping emissions in climate change targets.

I turn to the additional impact of aviation emissions. It is clear that, although this is a developing area of science—just as the whole subject of climate change is—emissions at altitude have a disproportionate and substantial impact on the causes of climate change. It has been argued that a multiplier should therefore be applied before aviation emissions are counted for the purpose of the target.

Towards the end of amendment 109, I seek to require that the provision “must include the use, for each greenhouse gas, of a multiplier which reflects the direct and indirect non-carbon dioxide climate change impacts of emissions at altitude from international aviation” on climate change.

Amendment 112 raises the issue of a multiplier in respect of the advice that ministers must request from the advisory body—at present the UK Committee on Climate Change. That committee has expressed its view and the UK Government also has a view. Given that those views will develop over time, it is important that ministers are required to seek advice on the most appropriate multiplier that should apply.

At times, aviation can come in for a bit too much stick. I recognise that it is only one element of a much broader agenda. We need to reduce our dependence on aviation, just as we need to reduce our road traffic levels, energy demands and waste. In that context, aviation emissions should not be exempt on the basis that they represent only a small proportion of overall emissions. If aviation emissions are to be included in the bill, we should include all of their impact. If we do that, perhaps in coming years we will read fewer stories in the newspapers about the Scottish Government flying its advisers round the world to tell it how to reduce emissions.

I move amendment 109.

Des McNulty: Amendments 110 and 111 are probing amendments. I am interested in how ministers respond to the different problems that
are associated with measures on aviation emissions and shipping emissions.

When the committee considered the bill, it was recognised that there is a fairly well-established methodology for identifying aviation emissions, albeit that there are outstanding issues to do with the multiplier, but that there are much greater difficulties in quantifying shipping emissions. That is largely due to the fact that whereas aviation emissions can be based on fuelling—there is refuelling every time there is a flight—ships do not need to be fuelled for every voyage. It is therefore much harder to identify shipping emissions.

I want to ensure that the difficulties in bringing forward provisions on shipping emissions that result from those emissions not being easy to quantify do not delay the process of establishing aviation emissions. I am keen to ensure that if ministers have any doubt whatever about the possibility of treating emissions as a package that includes aviation and shipping emissions, we should separate them at this point so that aviation can at least be dealt with and a further year can be allowed for shipping if that should prove to be necessary. The purpose of my proposals is to ensure that ministers have identified the problems in dealing with what the bill requires and that they have set themselves an appropriate timetable that ensures that we can deal with aviation and shipping as quickly as possible.

Stewart Stevenson: Mr McNulty’s amendments 110 and 111 are not necessary, but I would have no objection to his pressing them. There is certainly merit in what he says. A range of difficulties is associated with shipping compared with aviation. Indeed, there is a range of difficulties with shipping on a broad range of emissions, not simply greenhouse gas emissions. Shipping must still reduce the sulphur in its fuel, which has certain effects, and it must still do work on particulates, which are still being emitted from burning shipping fuel. Mr McNulty is therefore perfectly correct to give us the opportunity to consider the issue.

We must ensure that aviation plays a significant part. I was interested to hear Patrick Harvie say that we sometimes overfocus on aviation. That is true, but it is important that every sector shows that it is making progress. I do not think that aviation has so far taken the demonstrable steps forward that we might wish for. I assure members that the Government is absolutely committed to moving rapidly on aviation and that when we understand how to resolve some of the difficulties associated with shipping, we will move on them as well.

There is a drafting issue with respect to Des McNulty’s amendment 111, which my amendment 146 seeks to correct. It would insert a reference to the other date of 1 June 2011, which it is important to do.

We are happy to agree to Patrick Harvie’s amendments in the group. Amendment 109 seeks to include various criteria that the Scottish ministers must comply with when they make orders to specify the emissions from international aviation and international shipping that are to be attributable to Scotland for the purposes of the targets in the bill. The amendment simply puts on a statutory footing actions that the Scottish ministers intended to take anyway. On that basis, I am comfortable with amendment 109 and am willing to support it.

Amendment 112, which is linked to amendment 109, requires the Scottish ministers to request advice from the relevant body on the appropriate multiplier for each greenhouse gas prior to bringing forward an order to include Scotland’s share of international aviation emissions within Scottish emissions. That relates to the matter of radiative forcing, which is of particular interest to Patrick Harvie and is of interest to me, too. We have committed to seeking advice on the multiplier, so the principle behind the amendment causes me no problems. I am therefore content to support it.

Des McNulty: I want to be clear about the minister’s analysis. I have offered an opportunity through amendments 110 and 111 for the minister to guarantee that the current timetable in the bill will allow him to deal with aviation and shipping. If he is not confident that he can do that adequately, it would be better to agree to those amendments. That would give us the assurance that aviation at least could be dealt with within the timescale and that dealing with shipping could follow.

Stewart Stevenson: We are content that the current provisions give us sufficient time to make an initial judgment. Of course there will be changes as information emerges over the years, particularly about maritime transport—I think that there is a move from using a number of quite heavily contaminating fuels; I am thinking of M30, M40 and the less-contaminating M120—but we are in a position at which we can take initial steps. Indeed, it is important that we take early initial steps. That is a thread running through the bill.

Patrick Harvie: To save time, I say simply that I welcome the minister’s comments in agreeing to support the amendments in my name in the group.

Amendment 109 agreed to.

Amendments 110, 111 and 146 not moved.

Amendment 112 moved—[Patrick Harvie]—and agreed to.
Section 18A—Limits on use of carbon units

Amendments 26 and 27 moved—[Stewart Stevenson]—and agreed to.

Amendment 113 moved—[Malcolm Chisholm].

The Deputy Presiding Officer (Trish Godman): The question is, that amendment 113 be agreed to. Are we agreed?

Members: No.

The Deputy Presiding Officer: There will be a division.

For
Alexander, Ms Wendy (Paisley North) (Lab)
Bailie, Jackie (Dumbarton) (LD)
Baker, Claire (Mid Scotland and Fife) (Lab)
Baker, Richard (North East Scotland) (Con)
Boyack, Sarah (Edinburgh Central) (Lab)
Brankin, Rhona (Midlothian) (Lab)
Brown, Robert (Glascow) (LD)
Butler, Bill (Glasgow Anniesland) (Lab)
Chisholm, Malcolm (Edinburgh North and Leith) (Lab)
Craigen, Cathie (Cumbernauld and Kilsyth) (Lab)
Curran, Margaret (Glasgow Baillieston) (Lab)
Eadie, Helen (Dunfermline East) (Lab)
Ferguson, Patricia (Glasgow Maryhill) (Lab)
Finnie, Ross (West of Scotland) (LD)
Foulkes, George (Lothians) (Lab)
Gillon, Karen (Clydesdale) (Lab)
Glen, Martyn (North East Scotland) (Lab)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Grant, Rhoda (Highlands and Islands) (Lab)
Gray, Iain (East Lothian) (Lab)
Harper, Robin (Lothians) (Green)
Harvie, Patrick (Glasgow) (Green)
Henry, Hugh (Paisley South) (Lab)
Hume, Jim (South of Scotland) (LD)
Kelly, James (Glasgow Rutherglen) (Lab)
Kerr, Andy (East Kilbride) (Lab)
Lamont, Johann (Glasgow Pollok) (Lab)
Livingstone, Marilyn (Kirkcaldy) (Lab)
Macdonald, Lewis (Aberdeen Central) (Lab)
MacDonald, Margo (Lothians) (Ind)
Macintosh, Ken (Eastwood) (Lab)
Martin, Paul (Glasgow Springburn) (Lab)
McArthur, Liam (Orkney) (LD)
McAveely, Mr Frank (Glasgow Shettleston) (Lab)
McConnell, Jack (Motherwell and Wishaw) (Lab)
McInnes, Alison (North East Scotland) (LD)
McNeil, Duncan (Greenock and Inverclyde) (Lab)
McNeill, Pauline (Glasgow Kelvin) (Lab)
McGuiere, Des (Clydebank and Milngavie) (Lab)
Mulligan, Mary (Linlithgow) (Lab)
Munro, John Farquhar (Ross, Skye and Inverness West) (LD)
O'Donnell, Hugh (Central Scotland) (LD)
Oldfather, Irene (Cunninghame South) (Lab)
Park, John (Mid Scotland and Fife) (Lab)
Peacock, Peter (Highlands and Islands) (Lab)
Peatlie, Cathy (Falkirk East) (Lab)
Pringle, Mike (Edinburgh South) (LD)
Curran, Margaret (Glasgow Baillieston) (Lab)
Dorries, Bob (Glasgow) (SNP)
Ewing, Fergus (Inverness East, Nairn and Lochaber) (SNP)
Fabbri, Linda (Central Scotland) (SNP)
FitzPatrick, Joe (Dundee West) (SNP)
Fraser, Murdo (Mid Scotland and Fife) (Con)
Gibson, Kenneth (Cunninghame North) (SNP)
Gibson, Rob (Highlands and Islands) (SNP)
Goldie, Annabel (West of Scotland) (Con)
Graham, Christine (South of Scotland) (SNP)
Harvie, Christopher (Mid Scotland and Fife) (SNP)
Hepburn, Jamie (Central Scotland) (SNP)
Hyslop, Fiona (Lothians) (SNP)
Ingram, Adam (South of Scotland) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Kidd, Bill (Glasgow) (SNP)
Lamont, John (Roxburgh and Berwickshire) (Con)
Lochhead, Richard (Moray) (SNP)
MacAskill, Kenny (Edinburgh East and Musselburgh) (SNP)
Marwick, Tricia (Central Fife) (SNP)
Mather, Jim (Argyll and Bute) (SNP)
Matheson, Michael (Falkirk West) (SNP)
Maxwell, Stewart (West of Scotland) (SNP)
McGrigor, Jamie (Highlands and Islands) (Con)
McKee, Ian (Lothians) (SNP)
McKelvie, Christina (Central Scotland) (SNP)
McLaughlin, Anne (Glasgow) (SNP)
McLetchie, David (Edinburgh Pentlands) (Con)
McMillan, Stuart (West of Scotland) (SNP)
Milne, Nanette (North East Scotland) (Con)
Mitchell, Margaret (Central Scotland) (Con)
Neil, Alex (Central Scotland) (SNP)
Patterson, Gil (West of Scotland) (SNP)
Robison, Shona (Dundee East) (SNP)
Salmone, Alex (Gordon) (SNP)
Scanlon, Mary (Highlands and Islands) (Con)
Scott, John (Ayr) (Con)
Smith, Elizabeth (Mid Scotland and Fife) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)
Stevenson, Stewart (Banff and Buchan) (SNP)
Swinney, John (North Tayside) (SNP)
Thomson, Dave (Highlands and Islands) (SNP)
Watt, Maureen (North East Scotland) (SNP)
Welsh, Andrew (Angus) (SNP)
White, Sandra (Glasgow) (SNP)
Wilson, Bill (West of Scotland) (SNP)
Wilson, John (Central Scotland) (SNP)

AGAINST
Adam, Brian (Aberdeen North) (SNP)
Aitken, Bill (Glasgow) (Con)
Allan, Alasdair (Western Isles) (SNP)
Brocklebank, Ted (Mid Scotland and Fife) (Con)
Brown, Gavin (Lothians) (Con)
Brown, Keith (Ochil) (SNP)
Brownlee, Derek (South of Scotland) (Con)
Campbell, Aileen (South of Scotland) (SNP)
Carlaw, Jackson (West of Scotland) (Con)
Coffey, Willie (Kilmarnock and Loudoun) (SNP)
Constance, Angela (Livingston) (SNP)
Crawford, Bruce (Stirling) (SNP)
Cunningham, Roseanna (Perth) (SNP)
Don, Nigel (North East Scotland) (SNP)
Dorris, Bob (Glasgow) (SNP)

The Deputy Presiding Officer: The result of the division is: For 60, Against 60, Abstentions 0.
I use my casting vote against amendment 113. Amendment 113 disagreed to.

Section 19—Meaning of advisory body
Amendment 114 moved—[Sarah Boyack]—and agreed to.

The Deputy Presiding Officer: Group 9 is on minor amendments and drafting changes. Amendment 28, in the name of the minister, is grouped with amendments 31, 34, 35 and 51.

Stewart Stevenson: All the amendments in the group are for minor drafting purposes. They are designed to tidy up a number of provisions that were amended at stage 2, and principally address matters of consistency of language and structure. Given their technical nature, I do not propose to say any more about them, unless any member wishes to intervene; I would be happy to provide further details if any member does so.

I move amendment 28.

Amendment 28 agreed to.

Section 22—Advice on annual targets etc
Amendments 29 and 30 moved—[Stewart Stevenson]—and agreed to.

Amendment 116 moved—[Shirley-Anne Somerville]—and agreed to.

Section 29—Reports on annual targets: content
Amendment 31 moved—[Stewart Stevenson]—and agreed to.

Section 30—Reports on proposals and policies for meeting annual targets
The Deputy Presiding Officer: Group 10 is on parliamentary consideration of reports. Amendment 32, in the name of the minister, is grouped with amendments 33, 36 and 37.

Stewart Stevenson: Amendment 32, which is the main amendment in the group, introduces a national planning framework format to some of the reporting that the bill requires. That is in line with the commitment that I made to Alison McInnes in the stage 1 debate.

At stage 2, Des McNulty raised concerns on going through an NPF-style scrutiny period each year for reporting under the bill. I agree that that would probably be unhelpful and cumbersome. That is why amendment 32 applies specifically to the report that ministers must make on proposals and policies to achieve annual targets. Unlike other reports that the Parliament requires, it is not simply a presentation of data, so a 60-day period for parliamentary scrutiny shall be of benefit.

Members will note that amendment 36 is consequential on amendment 32 and seeks to delete the reference in section 34 to proposals and policies for achieving annual targets. That is because section 34 is concerned with the scrutiny of reports after they have been laid in Parliament. Proposed new subsections (1E) and (1F) that amendment 32 would insert into section 30 contain provisions relating to the scrutiny of the final report on proposals and policies for meeting annual targets once that report is laid in Parliament. Because that provision is made in amendment 32, the post-laying scrutiny provision in section 34 is unnecessary in respect of the report on proposals and policies.

Amendment 33 adds a new requirement for the report on proposals and policies to report the respective contributions that energy efficiency, energy generation, land use and transport should make towards achieving the targets. That fulfils another commitment that I made to Alison McInnes at stage 2.

Amendment 37 seeks to clarify some ambiguity in the wording of section 34(4) surrounding reports, which are made by committees, and resolutions, which are made by the Parliament.

I move amendment 32.

Alison McInnes: I am pleased that the minister lodged amendment 33, which implements provisions that I first proposed at stage 2. I welcomed his commitment at stage 2 to come back with altered language on sectoral targets. As the minister knows, I believe passionately that, for the bill to encourage genuine behavioural shift, it is vital that we specify that emissions reductions must happen across all aspects of Scotland’s economy. I am confident that, by putting the requirement into law, we will set the ball rolling on encouraging innovation across our economy.

I am pleased that the minister has introduced the NPF-style review process for reports on proposed policies that are aimed at meeting annual targets. As the minister acknowledged, Patrick Harvie and I proposed that approach in a slightly broader form at stage 2. I am a little disappointed that the process could not cover all the reporting duties, but I am pleased that it is being brought into section 30. I am sure not only that it will encourage members to develop an active interest and expertise in such matters, but that the requirement on the Government to take heed of representations that are made during the process will bring valuable input into policies on achieving targets. As the targets get harder as the years go on, the process will prove invaluable in helping to ensure that we achieve the targets that we have set.

Amendment 32 agreed to.
Amendment 33 moved—[Stewart Stevenson]—and agreed to.

After section 31A

The Deputy Presiding Officer: Group 11 is on energy generating stations—efficiency guidance. Amendment 147, in the name of Liam McArthur, is grouped with amendment 54.

11:30

Liam McArthur (Orkney) (LD): Every speaker in the debate so far has referred to the importance of addressing climate change and the challenge that we face. Therefore, it is not surprising that all parties in the Parliament agreed that the bill should be passed without undue delay. In the circumstances, that was the right decision, but it has created difficulties for the Parliament, particularly the lead committee—the Transport, Infrastructure and Climate Change Committee—although ministers and their officials have not escaped unscathed.

The amendments in this group provide ample evidence of those difficulties. At stage 2, I successfully moved an amendment that required the Scottish ministers to use their consenting powers under the Electricity Act 1989 to set emissions limits for new and extended electricity generating plants. Liberal Democrat colleagues at Westminster—notably Charles Kennedy—have taken a lead on that issue, with firm support from the Scottish National Party and other parties. There was some question at that stage about the legal competence of the measure that the committee supported and, despite subsequent efforts, no agreement could be reached that did not risk leaving the bill open to further scrutiny by the Privy Council, which all parties were keen to avoid.

Late in the day, concerns were also raised about the impact that section 49A might have on Longannet’s chances of successfully bidding for the pilot carbon capture and storage competition that the UK Government is running. All parties in the Parliament want Longannet to win that competition, so I am happy to accept amendment 54 in the minister’s name. However, it is important that proper focus be brought to bear on the impact that emissions from electricity generation have. No one can dispute the significant contribution that they make to our overall emissions. Therefore, the more we can do to bring down emissions from generation, the greater the likelihood that we will achieve and possibly exceed the overall reduction targets that we set. Emissions performance standards will have a role to play in that.

Amendment 147 in my name brings proper focus to that and requires the Scottish ministers to lay before the Parliament annually a report that outlines the impact of their actions on net Scottish emissions resulting from electricity generation. It falls short of what might have been achievable had more time been available, but it provides a useful and important basis on which to keep the issue under review from 2010 onwards.

I am grateful to the Presiding Officer for allowing amendment 147 as a manuscript amendment.

I move amendment 147.

Stewart Stevenson: I thank Liam McArthur for his assistance in this regard. We never had a policy difference; we merely foresaw a difficulty with the drafting. I am glad that, in amendments 147 in his name and amendment 54 in mine, we have something in front of us that will take us forward and resolve the issue.

Under amendment 147, the Scottish ministers will have to report on the impact that the exercise of their electricity generation functions has on net Scottish emissions. Liam McArthur’s amendment will give members a strong assurance of an enduring legislative requirement for ministers to justify their actions on electricity generation. Given our clear commitment to the decarbonisation of electricity generation by 2030, as set out in the climate change delivery plan, the Government will be more than happy to make such reports.

However, as Liam McArthur accepted, we have to delete section 49A from the bill. It is a serious matter when there is a risk that a bill will breach legislative competence. As Liam McArthur said, the Privy Council could come into play and significantly delay the bill. That would be embarrassing, risk undermining our reputation as leaders on climate change and take us into uncharted legal territory. That is not a risk worth taking, and Liam McArthur has been clear about that.

As I outlined to committee members at stage 2, the Government has not ruled out introducing an emissions performance standard for new electricity generating stations. As my colleague Jim Mather informed the Parliament last week in his reply to parliamentary question S3W-24912, we will consider, in line with the UK approach, the development of an emissions performance standard in line with the development of carbon capture and storage technology.

The key issue at present, as I said at stage 2, is timing. To decarbonise by 2030, CCS will need to be retrofitted in the 2020s and demonstrated in the 2010s, so the next decade will be crucial in making CCS a technical and commercial reality. That will require substantial investment from the public sector. That is why the UK Government is
currently consulting on a CCS levy—which will require new UK legislation—which will be spent by this Parliament. We will seek the Parliament’s consent on the issue in the autumn, so the Scottish Parliament has a clear reassurance that it can revisit the subject later this year. Decarbonising electricity generation by 2030 must remain our overarching objective.

I have given some clear commitments to Parliament today. Under amendment 147, in the name of Liam McArthur, ministers will be subject to a new reporting duty. That should give clear assurance that emissions reduction from electricity generation will take place in keeping with the bill.

Alex Johnstone: At stage 2, I voted against the amendment that inserted section 49A largely because of the concerns that the minister has just set out. However, as Liam McArthur mentioned, section 49A includes a significant area of policy that enjoys a broad level of support in the south, in the House of Commons. Consequently, I was somewhat concerned to find myself required to oppose section 49A on grounds that were not policy related. Therefore, I am very pleased that Liam McArthur lodged amendment 147, which will ensure that the issue is included in the bill. That allows me to support both amendment 147 and amendment 54, which will delete section 49A from the bill.

Des McNulty: At stage 2, Labour members of the Transport, Infrastructure and Climate Change Committee supported—on policy grounds—the amendment that inserted section 49A. However, we understand the legislative competence issues that have led to the requirement for amendment 54, which will delete that section. We will support amendment 147, in the name of Liam McArthur, which will achieve some of what he intended to achieve through section 49A. We continue to believe that new fossil fuel stations should be introduced only on the basis that they incorporate carbon capture and storage, as would have been required under section 49A. Although amendment 147 perhaps falls short by comparison with section 49A, we hope that we will have the opportunity to discuss the issue further. On that basis, we will support amendment 147 and amendment 54.

Liam McArthur: I welcome the minister’s comments on the importance of, and the potential future role for, emissions performance standards. We will certainly press him on that matter and continue to scrutinise developments up to 2020. I am also grateful for the supportive comments of Alex Johnstone and Des McNulty.

Amendment 147 agreed to.

Section 31B—Report on progress towards meeting the interim target
Amendments 34 and 35 moved—[Stewart Stevenson]—and agreed to.

Section 34—Reports: provision of further information to the Scottish Parliament
Amendments 36 and 37 moved—[Stewart Stevenson]—and agreed to.

Section 36—Duties of public bodies relating to climate change
The Deputy Presiding Officer: Group 12 is on public bodies—climate change duties. Amendment 38, in the name of the minister, is grouped with amendments 39 to 49, 52, 5, 5A, 91 and 92.

Stewart Stevenson: At stage 2, Cathy Peattie successfully proposed amendments that included within the bill a duty on public bodies “to contribute to the delivery of the targets set in or under Part 1”.

Although I did not agree that such an approach was necessary, I accepted the general principle behind what is now section 36(A1) of the bill. However, while I accept the general principle, I believe that a number of amendments are needed to improve how section 36 works and to take proper account of the amendments that were made at stage 2.

In particular, section 36(A1) is not specific about what will be expected of public bodies to fulfil the duties that it places on them. As members will know from the briefing note that the Convention of Scottish Local Authorities has circulated, it has concerns about that aspect of the duties as they currently stand. Amendment 38 will place on public bodies a duty to reduce greenhouse gas emissions in so far as that is consistent with the exercise of the relevant public body’s functions. The language that is proposed in amendment 38 seeks to make it much clearer what is expected from public bodies.

In the proposed new subsection (A2) that amendment 38 will insert into section 36, the sustainable development duty will apply only to public bodies’ actions to reduce their emissions. That will ensure that the duty does not cut across other functions that such bodies might have and other sustainability duties to which they might be subject. That will help to avoid the confusion of conflicting and competing sustainability duties on public bodies.

Let me reassure members about duties that relate to adaptation to the effects of climate change. Although a wide spectrum of Scotland’s public bodies can, and should, take action to reduce their emissions, taking action to adapt to
the effects of climate change tends to be more of a specialist activity. For that reason, it is felt that adaptation duties on public bodies are best suited to secondary legislation. That will allow a more targeted, and therefore more effective, approach to be taken. The Scottish Government intends to introduce carefully considered regulations and guidance, which will also allow the flexibility to improve directions as our approach to adapting to climate change continues to improve. I am content to confirm that I consider that it is important that an adaptation duty be introduced as swiftly as possible once the bill receives royal assent. We anticipate that that will be within about a year.

Another point to make is that, under the provision that was inserted by Cathy Peattie’s stage 2 amendment, the climate change duties apply to all the persons and bodies that are listed in schedule 1 to the Freedom of Information (Scotland) Act 2002. Unfortunately, that is unnecessarily wide, as it refers to individuals as well as organisations. Therefore, I propose that we use a different reference source for the list of relevant public bodies: the list of devolved public bodies in schedule 3 to the Ethical Standards in Public Life etc (Scotland) Act 2000. I believe that that will cover all the significant public bodies that should be covered. That will be achieved by amendment 49, which will mean that local authorities will also be included in the definition of “relevant public body”.

Amendments 39, 43 to 48, 91 and 92 are consequential on amendment 49.

A significant issue with section 36 as it stands is that it would require public bodies to comply with the new duties when exercising any functions and to do so in the most sustainable manner. That duty would not be restricted to duties under the bill but would apply to those bodies when they carry out any function, even those functions that have no obvious connection to climate change. That could have the effect of causing significant confusion because many public bodies—including the Scottish Environment Protection Agency, Scottish Natural Heritage and local authorities—already have sustainable development duties under other legislation. I do not believe that that was Ms Peattie’s intention, which is why I propose to replace the current duties in sections 36(A1) and 36(A2) with better-defined duties. In fact, the proposed duties in amendment 38 could be said to go further than the duty that was inserted at stage 2 because they would require bodies to act in a manner which reduces the emissions of greenhouse gases rather than simply to “contribute to the delivery of the targets” that are placed on ministers under the bill.

Amendment 41 is consequential on amendment 38.

For the sake of completeness, amendments 40 and 42 will simply tidy up the drafting of section 36.

On amendment 5, in the name of Cathy Peattie, and my amendment 5A, I agree that the more focused list of public bodies that, if amendment 38 is agreed to, will be covered by section 36 should be subject to the equal opportunities duty in section 62. Given the wide range of bodies and persons that are covered by the Freedom of Information (Scotland) Act 2002, there is a difficulty with amendment 5 as lodged, which means that I cannot accept it. Amendment 5A, in my name, which is in a sense consequential on amendment 49, will have the effect of applying the section 62 duty to those relevant public bodies that will be covered by section 36 if amendment 49 is agreed to. If amendment 5A is agreed to, I will be happy to support amendment 5.

At stage 2, John Park lodged amendments on procurement but, after discussion, his principal amendment was not moved because of technical drafting problems that were identified. Amendment 52 deals with that issue and will impose a requirement that will apply when public bodies have to prepare a report on how they are complying with climate change duties. That report must contain information about how the procurement policies and procurement activities of public bodies “have contributed to compliance with climate change duties.”

I move amendment 38.

11:45

Cathy Peattie (Falkirk East) (Lab): I oppose amendments 38 and 43 to 49. Public bodies should have nothing to fear from the duty that was agreed to at stage 2. Many are already implementing a wide range of climate change measures, and I congratulate them on setting an example to which all public bodies should aspire; the duty exists to ensure that they do.

The current duty is not onerous. It incorporates reducing greenhouse gas emissions, adaptation and sustainable development. It specifies that public bodies must “contribute to the delivery of the targets” in the bill and must “help deliver” adaptation programmes. It also makes it clear that they can decide what is appropriate for their area.

The minister appeared to agree with that when he promised to work with whatever decision the
I, too, think that councils and other public bodies are up for this.

Why lodge amendment 38? It will weaken the public body duty that was agreed to at stage 2. It completely removes adaptations, requires public bodies merely to cut greenhouse gas emissions attributable to their activities, and links sustainable development only to weak greenhouse gas emissions cuts and not to overall functions.

Councils’ stated fears about people taking cases to court are not borne out by similar legislative provisions, which have not led to a significant number of cases. I am sure that the Scottish legal system is robust enough to deal with them and, in any event, amendment 38 would not prevent anyone from trying. That being so, why diminish the perfectly good provisions that have been agreed to?

Amendment 43 is linked to other amendments, including amendment 49. The bill, as agreed to at stage 2, defines public bodies according to the Freedom of Information (Scotland) Act 2002. Amendment 49 limits the definition of public bodies to the definition in the Ethical Standards in Public Life etc (Scotland) Act 2000, which is not as wide as the FOI act and does not include the Scottish ministers. Crucially, the FOI act definition is likely to be broadened to cover, for example, private prisons and other organisations that deliver public services. Amendment 49 is minimalist in ambition. We need action, and we need it urgently.

Amendment 5 ensures that equal opportunities requirements in the bill apply to public bodies as well as to ministers and advisory bodies.

John Park (Mid Scotland and Fife) (Lab): I want to make a brief contribution on amendment 52. I appreciate that the minister took on board the spirit of my proposal at stage 2 and has tidied up the technical aspects.

It is important to recognise the role of the public sector not just in procurement policy but in procurement activity. The public sector plays an important role in driving behaviour—and, we hope, will provide an exemplar to the private sector. The bill provides an opportunity to promote and publicise the good work that is taking place throughout not only the public sector but the private sector. I hope that we will consider the key roles played by workers, particularly those who are involved in trade union workplace environmental activity. A key role is played by the trade unions in driving the behaviour of trade union members and workers—not just in the workplace but the behaviour that they take back to their homes.

The environmental objectives that are being pursued by the trade union movement are a worthy contribution to the wider climate change challenge that we face. In the past, we have seen health and safety representatives make workplaces safer and learning representatives make workplaces smarter.

Stewart Stevenson: I agree with much of what Mr Park is saying, and we are working closely with the Scottish Trades Union Congress on many of those issues.

John Park: I thank the minister. I believe that environmental representatives in the workplace will make workplaces greener.

Alison McInnes: The Liberal Democrats will oppose the changes to what was agreed at stage 2. If we are to achieve the necessary cultural changes, everyone needs to be involved, and the whole of the public sector needs to contribute to achieving the targets that we spoke about earlier. We all need to set off from the starting line at the same time. As it stands, the net is cast as widely as possible. I suggest that we should resist amendments that narrow the definitions and, disappointingly, remove adaptations altogether.

Patrick Harvie: I support Cathy Peattie’s position on the group of amendments and express some disappointment with COSLA’s position in its briefing paper. If that position is based on fear that council decisions could be challenged on the assertion that an alternative approach could be made on the ground of reducing carbon emissions, it seems an implicit acceptance that many council decisions need to be challenged on the basis that alternative approaches should have been considered. I would have hoped that our local government sector would have been more up for this challenge than it appears to be according to the contents of its briefing.

As I said, I support Cathy Peattie’s position on this group. Throughout the passage of the bill, she has consistently argued for clear and ambitious public sector duties. I urge her to move her amendments and I look forward to supporting them.

The Deputy Presiding Officer: Does the minister wish to respond?

Stewart Stevenson: I think that the debate has been put, Presiding Officer.

The Deputy Presiding Officer: The question is, that amendment 38 be agreed to. Are we agreed?

Members: No.

The Deputy Presiding Officer: There will be a division.
For
Adam, Brian (Aberdeen North) (SNP)
Aitken, Bill (Glasgow) (Con)
Allan, Alasdair (Western Isles) (SNP)
Brocklebank, Ted (Mid Scotland and Fife) (Con)
Brown, Gavin (Lothians) (Con)
Brown, Keith (Ochil) (SNP)
Brownlee, Derek (South of Scotland) (Con)
Campbell, Aileen (South of Scotland) (SNP)
Carlaw, Jackson (West of Scotland) (Con)
Coffey, Willie (Kilmarnock and Loudoun) (SNP)
Constance, Angela (Livingston) (SNP)
Crawford, Bruce (Stirling) (SNP)
Cunningham, Roseanna (Perth) (SNP)
Don, Nigel (North East Scotland) (SNP)
Doris, Bob (Glasgow) (SNP)
Ewing, Fergus (Inverness East, Nairn and Lochaber) (SNP)
Fabianni, Linda (Central Scotland) (SNP)
FitzPatrick, Joe (Dundee West) (SNP)
Fraser, Murdo (Mid Scotland and Fife) (Con)
Gibson, Kenneth (Cunninghame North) (SNP)
Gibson, Rob (Highlands and Islands) (SNP)
Goldie, Annabel (West of Scotland) (Con)
Grahame, Christine (South of Scotland) (SNP)
Harvie, Christopher (Mid Scotland and Fife) (SNP)
Hepburn, Jamie (Central Scotland) (SNP)
Hyslop, Fiona (Lothians) (SNP)
Ingram, Adam (South of Scotland) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Kidd, Bill (Glasgow) (SNP)
Lamont, John ( Roxburgh and Berwickshire) (Con)
Lochhead, Richard (Moray) (SNP)
MacAskill, Kenny (Edinburgh East and Musselburgh) (SNP)
Marwick, Tricia (Central Fife) (SNP)
Mather, Jim (Argyll and Bute) (SNP)
Matheson, Michael (Falkirk West) (SNP)
Maxwell, Stewart (West of Scotland) (SNP)
McGrigor, Jamie (Highlands and Islands) (Con)
McKee, Ian (Lothians) (SNP)
McKelvie, Christina (Central Scotland) (SNP)
McLaughlin, Anne (Glasgow) (SNP)
McLetchie, David (Edinburgh Pentlands) (Con)
McMillan, Stuart (West of Scotland) (SNP)
Milne, Nanette (North East Scotland) (Con)
Mitchell, Margaret (Central Scotland) (Con)
Neil, Alex (Central Scotland) (SNP)
Paterson, Gill (West of Scotland) (SNP)
Robison, Shona (Dundee East) (SNP)
Salmond, Alex (Gordon) (SNP)
Scanlon, Mary (Highlands and Islands) (Con)
Scott, John (Ayr) (Con)
Smith, Elizabeth (Mid Scotland and Fife) (Con)
Somervell, Shirley-Anne (Lothians) (SNP)
Stevenson, Stewart (Banff and Buchan) (SNP)
Swinney, John (North Tayside) (SNP)
Thompson, Dave (Highlands and Islands) (SNP)
Watt, Maureen (North East Scotland) (SNP)
Welsh, Andrew (Angus) (SNP)
Wilson, Bill (Ayrshire and Arran) (SNP)
Wilson, John (Central Scotland) (SNP)

AGAINST
Alexander, Ms Wendy (Paisley North) (Lab)
Baillie, Jackie (Dumbarton) (Lab)
Baker, Claire (Mid Scotland and Fife) (Lab)
Baker, Richard (North East Scotland) (Lab)
Boyack, Sarah (Edinburgh Central) (Lab)
Branch, Rhona (Midlothian) (Lab)
Brown, Robert (Glasgow) (LD)
Butler, Bill (Glasgow Anniesland) (Lab)
Chisholm, Malcolm (Edinburgh North and Leith) (Lab)
Craigie, Cathie (Cumbernauld and Kilsyth) (Lab)
Curran, Margaret (Glasgow Baillieston) (Lab)
Eddie, Helen (Dunfermline East) (Lab)
Ferguson, Patricia (Glasgow Maryhill) (Lab)
Finnie, Ross (West of Scotland) (LD)
Foulkes, George (Lothians) (Lab)
Gillon, Karen (Clydesdale) (Lab)
Glen, Marilyn (North East Scotland) (Lab)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Grant, Rhoda (Highlands and Islands) (Lab)
Gray, lain (East Lothian) (Lab)
Harper, Robin (Lothians) (Green)
Harvie, Patrick (Glasgow) (Green)
Henry, Hugh (Paisley South) (Lab)
Hume, Jim (South of Scotland) (LD)
Kelly, James (Glasgow Rutherglen) (Lab)
Kerr, Andy (East Kilbride) (Lab)
Lamont, Johann (Glasgow Pollok) (Lab)
Livingstone, Marilyn (Kirkcaldy) (Lab)
MacDonald, Lewis (Aberdeen Central) (Lab)
MacDonald, Margo (Lothians) (Ind)
Macintosh, Ken (Eastwood) (Lab)
Martin, Paul (Glasgow Springfield) (Lab)
McArthur, Liam (Orkney) (LD)
McAveety, Mr Frank (Glasgow Shettleston) (Lab)
McCabe, Tom (Hamilton South) (Lab)
McConnell, Jack (Motherwell and Wishaw) (Lab)
McInnes, Alison (North East Scotland) (LD)
McMahon, Michael (Hamilton North and Bellshill) (Lab)
McNeill, Duncan (Greenock and Inverclyde) (Lab)
McNeill, Pauline (Glasgow Kelvin) (Lab)
McNulty, Des (Clydebank and Milngavie) (Lab)
Mulligan, Mary (Linlithgow) (Lab)
Munro, John Farquhar (Ross, Skye and Inverness West) (LD)
O'Donnell, Hugh (Central Scotland) (LD)
Oldfather, Irene (Cunninghame South) (Lab)
Park, John (Mid Scotland and Fife) (Lab)
Peacock, Peter (Highlands and Islands) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Pringle, Mike (Edinburgh South) (LD)
Purvis, Jeremy (Tweeddale, Ettrick and Lauderdale) (LD)
Rumbles, Mike (West Aberdeenshire and Kincardine) (LD)
Scott, Tavish (Shetland) (LD)
Smith, Elaine (Coatbridge and Chryston) (Lab)
Smith, lain (North East Fife) (LD)
Smith, Margaret (Edinburgh West) (LD)
Stephen, Nicol (Aberdeen South) (LD)
Stewart, David (Highlands and Islands) (Lab)
Stone, Jamie (Caithness, Sutherland and Easter Ross) (LD)
Tolson, Jim (Dunfermline West) (LD)
Whitefield, Karen (Airdrie and Shotts) (Lab)
Whitton, David (Strathkelvin and Bearsden) (Lab)

The Deputy Presiding Officer: The result of the division is: For 60, Against 62, Abstentions 0.

Amendment 38 disagreed to.

Amendment 39 moved—[Stewart Stevenson]— and agreed to.

Amendments 40 to 48 not moved.

Amendment 49 moved—[Stewart Stevenson].

The Deputy Presiding Officer: The question is, that amendment 49 be agreed to. Are we agreed?

Members: No.
The Deputy Presiding Officer: There will be a division.

FOR

Adam, Brian (Aberdeen North) (SNP)
Aitken, Bill (Glasgow) (Con)
Allan, Alasdair (Western Isles) (SNP)
Brocklebank, Ted (Mid Scotland and Fife) (Con)
Brown, Gavin (Lothians) (Con)
Brown, Keith (Ochil) (SNP)
Brownlee, Derek (South of Scotland) (Con)
Campbell, Aileen (South of Scotland) (SNP)
Carlaw, Jackson (West of Scotland) (Con)
Coffey, Willie (Kilmarnock and Loudoun) (SNP)
Constance, Angela (Livingston) (SNP)
Crawford, Bruce (Stirling) (SNP)
Cunningham, Roseanna (Perth) (SNP)
Don, Nigel (North East Scotland) (SNP)
Doris, Bob (Glasgow) (SNP)
Ewing, Fergus (Inverness East, Nairn and Lochaber) (SNP)
Fabiani, Linda (Central Scotland) (SNP)
FitzPatrick, Joe (Dundee West) (SNP)
Fraser, Murdo (Mid Scotland and Fife) (Con)
Gibson, Kenneth (Cunninghame North) (SNP)
Gibson, Rob (Highlands and Islands) (SNP)
Goldie, Annabel (West of Scotland) (Con)
Grahame, Christine (South of Scotland) (SNP)
Harvie, Christopher (Mid Scotland and Fife) (SNP)
Hebbron, Jamie (Central Scotland) (SNP)
Hyslop, Fiona (Lothians) (SNP)
Ingram, Adam (South of Scotland) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Kidd, Bill (Glasgow) (SNP)
Lamont, John (Roxburgh and Berwickshire) (Con)
Lochhead, Richard (Moray) (SNP)
MacAskill, Kenny (Edinburgh East and Musselburgh) (SNP)
Marwick, Tricia (Central Fife) (SNP)
Mather, Jim (Argyll and Bute) (SNP)
Matheson, Michael (Faithkirk West) (SNP)
Maxwell, Stewart (West of Scotland) (SNP)
McGrigor, Jamie (Highlands and Islands) (Con)
McKee, Ian (Lothians) (SNP)
McKelvie, Christina (Central Scotland) (SNP)
McLaughlin, Anne (Glasgow) (SNP)
McLetchie, David (Edinburgh Pentlands) (Con)
McMillan, Stuart (West of Scotland) (SNP)
Milne, Nanette (North East Scotland) (Con)
Mitchell, Margaret (Central Scotland) (Con)
 Munro, John Farquhar (Ross, Skye and Inverness West) (LD)
Neil, Alex (Central Scotland) (SNP)
Paterson, Gil (West of Scotland) (SNP)
Robison, Shona (Dundee East) (SNP)
Salmond, Alex (Gordon) (SNP)
Scanlon, Mary (Highlands and Islands) (Con)
Scott, John (Ayr) (Con)
Smith, Elizabeth (Mid Scotland and Fife) (Con)
Somerville, Shirley-Anne (Lothians) (SNP)
Stevenson, Stewart (Banff and Buchan) (SNP)
Swinney, John (North Tayside) (SNP)
Thompson, Dave (Highlands and Islands) (SNP)
Watt, Maureen (North East Scotland) (SNP)
Welsh, Andrew (Angus) (SNP)
White, Sandra (Glasgow) (SNP)
Wilson, John (Central Scotland) (SNP)

AGAINST

Alexander, Ms Wendy (Paisley North) (Lab)
Baillie, Jackie (Dumbarton) (Lab)
Baker, Claire (Mid Scotland and Fife) (Lab)
Baker, Richard (North East Scotland) (Lab)
Boyack, Sarah (Edinburgh Central) (Lab)
Brankin, Rhona (Midlothian) (Lab)
Brown, Robert (Glasgow) (LD)
Butler, Bill (Glasgow Anniesland) (Lab)
Chisholm, Malcolm (Edinburgh North and Leith) (Lab)
Craigie, Cathie (Cumbernauld and Kilsyth) (Lab)
Curran, Margaret (Glasgow Baillieston) (Lab)
Eadie, Helen (Dunfermline East) (Lab)
Ferguson, Patricia (Glasgow Maryhill) (Lab)
Finnie, Ross (West of Scotland) (LD)
Foulkes, George (Lothians) (Lab)
Gillon, Karen (Clydesdale) (Lab)
Glen, Marilyn (North East Scotland) (Lab)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Grant, Rhoda (Highlands and Islands) (Lab)
Gray, Iain (East Lothian) (Lab)
Harper, Robin (Lothians) (Con)
Harvie, Patrick (Glasgow) (Green)
Henry, Hugh (Paisley South) (Lab)
Hume, Jim (South of Scotland) (LD)
Kelly, James (Glasgow Rutherglen) (Lab)
Kerr, Andy (East Kilbride) (Lab)
Lamont, Johann (Glasgow Pollok) (Lab)
Livingstone, Marilyn (Kirkcaldy) (SNP)
Macdonald, Lewis (Aberdeen Central) (Lab)
MacDonald, Margo (Lothians) (Ind)
Macintosh, Ken (Eastwood) (Lab)
Martin, Paul (Glasgow Springburn) (Lab)
McArthur, Liam (Orkney) (LD)
McAveety, Mr Frank (Glasgow Shettleston) (Lab)
McCabe, Tom (Hamilton South) (Lab)
McConnell, Jack (Motherwell and Wishaw) (Lab)
McInnes, Alison (North East Scotland) (LD)
McMahon, Michael (Hamilton North and Bellshill) (Lab)
McNeil, Duncan (Greenock and Inverclyde) (Lab)
McNeill, Pauline (Glasgow Kelvin) (Lab)
McNulty, Des (Clydebank and Milngavie) (Lab)
Mulligan, Mary (Linlithgow) (Lab)
O’Donnell, Hugh (Central Scotland) (LD)
Oldfather, Irene (Cunninghame South) (Lab)
Park, John (Mid Scotland and Fife) (Lab)
Peacock, Peter (Highlands and Islands) (Lab)
Peattie, Cathy (Falkirk East) (Lab)
Pringle, Mike (Edinburgh South) (LD)
Purvis, Jeremy (Tweeddale, Ettrick and Lauderdale) (LD)
Rumbles, Mike (West Aberdeenshire and Kincardine) (LD)
Scott, Tavish (Shetland) (LD)
Simpson, Dr Richard (Mid Scotland and Fife) (Lab)
Smith, Elaine (Coatbridge and Chryston) (Lab)
Smith, Iain (North East Fife) (LD)
Smith, Margaret (Edinburgh West) (LD)
Stephen, Nicol (Aberdeen South) (LD)
Stewart, David (Highlands and Islands) (Lab)
Stone, Jamie (Caithness, Sutherland and Easter Ross) (LD)
Tolson, Jim (Dunfermline West) (LD)
Whitefield, Karen (Airdrie and Shotts) (Lab)
Whitton, David (Strathkelvin and Bearsden) (Lab)
Wilson, Bill (West of Scotland) (SNP)

The Deputy Presiding Officer: The result of the division is: For 60, Against 62, Abstentions 0.

Amendment 49 disagreed to.

Section 38—Reporting on climate change duties

Amendments 51 and 52 moved—[Stewart Stevenson]—and agreed to.
Section 45D—Duty to produce a land use strategy

Amendment 119 moved—[Sarah Boyack]—and agreed to.

Section 47—Power to modify functions of Forestry Commissioners

Amendment 120 moved—[Sarah Boyack]—and agreed to.

The Deputy Presiding Officer: Group 13 is on application of biodiversity duty. Amendment 53, in the name of the minister, is the only amendment in the group.

Stewart Stevenson: Amendment 53, in my name, amends section 47(3A), as inserted at stage 2 by amendment 221, in the name of Jim Hume. On closer reading of subsection (3A), I believe that it goes further than Mr Hume intended. Applying the duty to individuals opens them to the risk of their being directly liable for breach of biodiversity duty rather than, or as well as, the joint venture company or trust itself. In deleting the reference to the “person appointed”, amendment 53 removes that risk while leaving intact, we believe, Mr Hume’s intention at stage 2.

I move amendment 53.

Jim Hume (South of Scotland) (LD): I am happy to accept that amendment to my stage 2 amendment, as it sharpens it up.

Amendment 53 agreed to.

Section 48—Duty of Scottish Ministers to promote energy efficiency

The Deputy Presiding Officer: Group 14 is on the contribution of planning and building regulations to reduction of emissions. Amendment 121, in the name of Sarah Boyack, is grouped with amendments 137, 137A, 137B, 138 and 138A.

Sarah Boyack: It is fair to say that we are all marked by our experience before we arrive in the Parliament. I own up to being a former town planner, which is a dangerous thing to admit in any public organisation, but it makes me determined to use our building and planning process to tackle the challenge of climate change effectively.

I am convinced that we are not currently taking many opportunities that we need to take. All the amendments in group 14 are about enabling the planning system to look to the future, plan intelligently and future proof our new buildings so that they take on the challenge of climate change, particularly in relation to reducing emissions.

We can all be proud of the fact that the Scottish Parliament has ratcheted up the standards that are required for new buildings. The intention of Scottish planning policy 6, which was passed two years ago, was to incentivise all developers to build homes and buildings that were more efficient and more reliant on locally sourced heat and energy. We adapted the Merton rule for our purposes in Scotland, but we now need to do more to push ahead on that agenda.

All our new developments and buildings should incorporate low-carbon designs and technologies. Each building will bring its own opportunities, but also its own challenges. We can see from the way in which the code for sustainable buildings is beginning to transform the building industry in England that setting a level playing field and ensuring that there is clarity for developers does work.

Amendment 121 requires the Scottish Government’s energy efficiency plan to give details of how ministers intend to ensure that all new buildings avoid a specified and rising proportion of the projected greenhouse gas emissions from their use, calculated on the basis of designs for specific building, through the installation and operation of low and zero-carbon generating technologies. New buildings will have to meet the building standards that are set by the Government of the day. If they do better than those standards, there is the incentive that they will not have to produce as many on-site renewables and zero-carbon technologies.

12:00

Amendment 121 would mean that new developments must take account of those issues. In committee, the minister objected to the terms of my stage 2 amendment. Now that I have re-examined the issue from first principles and considered the code for sustainable building that is employed in the rest of the UK, I want to push the point because it is entirely possible to predict buildings’ notional impact when they are built. That is no guarantee of how buildings are used. There is nothing to prevent people who have fantastically efficient boilers from putting them on full and leaving the windows open, but that does not mean to say that the builder installed the best technology. How we use our buildings must obviously be part of the agenda, but it is possible to predict their notional impact.

SPP 6 sought to deliver houses that were cheaper to heat and power in financial and carbon terms. Another key objective was to promote decentralised renewable energy networks. The Department of Trade and Industry estimated that between 30 and 40 per cent of locally sourced heat and power could come from such networks. We are nowhere near that yet, but SPP 6 is beginning to incentivise people to move in that
direction. Aberdeen is a good example of where that is beginning to happen. We must deliver on the potential that exists, and development plans are the key.

The Royal Town Planning Institute has signalled its commitment to play a part in reducing carbon emissions. It advocates that regional and local plans and policies should be climate change proofed to ensure that they are updated, and amendment 137 would ensure that all local plans are updated. The minister is unhappy about the fact that amendment 137A refers specifically to strategic development plans but, as a former strategic planner, I am afraid that I must debate the point with him. There might be a different way of phrasing it, but the principle needs to be in the structure plans. The structure plans set the framework for local planners to follow, and there is a role for them to play in regional community heat provision.

Amendment 138 is crucial as it provides for a review process. When SPP 6 was put in place, a criticism that was made was that neither local authorities nor the Government showed enough leadership or pushed it enough. We need to get the momentum going again.

I believe that, taken together, my amendments represent a good package that would ensure that, at least for new developments, we could be confident that a good process was in place that developers across the country could work with, that was clear to them and that met local circumstances. My amendments would allow ministers to review progress in the future and identify what more needs to be done. That is crucial given that we are discussing a moving target.

Finally, I thank the minister for his gracious lodging of amendment 138A, which probably makes amendment 138B appropriate for supplementary guidance, which in turn would not be universal in their cover over the country can operate perfectly well without the requirements of the strategic plans, it is hard to see why those councils that are subject to them need additional requirements.

The detail of amendment 137 may be more appropriate for supplementary guidance, which in due course can form a statutory element of the development plan when ministers approve the first strategic plans and planning authorities adopt the first local development plans.

We accept all amendments in this group apart from amendments 137A and 137B, which we think are unnecessary and bureaucratic and, in any event, would not be universal in their cover over councils.

Sarah Boyack: It is helpful to get the minister’s clarification of the Government’s view. It is important that, even in a concise and visionary plan, we can indicate support for low-carbon technologies and strategic developments that relate to local provision. I welcome the fact that the minister will bring along supplementary guidance. I have been careful not to be specific in the bill about types of technologies because I do not think that would be appropriate. New zero-carbon technologies that none of us has heard of will probably be available in four years’ time.
The issue is about a principle being established in plans and not detailed requirements on developers, who must be left to choose the right kind of zero or low-carbon technologies for their own developments—I very much agree with the minister in that respect. However, if we do not have the planning policies in place in every development plan, they will not happen. As an ex-planner, I know that guidance from central Government is crucial. I therefore hope that, if we agree to my amendments in this group, the Government will bring forward guidance.

One of the concerns that informed my lodging of the amendments is that the recasting of planning policy guidance, which in many ways is admirable, will potentially water down what was in SPP 6, which would be a great mistake. Local authorities such as the City of Edinburgh Council and Midlothian Council, which have already started down that track, have begun to make a difference to the standards of new buildings. I therefore hope that what I propose will go into statute and make a difference in all our new developments.

Amendment 121 agreed to.

The Deputy Presiding Officer: Group 15 is on definition of energy efficiency. Amendment 122, in the name of Des McNulty, is grouped with amendment 123.

Des McNulty: Section 48(8)(b) refers to "materials the manufacture or use of which produces or involves lower emissions of greenhouse gases than other materials". It struck me that there might be a restriction in the use of the term "materials" that excludes or does not explicitly include equipment that could contribute to reducing emissions of greenhouse gases. It therefore seemed to me to be appropriate to seek to introduce the term "equipment" into section 48(8)(b), which would allow a broader use of technologies than those referred to in section 48(8)(a), which refers to "technologies … reliant on renewable sources of energy".

There are other technologies that may not be reliant on particular sources of energy to deliver energy efficiency. For the sake of completeness, I therefore lodged amendments 122 and 123.

If the minister can satisfy me that "materials" is sufficient and includes equipment, I will not press amendment 122, but it seems to me that there is no harm in making explicit reference to equipment by including the phrase "and equipment" in section 48(8)(b).

I move amendment 122.

Stewart Stevenson: Amendments 122 and 123 simply seek to make explicit what we believe is already implicit. They are not necessary but it will not cause any harm if they are agreed to.

Amendment 122 agreed to.

Amendment 123 moved—[Des McNulty]—and agreed to.

Section 49A—Energy generating stations: efficiency guidance

Amendment 54 moved—[Stewart Stevenson]—and agreed to.

Section 50—Non-domestic buildings: assessment of energy performance and emissions

The Deputy Presiding Officer: Group 16 is on assessment of energy performance of buildings. Amendment 55, in the name of the minister, is grouped with amendments 56 to 66.

Stewart Stevenson: The wording of sections 50 and 50A, which cover the energy performance of, respectively, non-domestic buildings and living accommodation, should mirror each other as clearly and closely as possible, and amendments 55 and 56 seek to amend section 50 to achieve that very aim.

On amendment 57, although at stage 2 I welcomed in principle amendment 226, in the name of Liam McArthur, I was unable to support it because of a technical drafting flaw. Amendment 57 seeks to correct that flaw and to place a duty on the Scottish ministers to publish 12 months after the day on which section 50 comes into force a report on measures to reduce non-domestic building emissions and the manner of and the timescales for introducing such measures.

Amendments 58 to 66 are technical amendments that seek to modify section 50 to make the provisions on energy efficiency for living accommodation equivalent to those for non-domestic buildings. I will be able to provide further explanation if members so require.

Taken together, the Government amendments in this group seek to ensure that powers to require improvements in energy performance and reductions in emissions are consistent across all buildings and to allow ministers, subject to proper parliamentary scrutiny, to recognise the differences in ownership and character between living accommodation and non-domestic buildings.

I move amendment 55.

Iain Smith (North East Fife) (LD): I welcome the amendments to section 50A, which was introduced as a result of a stage 2 amendment in my name, lodged on behalf of the Economy, Energy and Tourism Committee. The amendment was intended to ensure that provisions on the
assessment of energy performance of and emissions from buildings applied—or, at least, could apply—to living accommodation. Although regulations relating to living accommodation and non-domestic buildings need not be identical, at least the power to introduce them will exist.

The measure is absolutely vital, given that by 2050 85 per cent of Scotland’s population will be living in buildings that exist at the moment and will therefore not be subject to any stronger building regulations that might be introduced in future. We need to take action to ensure that those buildings are taken into account and that we do all we can to improve the energy performance of all buildings, not just new ones.

The minister, rightly, says that this group of amendments seeks to bring section 50A into line with section 50. Given that my amendment at stage 2 reflected the wording of section 50 in the bill as introduced, I welcome the fact that the amendments will bring section 50 and section 50A into line following amendments made to section 50 at stage 2.

Liam McArthur: At stage 2, there was general cross-party agreement on the importance of tackling energy efficiency in non-domestic buildings. Indeed, in the Government’s consultation, 80 per cent of respondents agreed that current policies and support would not deliver significant carbon emissions reductions. At that stage, the minister took very welcome steps to introduce a power requiring building owners to make the energy improvements specified in energy performance certificates. In lodging amendments that sought to clarify the timetable for such action, I was seeking not least to deliver on our aspiration to create many thousands of green-collar jobs by providing transparency, clarity and a timetable to allow industry to build up the products, materials and skills needed to deliver the bill’s measures.

In that light, I very much welcome amendment 57 and confirm that we accept all the amendments in the group.

Des McNulty: At stage 2, Labour supported the introduction of section 50A and the amendments that were lodged by Iain Smith and Liam McArthur. I pick up the minister’s invitation and ask him for further explanation of two amendments about which we have specific concerns. On amendment 59, we wonder why the minister wishes to remove the word “improvement”, and we are concerned that amendment 66 could exclude certain types of dwelling. If the minister can shed any light on the reason for those amendments, it would help members to understand them and decide whether they agree with the minister’s approach.

12:15

Stewart Stevenson: Amendment 66 simply ensures that we have a definition of “living accommodation”. There is a de minimis approach in relation to size, which is not likely to affect anything else. The amendment was drafted to cover tenements in particular, where there are specific difficulties, and other dwellings that have common areas. The definition is certainly not intended to exclude anything. It actually has the opposite effect and ensures that nothing that should be included is in fact excluded.

On amendment 59, improvement is a different issue that is dealt with elsewhere. The important thing at this stage is to make the assessment. Obviously, improvements require to be made once the assessment has been done. Amendment 59 simply ensures that we have things in the proper places.

Amendment 55 agreed to.

Amendments 56 to 57 moved—[Stewart Stevenson]—and agreed to.

Section 50A—Living accommodation: assessment of energy performance and emissions

Amendments 58 to 66 moved—[Stewart Stevenson]—and agreed to.

The Deputy Presiding Officer: I have no wish to move on to group 17 now as I do not wish to split the group between the morning and afternoon sessions. I therefore suspend the meeting until 1.45 pm.

12:17

Meeting suspended until 13:45.

13:45

On resuming—

The Presiding Officer (Alex Fergusson): Good afternoon. The first item of business this afternoon is the continuation of stage 3 proceedings on the Climate Change (Scotland) Bill. I remind members that they should have in front of them the bill as amended at stage 2; the marshalled list, which was revised yesterday; and the groupings, which I agreed.

As was the case this morning, the division bell will sound and proceedings will be suspended for five minutes for the first division of the afternoon, and the period of voting for that division will be 30 seconds. Thereafter, I will allow one minute for the first division after a debate. All other divisions will last 30 seconds.
After section 50A

The Presiding Officer: We continue where we left off. Group 17 is on council tax and non-domestic rates. Amendment 67, in the name of the minister, is grouped with amendments 67A to 67D, 67F, 67E, 125, 125A, 125B, 126, 68, 127 to 129, 69, 130, 70, 131, 132 and 93.

Stewart Stevenson: We accept amendments 67A to 67E, in the name of Lewis Macdonald. If amendments 125A and 125B, in my name, are agreed to, I will also be able to accept amendment 125, in his name. On non-domestic rates, I wish to accept amendment 132, in the name of Alex Johnstone.

I acknowledge the very valuable contribution of Sarah Boyack, whose determination placed a mechanism for incentivising energy efficiency and microgeneration in the text of the bill at stage 2. The Government amendments on council tax should be seen as largely complementary to that. They articulate, in robust and sound drafting, the principles that she has articulated.

We accept the principles of sections 50B and 50D, but a number of gaps and errors make them technically unworkable. I am happy to discuss those in detail during the debate on this group, if members require me to do so. Any remaining differences are only about how best to achieve the aims.

The Government's preferred approach is illustrated by amendment 67, combined with the changes that Mr Macdonald proposes. Overall, there are three issues where we can now reach consensus: a minimum level of council tax rebate; a mandatory element to the schemes; and arrangements for reporting on progress.

There are a number of other advantages to the Government's approach. It gives local authorities the flexibility to design energy efficiency discount schemes in a way that is best suited to the particular issues and challenges that affect their areas. The challenges that face a city council, such as the City of Edinburgh, might well be very different from those that face a council in a more rural area. Local authorities may begin to apply the measures on commencement; they do not have to wait for ministers to make regulations. By providing a broad definition of energy efficiency, new section 80A of the Local Government Finance Act 1992, which amendment 67 inserts, will allow future developments to be included in an energy efficiency discount scheme without the need for further legislation. For those reasons, I will move the amendments in my name and support those in the name of Mr Macdonald.

This is a difficult area of law, and action taken in one area can often have an unintentional, adverse impact elsewhere. That is the case with the provisions that Sarah Boyack's amendments inserted in the bill at stage 2, and with her stage 3 amendments, a number of which also relate to non-domestic rates. I will give some examples. Section 50B reduces the amount of council tax that a person is liable to pay in the following financial year. A similar weakness arises in relation to non-domestic rates. I fear that, because of the time lag, home owners might be put off making home energy improvements if they are considering moving home. Our proposal would reduce council tax liability in the same year in which an improvement is made. That makes the incentive potentially more attractive, as the rebate is enjoyed immediately. More important, it should help to encourage the quicker implementation of energy efficiency measures, which can only be a good thing.

The Scottish Government envisages that the rebate will be funded through successful partnerships between local authorities and energy suppliers, as is the case in England and Wales. However, without the flexibility that amendment 67 offers, combined with Lewis Macdonald's amendments, unmanaged demand from people in well-insulated properties might conflict with other locally led schemes to promote the uptake of energy efficiency measures. That could have a knock-on effect on council tax revenue. In the current economic situation, we do not think that it would be right to add unduly to such pressures on local authorities.

Furthermore, many businesses would not see any benefit from amendment 131, on non-domestic rates—on which we have identified some technical issues—as they are already exempt from paying rates through the various rates relief schemes. Amendment 132, on the other hand, would give the Scottish ministers the power to make regulations in respect of reductions in non-domestic rates for properties that fall into different categories and bands on the basis of their energy efficiency and greenhouse gas emissions.

Let me summarise. I recommend that members agree to amendments 67, 67F and 68 to 70, which will remove sections 50B to 50D. I also commend to members amendments 67A to 67E and 125, in the name of Mr Macdonald, along with the Government's amendments 125A and 125B. Finally, I endorse amendment 132, in the name of Mr Johnstone, and I ask members to do likewise. In consequence, I must ask members to reject amendments 126 to 131, if they are moved, as they are unnecessary in the light of the other amendments in the group.

I move amendment 67.

Lewis Macdonald (Aberdeen Central) (Lab): In the hierarchy of actions that we can take to reduce carbon emissions, action on energy
efficiency must always come first. Council tax discounts offer a significant incentive for householders to improve the energy efficiency of their homes.

As the minister has graciously acknowledged, we are discussing the amendments in group 17 as a direct result of Sarah Boyack’s vision and persistence in pursuing the matter, and her success in building a broad coalition of support behind her member’s bill proposals on energy efficiency and microgeneration, which is an important part of the same approach.

As the minister has acknowledged, the Transport, Infrastructure and Climate Change Committee approved that approach at stage 2. I welcome the fact that ministers have moved to support action on energy efficiency in the terms that we have heard. My amendments are designed to ensure that the scheme that the minister introduces achieves the desired results, and I welcome Mr Stevenson’s support for them. Without such amendments, the minister’s proposals would have allowed discount schemes that supported energy efficiency improvements, but they would not have guaranteed access to the benefits of such schemes across Scotland. If Parliament agrees to my amendments, that access will be guaranteed. Any householder who wishes to make energy efficiency improvements will enjoy access to a council tax discount. There will be no risk of a householder’s council not having such a scheme, or of its not applying it to the local area or to the valuation band of the house in question.

The message that such discounts are available right across Scotland is a clear and positive one. Of course, a national approach implies a national commitment, and I am glad that ministers have endorsed such an approach throughout Scotland. It is true to say that the bill must provide a framework for the energy companies so that they can invest in improving the energy efficiency of Scottish housing through the carbon emissions reduction target scheme, and we would expect central and local government fully to endorse and support that approach.

Amendment 125 provides for a review of the effectiveness of discount schemes, and it does so on an all-Scotland basis, so that any changes that are made will be consistent in all 32 local authority areas. I am happy to accept the minister’s amendments to amendment 125, as well as Alex Johnstone’s amendment 132. I urge members to support those amendments.

I move amendment 67A.

Sarah Boyack: In my view, the amendments in this group are probably the most important practical policy provisions that we will discuss today, from the point of view of their power to transform people’s attitudes to energy and their capacity to start making a difference on the huge amount of energy and heat that is wasted in this country. Somebody said earlier that 80 per cent of the buildings that will exist in 2050 have already been built. Our challenge is to encourage householders to make their houses more energy efficient.

Energy efficiency measures are incredibly cost effective and are the cheapest and best way to start to tackle climate change. However, people do not routinely put such measures into their houses, because they think that it is a hassle, they do not know how to get advice on them, they do not know a supplier and they do not know where to start. Even simple measures such as loft insulation or cavity wall insulation need to be put in place. For example, we could install cavity wall insulation in about 700,000 houses in Scotland, but we are not doing so, because we cannot put the pressure on and do not have the mechanisms to let people get on with it.

Last year, the Energy Saving Trust published research in England and Wales and then in Scotland that demonstrated that a one-off council tax reduction is an incredibly effective way in which to draw people’s attention and persuade them to act. Thousands of businesses have properties that could be changed. A reduction in council tax and business rates would mean that people could save on their bills—that is crucial, given that fuel prices for domestic properties have gone up by about 50 per cent over the past five years—and play their part in saving the planet. The message is really simple.

As colleagues have said, I have worked for five years now to bring these measures to the chamber. I thank everybody; I have previously thanked colleagues in the Parliament and the members of my steering group. I am delighted with where we have got to today. I would have loved it if the minister had sat down and talked to me about the measures months ago, but the Government had a they-shall-not-pass policy on council tax. However, I give the minister credit, because he has been incredibly helpful in the past week or so in ensuring that we have something in the bill that will work, which is my top priority. It is not the scheme that I wanted, but it is a good place to start. I listened to the minister’s officials last week and I do not want to impose a scheme that they do not like and which they could not make work.

The proposed measures will bring in CERT money. A sum of £50 is a good start and is enough to catch the attention. The review mechanism will be included, if we vote for all Lewis Macdonald’s amendments in the group.
Crucially, I want to ensure that the scheme cannot be a cherry-picking one that would mean that people could get money off their council tax only if they lived in particular local authority areas or certain streets. The scheme must be implemented across the country.

The minister has given a commitment that there will be guidance from the Scottish Government. That will be crucial in helping local authorities and in ensuring that they do not have too many burdens. In addition, with regard to the money for energy efficiency in the budget that we passed this year, I hope that the proposed provisions will allow us to draw in additional money from the private sector through CERT, which would make the £15 million that we supported earlier this year go much further. There will be another discussion about the issue next year, but I hope that the scheme gets up and running, that we begin to see a difference and that we can tackle not just climate change but fuel poverty, which afflicts almost 25 per cent of households in Scotland—that is a national disgrace and a national shame. The proposed measures will not fix that issue tonight or tomorrow, but they will put in place a mechanism that will let councils work with the power companies and individuals to make a difference.

I hope, too, that the Parliament will support the measures in Alex Johnstone’s amendment 132, on non-domestic rates. The Tories have been supportive of my member’s bill proposal throughout, for which I give them credit. It is probably appropriate that amendment 132 has fewer faults than my amendments in the group—that is the benefit of lodging a smaller amendment. I know that the business community is seized of the need to undertake energy efficiency measures. There is much support for the measures from big companies such as Tesco and groups such as the Scottish Property Federation.

I hope that we can all move forward today on the measures. The test will be next year, when we assess how far we have gone. I will not move my amendments in this group—amendments 126 to 131—but I will support the amendments in the group in the names of Lewis Macdonald, Alex Johnstone and Stewart Stevenson, which take us a lot further forward.

**Alex Johnstone:** I said earlier that I do not like the whole business of setting targets, because I have gone through that painful experience previously. It is far more practical to set out measures that will assist individuals, whether they are householders or business owners, to achieve the targets. That is why, in my view, chapter 3 contains some of the most significant provisions in the bill.

I pay tribute to Sarah Boyack for the work that she has done on promoting the energy efficiency aspects of the bill. I was not sure how long that has taken, but I heard her say in her speech that she has been working on those provisions for five years. At an early stage in that process, I took the opportunity to support in principle what she was trying to achieve.

14:00
The issue became the subject of intense debate at stage 2, when various members presented a number of slightly different proposals to introduce into the bill council tax discounts for people who take energy efficiency measures. At that stage, we obtained the Government’s agreement in principle to move forward on the issue and, pending the publication of Government amendments at stage 3, I decided to withdraw or not move my own amendments. I am therefore pleased to support not only amendment 67 but amendments 67A to 67F, in the names of Lewis Macdonald and the minister.

However, one issue that was not finalised at stage 2 was the inclusion of the non-domestic rateable sector in the broad provision. As a result, I have lodged amendment 132, which mirrors an amendment that I lodged but did not move at stage 2.

Once again, I commend Sarah Boyack for her work on this matter. However, I seek the Parliament’s support for amendment 132, which I have attempted to keep as simple as possible and which seeks to allow the Government to introduce a scheme, the detail of which will be fleshed out under the affirmative procedure. I hope that we will agree to that measure later.

**Liam McArthur:** In recognising Sarah Boyack’s contribution, the minister has set the tone for comments on this group of amendments. I certainly associate myself with his comments and with those made by Lewis Macdonald and Alex Johnstone. Although the manifestos of the various parties set out proposals in this area, the cross-party approach that was taken on the issue was very much a priority for Sarah Boyack, with expertise and support brought in from outwith the Parliament.

Earlier, I mentioned the pressures and difficulties created by the timetable for scrutiny of the bill. Given how long Sarah Boyack has been working on these proposals, it is perhaps unfortunate that even at stage 3 we are still trying to piece together a workable solution. However, as Lewis Macdonald and Alex Johnstone have pointed out, we have found a workable solution that covers both domestic and non-domestic incentive schemes.

In seeking to amend the Government’s amendment, amendments 67A to 67E, in the
name of Lewis Macdonald, seek to enshrine in the bill a national dimension to the proposed programme, and I welcome the minister’s support for the important approach that they set out.

Amendment 132, in the name of Alex Johnstone, certainly enjoys the benefits of brevity and simplicity. With the reporting requirements that amendment 125 seeks to introduce, the provisions will ensure that we are able to respond if, where and when necessary.

This part of the bill will have a very direct impact on the situation and as parliamentarians we will be able to support it with some confidence in our constituencies.

The Presiding Officer: I call the minister to wind up on amendment 67. You can have three minutes, minister.

Stewart Stevenson: Taking members’ advice about brevity and simplicity and given the unanimity and shared sense of purpose in the chamber, which I have to say bodes well for the whole climate change agenda, I may not need all that time, Presiding Officer.

However, I wish to make a couple of remarks. First, I again acknowledge Sarah Boyack’s efforts on this issue and thank her for reciprocating in her comments about the efforts that we have made in recent weeks. It is also worth revisiting her very important point that, although the proposal is part of the climate change agenda, it contributes to other policy areas, in particular our efforts to tackle fuel poverty. We have always recognised that improving the energy efficiency of people’s houses and reducing people’s energy bills plays to another agenda, and that is another important reason for moving in a direction that now appears to have secured unanimity in the chamber.

Lewis Macdonald: Likewise, I will be brief and simply acknowledge the chamber’s strong—indeed, unanimous—view that we have reached this point as a result of Sarah Boyack’s commitment and latterly the willingness of all parties to find a common route to ensure that progress was made in this area.

The critical question now is how the measure will be delivered and how we ensure that, in putting the schemes in place, local authorities have the full support not only of the private sector partners that deliver energy and have committed to improve energy efficiency but of every level of Government. On that basis, the Parliament has taken a significant step forward.

Amendment 67A agreed to.

Amendments 67B, 67C and 67D moved—[Lewis Macdonald]—and agreed to.

Amendment 67F moved—[Stewart Stevenson]—and agreed to.

Amendment 67, as amended, agreed to.

Amendment 125 moved—[Lewis Macdonald].

Amendments 125A and 125B moved—[Stewart Stevenson]—and agreed to.

Amendment 125, as amended, agreed to.

Section 50B—Council tax reductions to promote energy efficiency

Amendment 68 moved—[Stewart Stevenson]—and agreed to.

Amendment 69 moved—[Stewart Stevenson]—and agreed to.

Section 50C—Amounts of reductions in council tax

Amendments 127 to 129 not moved.

Amendment 70 moved—[Stewart Stevenson]—and agreed to.

After section 50D

Amendment 131 not moved.

Amendment 132 moved—[Alex Johnstone]—and agreed to.

The Presiding Officer: Group 18 is on district heating. Amendment 133, in the name of Lewis Macdonald, is the only amendment in the group.

Lewis Macdonald: Back in 2002, Aberdeen City Council established the Aberdeen Heat and Power Company Ltd to deliver the benefits of combined heat and power to people’s homes. Three successful schemes have been established, including those at Seaton and Stockethill in my constituency, and they supply 850 homes in high-rise buildings, half of which are for sheltered housing. The direct benefits are better heated homes, locally sourced electricity and lower bills.

If CHP schemes are established more widely, the potential prize will be that we significantly reduce carbon emissions while also tackling fuel poverty. That is why Labour wants more CHP schemes to be established in more towns and cities to supply cheaper and more sustainable heat and power to more homes. Indeed, I suspect
that those objectives are shared by members throughout the chamber.

To achieve those ends, amendment 133 requires ministers to amend the relevant regulations to remove the burden of non-domestic rates from the distribution pipes and risers in combined heat and power schemes. The Mansfield judgment in England confirmed that business rates there should not be paid on the distribution element of residential CHP schemes. To deliver the same benefit in Scotland requires action by ministers, and that is what the amendment seeks.

The required change to the regulations will exempt distribution pipes from the point where they leave the plant to the hydraulic interface unit at which they enter individual homes. Where a scheme includes non-residential as well as residential properties, the exemption will apply from the point where distribution pipes that serve only homes leave the mains pipe that serves both categories. Such changes would bring a reduction in householders’ bills. For pensioners and low-income households, a saving of £1 a week or even a fortnight can make a difference and help people to avoid fuel poverty.

The changes would not only help householders but reduce the capital costs of developing new or extending existing CHP schemes. That is the prize. If we want more widespread development of district heating schemes, much more will need to be done. However, if members agree to amendment 133, or if the minister makes the changes that I propose in another way, we will make a useful start.

I move amendment 133.

Stewart Stevenson: Our objective is to ensure that people throughout Scotland can share in the benefits that residents of Seaton and Stockethill in Aberdeen have enjoyed from combined heat and power. In the early 2000s the Labour-led Administration in Aberdeen took a lead, which is a shining example that should inform others.

The job of ministers and the Parliament is to dismantle barriers to the wider adoption of such measures. Lewis Macdonald said that a pensioner might save £1 per week; I prefer to think of that saving as £52 per year, which gives a sense of the significant sum that can be saved—as is the case with the winter fuel allowance, which comes in a lump sum. The approach that Lewis Macdonald proposed would be a significant intervention.

I have the power to introduce legislation to achieve the objective behind amendment 133. We intend to do so in any event, to ensure that we harmonise the valuation treatment of CHP plants north and south of the border. There are specific difficulties with amendment 133. We have residual concerns about European state aid rules, but we think that we can overcome those difficulties through secondary legislation. The construction of amendment 133 is such that I have difficulty in supporting it, but I commit to using the powers that we have to address the problem of risers and connecting pipes in multistorey buildings, which has been the biggest issue. The objective is to end up in the position that exists south of the border and to ensure that the Aberdeen models can be adopted elsewhere.

Lewis Macdonald: I am pleased to hear that assurance. When does the minister anticipate introducing the secondary legislation to which he referred?

Stewart Stevenson: We have given preliminary thought to how we might do that. The member’s question is reasonable, but I am not in a position to give him the absolute assurance that he seeks. However, I would be surprised if we were not able to do it within, perhaps, 12 to 18 months. I want to make rapid progress and ensure that we pick up the issue and run with it.

Lewis Macdonald: I am pleased by the minister’s assurances about the substance of what he intends to do. I had hoped that he might be able to give an assurance in relation to the forthcoming financial year, but I take what he said to mean that he will make efforts to introduce secondary legislation as quickly as he can do.

Stewart Stevenson: I am happy to acknowledge that in the terms that the member used.

Lewis Macdonald: That is helpful. Given the minister’s comment and what I took to be a backstop assurance that the regulations will be changed within 18 months, thereby achieving the objective of amendment 133, I will not press the amendment.

Amendment 133, by agreement, withdrawn.
sector still has the worst levels of energy inefficiency of any form of housing tenure. According to the key findings of the Scottish house condition survey, a rented property in the private sector is four times as likely to be rated as poor for energy efficiency as the average home. Ten per cent of private sector tenants, whether in city-centre tenements or in homes in rural areas, live in severe fuel poverty, as compared with 4 per cent of tenants in the social rented sector. Amendment 134 seeks to press ministers to achieve the target of bringing the private rented sector up to the same standard that is achieved in other sectors.

The guidance that is issued by ministers on the energy efficiency of social rented housing—the Scottish housing quality standard—requires providers to achieve a national home energy rating of at least 5 out of 10 by 2015. Amendment 134 would extend that requirement to cover private landlords.

The minister said at stage 2 that consultation on these issues will take place as part of work on the proposed housing bill, and I welcome that. I hope that he can reaffirm that intention today. However, beyond that general commitment, I would specifically like to hear whether ministers will consult on the application of the Scottish housing quality standard to the private rented sector, on the same timetable as applies to the social rented sector. That is partly because I would like to find out about any difficulties that might arise, but also because I would like to hear an indication of the Government's intentions for overcoming any such difficulties.

As was the case with amendment 133, I would be interested in hearing when consultation will begin. Will it be accompanied by a regulatory impact assessment to consider the costs and benefits in terms of carbon as well as cash?

Finally, following our discussions at stage 2, I would welcome an assurance from the minister that his approach to consulting on energy efficiency measures as consequential improvements to existing buildings, of whatever size, will be the same as his approach to improvements in the private rented sector. Will the minister assure us that steps will be taken in the next few months?

I move amendment 134.

Stewart Stevenson: I will start by briefly reverting to our discussion on amendment 133. I knew that we had started work on combined heat and power; I am now told that we should be ready by 1 April 2010. For some reason, my notes did not say that, as they should have done, but I hope that I have now put some flesh on what I said to Lewis Macdonald earlier.

By making energy efficiency part of the repairing standard that private landlords are already required to meet, amendment 134 aims to ensure that private landlords take action to improve the energy efficiency of the houses that they let. We absolutely understand the intention behind Lewis Macdonald's proposal. As he said, he has engaged with these serious issues over an embarrassingly long period with SCARF—a body with which members from the north-east continue to engage in order to ensure that their constituents receive the benefits.

As with many other issues that have arisen at this stage of the bill's progress, further scrutiny and consultation would likely be required—especially in relation to scale, impact and cost. Lewis Macdonald referred to any regulatory impact assessment were the Government to consult, and I take what he said as an acknowledgement that we need to tackle these key issues.

Our consultation on minimum energy efficiency standards in the private rented sector will be launched in early autumn. Depending on the outcome, we plan to introduce measures in the proposed housing bill in 2010. We will consult on setting the minimum standard at the same level as the existing standard required for energy efficiency in the social rented sector. Thereafter, we will consider further enhancements to the standard.

The consultation will be accompanied by a partial regulatory impact assessment, which will examine the cost impact of the proposal, as well as examining potential carbon savings, potentially lower fuel bills, and the impact on the Government’s fuel poverty targets.

I hope that that addresses the points that the member raised and convinces him of the seriousness with which we are treating his proposal and the eagerness with which we seek to pursue it.

Lewis Macdonald: I am encouraged by the assurances that the minister has given and by the timetable that he has set. I take it from his comments that that timetable would apply to the range of areas on which he gave assurances at stage 2.

Stewart Stevenson: That is correct.

Lewis Macdonald: I welcome that clarification, particularly with regard to consequential improvements.

Clearly, this is an important issue in terms of social justice as well as energy efficiency. The consultation will enable the necessary steps to be taken in short order to improve the energy efficiency of homes. On that basis, I seek leave to withdraw the amendment.

Amendment 134, by agreement, withdrawn.
The Presiding Officer: Amendment 135, in the name of Sarah Boyack, is in a group on its own.

Sarah Boyack: At stage 2, I moved an amendment that aimed to enable the best use to be made of our buildings and land assets in relation to climate change objectives. The minister agreed with the aims behind that amendment but politely suggested that it needed to be reworked. I am grateful to the committee clerks for their assistance in the drafting of amendment 135 and to the minister’s officials for their advice about how to get the amendment right.

The climate change burden will be applicable under the Title Conditions (Scotland) Act 2003. It will enable public bodies, at their discretion, to add heightened mitigation or adaptation performance standards to the title deeds of built and land assets that they wish to sell and which could be developed in the future by a purchaser. Those standards will be applied in advance, before the land is put up for sale, so that developers will be able to take the burden into account when paying for the land in question.

The amendment seeks to introduce an enabling mechanism that a public body can use if it wishes to do so. That mechanism will be available to any public body or agency in Scotland, such as local authorities, the Scottish Environment Protection Agency and Scottish Water, and it will enable local authorities to exercise leadership and send a clear signal about expectations to people who want to develop land or buildings.

We are talking about a great deal of land. Public bodies have a keen interest in selling their land, and they often negotiate and set conditions when they do so. The provisions in amendment 135 will enable them to take an up-front approach in relation to climate change, and will mean that someone who is buying the land will know exactly what the burden is when they negotiate the price. Clearly, a local authority or public body will use this mechanism only when it fits its objectives.

The provision builds on the current legal framework in the Title Conditions (Scotland) Act 2003. It builds on those burdens, but it will be a new type of burden. The closest comparator is probably the economic development burden in section 45 of the 2003 act, which enables a burden to be established for the purpose of promoting economic development. The new burden will be wider than that in terms of who can exercise it, and it will be exercised in relation to climate change. I hope that colleagues will support the amendment.

I move amendment 135.

Stewart Stevenson: The amendment seeks to create a new type of real burden that relates to climate change. As I indicated at stage 2, we support the general principle behind the amendment. Public bodies and others should be able to ensure that, when they sell property on for development, that development is taken forward in line with high environmental standards. Although, arguably, the planning system already guarantees minimum standards for new developments, and higher standards will, of course, impact on the price that public bodies receive for the sale, amendment 135 simply provides an additional option for public bodies and others to consider. I am, therefore, content to support it.

Amendment 135 agreed to.

Section 51A—Air source heat pumps and micro wind turbines in domestic properties: permitted development rights

The Presiding Officer: Group 21 is on permitted development rights. Amendment 71, in the name of the minister, is grouped with amendments 72 to 84, 144 and 145.

Stewart Stevenson: We will accept the amendments in Sarah Boyack’s name in this group and, therefore, we hope that Parliament will accept all of ours as well.

The effect of amendments 144 and 145, in the name of Sarah Boyack, will be to require the Scottish ministers to introduce any further permitted development rights for microgeneration equipment in domestic property within six months of the bill receiving royal assent. Members will wish to note that research on the issue has recently been let to contractors, who will engage with a wide range of stakeholders during the summer and then report to officials on that. I believe that the first meeting on the subject will take place tomorrow. That research will assist in equipping the Scottish Government with a detailed understanding of the potential impacts of micro wind turbines and air source heat pumps in domestic properties.

In proposing amendments 71 to 77, which are in my name, I support the intention behind Ms Boyack’s stage 2 amendment that introduced section 51A, but I seek to clarify the procedures by which the objectives should be brought forward and the domestic properties to which permitted development should apply. Amendment 71 will ensure that the wording of section 51A more clearly makes provision on specifying the circumstances for the introduction of permitted development rights under planning legislation. Amendment 72 seeks to achieve clarity about procedure and intention. Amendments 73, 74 and 76 are simply consequential amendments. Amendment 75 relates to an issue of drafting practice—convention says that we use the numeral “6” rather than the word “six”. Amendment 77 strengthens the scope of consultation.
Amendment 78 is the first of a group of seven amendments to section 51B that relate to the issue of permitted development rights for microgeneration in non-domestic buildings. As I said, amendments 71 and 72 relate to the way in which the Scottish ministers will introduce any changes to permitted development rights for microgeneration in domestic properties, and it is important to ensure that the same procedures apply to non-domestic properties. Amendment 78 will ensure that the bill states that the Scottish ministers must exercise their functions, rather than their powers, under planning legislation. That will align section 51B with section 51A and secure Liam McArthur’s intentions, which I support, in advancing the amendment that introduced section 51B at stage 2. Amendment 82 seeks to strengthen that provision to ensure that persons who are representative of the energy efficiency, renewables or microgeneration industries, and other persons, may be consulted.

I move amendment 71.

Sarah Boyack: The reason why the sections that now have the heading “Permitted development rights” were accepted at stage 2 was because of a general feeling in the committee that we need to get going on producing a credible statutory instrument to provide rules on permitted development rights. The Government produced a draft statutory instrument, but it was flawed in relation to mini wind turbines, as it included a bizarre condition that there could be permitted development only if a building was 100m away from the next property. That would have ruled out many wind turbines not only in urban Scotland but in rural Scotland, too.

I am glad that we are debating the issue. COSLA’s briefing raises concerns about the potential adverse physical impact of microgeneration in buildings. It is appropriate that we address those concerns head on. Permitted development rights will not apply automatically to listed buildings or in conservation areas. We all expect that when a statutory instrument comes before us after due consultation, there will be a mechanism that will focus particularly on the noise issue. There is a requirement on the industry to ensure that its equipment is certified properly and that householders and their neighbours can rely on that certification to be absolutely accurate. However, we must get going on giving householders the opportunity to use the right form of equipment if it can help to provide energy for their houses and if it is appropriate—that must be their call.

Microgeneration is part of decarbonising our energy system and part of delivering a more decentralised energy supply network throughout Scotland. As a representative of a city that has tremendous heritage, I think that the qualification that permitted development rights will not apply automatically to listed buildings or in conservation areas is important. In some areas, it would not be appropriate to have modern technology. However, that must be the call of the local authority and it must be done intelligently. We should be able to get to that point with the new statutory instrument.

14:30

The feed-in tariff that will be coming soon will help to promote these technologies, but there is unnecessary red tape. The amendments in my name are intended to ensure that the intention behind my stage 2 amendment is delivered in practice. When we read the bill as amended at stage 2, it appeared that the amendment might not have helped to speed up the minister. I hope that the amendments that I have lodged for stage 3 will do that and I am grateful to the minister for accepting them.

We are all keen to get going on this issue. It is not about requiring people to use these technologies; it is about ensuring that the technologies can be used where people think that they will make a difference to their property. That is the key point. It might not be the biggest change that we make in tackling climate change, but it is important nonetheless.

Liam McArthur: At stage 2, there were divisions on this issue between the political parties that are represented on the committee. Given what the minister has said, those divisions seem to have disappeared and we now have a consensus on the role that permitted developments can play in the domestic and non-domestic sectors.

The amendment at stage 2 addressed flaws in what was being proposed for the domestic sector. A stage 2 amendment in my name acted as a catalyst for pressing ahead with permitted development in the non-domestic sector. I accept what the minister said at that stage about having to treat certain aspects of the two sectors differently.

As Sarah Boyack said, the statutory instruments that will now follow will have to be considered further, because we have to allay fears that there will be a complete free-for-all. She identified the issue of noise; undoubtedly others will arise and they will have to be tackled.

On the Government’s green jobs objectives, providing a degree of clarity about what is expected will allow companies in the sector to invest in the skills, equipment and expertise that will allow these devices to be rolled out throughout the country, where appropriate and where the desire for them exists.
I welcome the amendments in the name of the minister, which improve aspects of consultation and tighten up the wording that was approved as a result of amendments at stage 2.

The Presiding Officer: I call the minister to wind up.

Stewart Stevenson: I think that everything has been said, Presiding Officer.

Amendment 71 agreed to.

Amendments 72 to 77 moved—[Stewart Stevenson]—and agreed to.

Section 51B—Microgeneration in non-domestic buildings: permitted development rights

Amendments 78 to 84 moved—[Stewart Stevenson]—and agreed to.

After section 51B

Amendment 137 moved—[Sarah Boyack].

Amendments 137A and 137B not moved.

Amendment 137 agreed to.

Amendment 138 moved—[Sarah Boyack].

Amendment 138A moved—[Stewart Stevenson]—and agreed to.

Amendment 138, as amended, agreed to.

The Presiding Officer: Group 22 is on promotion of water conservation and water-use efficiency. Amendment 136, in the name of Des McNulty, is the only amendment in the group.

Des McNulty: If this were a climate change bill in practically any other country in the world, I am pretty sure that water conservation and water-use efficiency would be high up the agenda. It is perhaps testament to Scotland’s rather damp climate—except for Clydebank, of course, where it never rains at all—that water conservation and water-use efficiency have not figured on our agenda so far. However, for a number of reasons, I believe that that is an oversight.

One reason is that Scottish Water is our biggest electricity consumer, so any improvements that it makes in water conservation or water-use efficiency will contribute significantly to overall energy efficiency. Individually, we are water consumers. If we can reduce our water consumption and eliminate wasteful water consumption or use non-treated water rather than treated water when appropriate, all of that will improve Scotland’s energy performance.

We should examine more systematically what we can do to improve our water-use efficiency. That opens up an agenda that it might be appropriate to consider in relation to another vehicle. If I had had time to think about the issue in advance, I would have produced a more elaborate amendment—I gave the minister a draft of one. However, I am content to have in the bill a duty that gives the Scottish ministers the right to encourage Scottish Water—in the politest possible way—to improve its performance on water conservation and water-use efficiency.

I hope that when regulations on energy efficiency or targets are made under the bill in due course, we will consider how to deal with wasteful water use or encourage more efficient use of water. In so doing, we will bring ourselves into line with what other countries seek to do. If one argument in favour of the bill is that it will produce green jobs, addressing our immediate needs and those of other people to improve how water is used could provide future employment for the country. We could also export our skills in that.

There are many arguments in favour of looking at water conservation and water-use efficiency. I am pleased to move the amendment and to highlight the issues in the bill.

I move amendment 136.

Stewart Stevenson: Amendment 136 will amend section 56(1) of the Water Industry (Scotland) Act 2002 to place a duty on the Scottish ministers to direct Scottish Water to promote water conservation and water-use efficiency. That is entirely consistent with the wider expectations that part 4 of the bill places on Scottish Water as a public body.

Members recognise that, as Des McNulty said, water conservation and water-use efficiency could contribute to the achievement of the targets that the bill sets. That is why we have directed Scottish Water to reduce leakage in its networks. Much is going on through the saving water in Scotland network.

Amendment 136 complements existing activities. Mr McNulty made his point politely and I will convey it in those polite terms to Scottish Water. I am happy to support the amendment.

Amendment 136 agreed to.

Section 51C—Energy performance of new buildings procured for the Scottish civil estate

The Presiding Officer: Group 23 is on the energy performance of the Scottish civil estate. Amendment 139, in the name of Cathy Peattie, is grouped with amendment 140.

Cathy Peattie: If the amendments are agreed to, older properties will not be automatically ignored and ministers will have to justify exceptions. Amendment 139 extends the requirement on the Government to procure
buildings that fall within the top quartile of energy performance to all buildings that become part of the Scottish civil estate, including buildings that are not newly built. At present, the bill requires no significant increase in standards over those that apply universally under building regulations. The amendment will provide a welcome boost to the non-domestic retrofit industry, which section 51C will not currently achieve.

A recent report found that emissions from Scottish Government buildings increased by 2.5 per cent last year. Amendment 139 will help us to rectify that problem and to show genuine leadership in reducing the 17 per cent of emissions that come from non-domestic buildings.

The accompanying amendment—amendment 140—will allow the Scottish Government to specify in regulations exemptions from the requirement to procure buildings that are in the top quartile of energy performance. That might apply when the Scottish Government had made a previous policy decision to relocate Government offices to a location where no building in the top quartile is available and where the cost of retrofitting would be unreasonable.

I move amendment 139.

Stewart Stevenson: I am content to support amendments 139 and 140. Amendment 139 extends the requirement for any building that the Scottish civil estate acquires to fall into the top quartile of energy performance to pre-existing buildings. Where it is not reasonably practicable to do that, there is the additional reporting duty under section 51B(2) to explain the reason for acquiring the building. One example would be the Scottish Government acquiring premises in a rural location where no building in the top quartile is available and where the cost of retrofitting would be unreasonable.

I move amendment 139.

Cathy Peattie: I am happy with the minister’s response.

Amendment 139 agreed to.

Amendment 140 moved—[Cathy Peattie]—and agreed to.

Section 53—Information on waste

The Presiding Officer: Group 24 is on waste regulations. Amendment 85, in the name of the minister, is grouped with amendments 87, 88, 3, 4 and 89.

Stewart Stevenson: I thought that my speech notes on this group were missing, but I have found them, Deputy Presiding Officer—Presiding Officer—[Interruption.] It has been a long day.

The Presiding Officer: I quite understand, minister.

Stewart Stevenson: I appreciate the sentiment behind Mr McNulty’s amendments, which would scale back the extent of super-affirmative procedure in chapter 4, part 5. I agree that that procedure is not appropriate for a number of the waste provisions in the bill; amendments 3 and 4 recognise that. The Scottish Government’s amendments—87, 88 and 89—seek to remove most of the waste provisions from super-affirmative procedure, as do Mr McNulty’s amendments. Affirmative procedure will remain the default.

I acknowledge readily the importance of the Parliament being able to consider thoroughly the significant provisions on deposit-and-return schemes and charging for carrier bags. It is clear that they have generated most of the debate. In recognition, we propose that the representation period be 90, not 60, days. Members will appreciate that that gives the Parliament an even greater opportunity to consider draft schemes, obtain evidence and craft proposals.

The Government amendments in the group differ from those of Mr McNulty in seeking to apply the super-affirmative procedure to only the first exercise of the powers under section 58 on deposit-and-return schemes and those under section 59 on charges for carrier bags. On its initial agreement to the use of those powers, the Parliament will have established the principle of using those schemes.

We do not propose any other substantive change to the amendment that the Rural Affairs and Environment Committee lodged at stage 2. In lodging the amendments in the group, we also took the opportunity to deal with some minor drafting problems. I do not propose to go into detail, but I am happy to answer questions on the subject.

I am grateful to Mr McNulty for his focus on these matters. However, in light of the reassurance that Scottish Government amendments 87 to 89 give—including that of addressing his intentions—I ask him not to move his amendments.

Amendment 85 aims to correct a drafting issue in section 53(4A). The matter is a simple one: an act cannot receive royal assent. The amendment is a simple and technical drafting correction.

I move amendment 85.

Des McNulty: Deputy Presiding Officer—I am sorry, Presiding Officer—I am following the same track of thought as Mr Stevenson—

The Presiding Officer: If you wait for just a few seconds, Mr McNulty, you will be right. The
Deputy Presiding Officer is taking over from me in the chair.

Des McNulty: Naturally I am pleased that the minister has taken on board the point that I raised at stage 2 about the need for the super-affirmative procedure to be protected in respect of sections 58 and 59. The fact that he has introduced a super-super-affirmative procedure with a period of 90 days is welcome, but that is perhaps testament to the fact that the sections that are referred to, particularly section 59, should not be in the bill. The fact that ministers are so embarrassed about the proposition that they want to have a procedural back-stop makes the fundamental issue clearer. I will return to that when we consider the next group of amendments.

As the minister said, amendments 87 to 89 do what I sought to do with amendments 3 and 4: they provide more of a back-stop. Therefore, I am happy not to press my amendments in favour of the minister’s proposals.

The minister said that amendment 85 aims to correct a minor drafting error. It appears to us that a timetabling issue is involved, and as far as we can see no case has been made for the amendment. We are therefore inclined to oppose it unless the minister can make a case for it. Obviously, we will listen to what he has to say about it and about what he is trying to do. If he can make a decent case, we are open to persuasion.

14:45

Alex Johnstone: I will speak briefly to the amendments in the group and to section 58, which is on deposit-and-return schemes. At stage 2, I proposed that the section be removed from the bill, but I subsequently withdrew my amendment. I believe, of course, that deposit-and-return schemes have a great deal to contribute to waste reduction, but fears that people in the industry expressed to me—that such schemes may be counterproductive or have unforeseen effects—caused a great deal of lobbying and concern. I therefore welcome the amendments and the fact that the super-affirmative procedure will give Parliament the opportunity to ensure that any such scheme will be open to full public and parliamentary scrutiny. I hope that, as a result, we will avoid some of the pitfalls that the industry is concerned about.

Stewart Stevenson: I will address the point that Mr McNulty raised. Section 53(4A), which was introduced at stage 2, states:

“A draft of a statutory instrument containing the first regulations under subsection (1) must be laid before the Scottish Parliament no later than one year after this Act receives Royal Assent.”

In drafting terms there is no act, so that language cannot be used. That is simply what I seek to address.

Malcolm Chisholm: Why did the minister not lodge an amendment to replace “Act” with “Bill”? He has used the drafting error to introduce a completely new timescale. The section may come into force in goodness knows how many years’ time; it depends on the Government.

Stewart Stevenson: I am entirely happy that we move forward with the subject at best speed and introduce the instrument a reasonable time after the section comes into force.

The Deputy Presiding Officer (Alasdair Morgan): The question is, that amendment 85 be agreed to. Are we agreed?

Members: No.

The Deputy Presiding Officer: There will be a division. I suspend proceedings for five minutes.

14:48

Meeting suspended.

14:53

On resuming—

The Deputy Presiding Officer: We move to the division on amendment 85.

For

Adam, Brian (Aberdeen North) (SNP)
Aitken, Bill (Glasgow) (Con)
Allan, Alasdair (Western Isles) (SNP)
Brocklebank, Ted (Mid Scotland and Fife) (Con)
Brown, Gavin (Lothians) (Con)
Brown, Keith (Ochil) (SNP)
Brown, Robert (Glasgow) (LD)
Brownlee, Derek (South of Scotland) (Con)
Campbell, Aileen (South of Scotland) (SNP)
Carlaw, Jackson (West of Scotland) (Con)
Coffey, Willie (Kilmarnock and Loudoun) (SNP)
Constance, Angela (Livingston) (SNP)
Crawford, Bruce (Stirling) (SNP)
Cunningham, Roseanna (Perth) (SNP)
Don, Nigel (North East Scotland) (SNP)
Doris, Bob (Glasgow) (SNP)
Ewing, Fergus (Inverness East, Nairn and Lochaber) (SNP)
Fabiani, Linda (Central Scotland) (SNP)
Finnie, Ross (West of Scotland) (LD)
FitzPatrick, Joe (Dundee West) (SNP)
Fraser, Murdo (Mid Scotland and Fife) (Con)
Gibson, Kenneth (Cunninghame North) (SNP)
Gibson, Rob (Highlands and Islands) (SNP)
Goldie, Annabel (West of Scotland) (Con)
Graeme, Christine (South of Scotland) (SNP)
Harvie, Christopher (Mid Scotland and Fife) (SNP)
Hepburn, Jamie (Central Scotland) (SNP)
Hume, Jim (South of Scotland) (LD)
Hyslop, Fiona (Lothians) (SNP)
Ingram, Adam (South of Scotland) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Kidd, Bill (Glasgow) (SNP)
Lamont, John (Roxburgh and Berwickshire) (Con)
Lochhead, Richard (Moray) (SNP)  
MacAskill, Kenny (Edinburgh East and Musselburgh) (SNP)  
Marwick, Tricia (Fife) (SNP)  
Mather, Jim (Argyll and Bute) (SNP)  
Matheson, Michael (Falkirk West) (SNP)  
Maxwell, Stewart (West of Scotland) (SNP)  
McArthur, Liam (Orkney) (LD)  
McGirr, Jamie (Highlands and Islands) (Con)  
McInnes, Alison (North East Scotland) (LD)  
McKee, Ian (Lothians) (SNP)  
McKelvie, Christina (Central Scotland) (SNP)  
McLaughlin, Anne (Glasgow) (SNP)  
McLetchie, David (Edinburgh Pentlands) (Con)  
McMillan, Stuart (West of Scotland) (SNP)  
Milne, Nanette (North East Scotland) (Con)  
Mitchell, Margaret (Central Scotland) (Con)  
Munro, John Farquhar (Ross, Skye and Inverness West) (LD)  
Neil, Alex (Central Scotland) (SNP)  
O’Donnell, Hugh (Central Scotland) (LD)  
Paterson, Gil (West of Scotland) (SNP)  
Pringle, Mike (Edinburgh South) (LD)  
Purvis, Jeremy (Tweeddale, Ettrick and Lauderdale) (LD)  
Robison, Shona (Dundee East) (SNP)  
Rumbles, Mike (West Aberdeenshire and Kincardine) (LD)  
Salmond, Alex (Gordon) (SNP)  
Scanlon, Mary (Highlands and Islands) (Con)  
Scott, John (Ayr) (Con)  
Scott, Tavish (Shetland) (LD)  
Smith, Elizabeth (Mid Scotland and Fife) (Con)  
Smith, Iain (North East Fife) (LD)  
Smith, Margaret (Edinburgh West) (SNP)  
Stephen, Nicol (Aberdeen South) (LD)  
Stevenson, Stewart (Banff and Buchan) (SNP)  
Stone, Jamie (Caithness, Sutherland and Easter Ross) (LD)  
Sturgeon, Nicola (Glasgow Govan) (SNP)  
Swinney, John (North Tayside) (SNP)  
Thompson, Dave (Highlands and Islands) (SNP)  
Tolson, Jim (Dunfermline West) (LD)  
Watt, Maureen (North East Scotland) (SNP)  
Welsh, Andrew (Angus) (SNP)  
Wilson, Bill (West of Scotland) (SNP)  
Wilson, John (Central Scotland) (SNP)  

**AGAINST**

Alexander, Ms Wendy (Paisley North) (Lab)  
Baillie, Jackie (Dumfartoon) (Lab)  
Baker, Claire (Mid Scotland and Fife) (Lab)  
Baker, Richard (North East Scotland) (Lab)  
Boyack, Sarah (Edinburgh Central) (Lab)  
Brankin, Rhona (Midlothian) (Lab)  
Butler, Bill (Glasgow Anniesland) (Lab)  
Chisholm, Malcolm (Edinburgh North and Leith) (Lab)  
Craigie, Cathie (Cumbernauld and Kilsyth) (Lab)  
Curran, Margaret (Glasgow Baillieston) (Lab)  
Earle, Helen (Rotterdam East) (Lab)  
Ferguson, Patricia (Glasgow Maryhill) (Lab)  
Foulkes, George (Lothians) (Lab)  
Gillon, Karen (Clydesdale) (Lab)  
Glen, Lynllyn (North East Scotland) (Lab)  
Gordon, Charlie (Glasgow Cathcart) (Lab)  
Grant, Rhoda (Highlands and Islands) (Lab)  
Gray, Ian (East Lothian) (Lab)  
Harper, Robin (Lothians) (Green)  
Harvie, Patrick (Glasgow) (Green)  
Henry, Hugh (Paisley South) (Lab)  
Jamieson, Cathy (Carrick, Cumnock and Doon Valley) (Lab)  
Kelly, James (Glasgow Rutherglen) (Lab)  
Kerr, Andy (East Kilbride) (Lab)  
Lamont, Johann (Glasgow Pollok) (Lab)  
Livingstone, Marilyn (Kirkcaldy) (Lab)  
Macdonald, Lewis (Aberdeen Central) (Lab)  
Macintosh, Ken (Eastwood) (Lab)  
Martin, Paul (Ardrossan and Kyle) (Lab)  
McAveety, Mr Frank (Glasgow Shettleston) (Lab)  
McCabe, Tom (Hamilton South) (Lab)  
McGinlay, Michael (Hamilton North and Bellshill) (Lab)  
McNeil, Duncan (Greenock and Inverclyde) (Lab)  
McNeill, Pauline (Glasgow Kelvin) (Lab)  
McNulty, Des (Clydebank and Milngavie) (Lab)  
Mulligan, Mary (Linlithgow) (Lab)  
Oldfather, Irene (Cunningham South) (Lab)  
Park, John (Mid Scotland and Fife) (Lab)  
Peacock, Peter (Highlands and Islands) (Lab)  
Peatle, Cathy (Falkirk East) (Lab)  
Pringle, Mike (Edinburgh South) (LD)  
Robison, Bill (Ayrshire North and Ayr) (Lab)  
Ross, John (Central Scotland) (SNP)  
Smith, Elaine (Coatruck and Chryston) (Lab)  
Stewart, David (Highlands and Islands) (Lab)  
Whitefield, Karen (Airdrie and Shotlands) (Lab)  
Whitton, David (Strathkelvin and Beardsend) (Lab)  

The Deputy Presiding Officer: The result of the division is: For 77, Against 45, Abstentions 0. Amendment 85 agreed to.

**Section 59—Charges for supply of carrier bags**

The Deputy Presiding Officer: Group 25 is on charges for the supply of carrier bags. Amendment 2, in the name of Des McNulty, is the only amendment in the group.

Des McNulty: At stage 2, an amendment similar to amendment 2 was defeated on the casting vote of the committee convener. The argument against the inclusion of what is proposed in section 59 remains as strong as it was when the then Environment and Rural Development Committee unanimously rejected the Environmental Levy on Plastic Bags (Scotland) Bill, which Mike Pringle introduced in the previous parliamentary session.

The minister will perhaps argue that section 59 is an enabling measure that could apply not just to plastic bags but to all carrier bags, but he will be well aware—following his meeting with representatives of Scotland’s highly successful packaging industry—that its practical impact would be to increase, by 35,000 tonnes, the annual weight of materials used for packaging. That will happen if single-use plastic bags are replaced by other forms of packaging, including paper bags and multiple-use plastic or plasticised bags. As well as that additional weight of materials contributing to increased CO2 emissions, we should also take into account the 200,000m3 of additional waste per annum—a substantial increase in avoidable waste going to landfill or to other methods of waste disposal in Scotland—and the extra 600,000 pallet journeys that would result. Those extra journeys and additional pieces of material that would need to be produced and disposed of are significant carbon-using mechanisms, so it is incredibly difficult to see how...
the measure would contribute to tackling climate change. In fact, the overwhelming evidence is that it would detract from tackling climate change.

As I said in the earlier discussion on the super-super-affirmative procedure, the fall-back position that the Government has adopted simply emphasises the fact that the proposal would adversely affect emissions by the amounts that I have been able to quantify. The proposal was previously tested and rejected by the Parliament.

Jeremy Purvis (Tweeddale, Ettrick and Lauderdale) (LD): In the area that I represent, one town—Selkirk—is now a plastic-bag-free town and another is fast on the way because of the support of the community and of local retailers. Is the member saying that my constituents are wrong to move ahead in that direction?

Des McNulty: No, I am saying absolutely the reverse. When I was a councillor, I represented a ward that at that time included Glasgow’s landfill centre, so my then constituents were very concerned about the amount of waste that was deposited needlessly. People do not want the amount of waste to increase as a result of a flawed measure that is introduced by the Scottish Parliament. The reality is that a charge on bags is the wrong way to reduce the use of plastic bags.

Over the past 18 months, huge success has been achieved by voluntary schemes—precisely of the kind that Mr Purvis mentioned—that have been introduced throughout Scotland. If we can reduce demand voluntarily, why do we need to introduce legislation that, in climate change terms, will make things worse and will not address the problems that people in Mr Purvis’s town are presumably concerned about?

The way forward is to have a sensible, rational and science-driven approach. We should take account of the voluntary action that people are already taking. We should not impose an undue burden and a significant disadvantage on a successful Scottish industry. We should not contaminate a climate change bill with measures that will actually contribute to increased emissions.

I move amendment 2.

Mike Pringle (Edinburgh South) (LD): I listened to Des McNulty’s speech with interest, but he simply repeated all the claims that the plastic bags industry has promulgated over the past few years since I introduced my bill. The truth of the matter is that the SNP should be congratulated on including section 59, which is an enabling provision. I agree with Des McNulty that huge advances have been made over the past 18 months or two years in reducing the number of plastic bags.

Karen Gillon (Clydesdale) (Lab): If the member feels so strongly about the issue, why did he not seek to reintroduce his bill after engaging in the further consultation that the then Environment and Rural Development Committee asked for?

15:00

Mike Pringle: The simple answer is that I was pragmatic. The fact was that, at that time, the Parliament would not have passed the bill. There seemed little point in reintroducing the bill when the Parliament did not think that the proposal was the right way forward. The right way forward, then and now, is to reduce the number of plastic bags—as has happened over the past 18 months.

Des McNulty is right: there has been a huge reduction in the number of plastic bags. However, if that reduction does not continue and section 59 remains, the SNP Government—or a future Government of Scotland—can say, “We haven’t gone far enough; there hasn’t been enough of a reduction.” We need only consider the example of countries all over the world that have gone down the route of charging. Ireland is a good example. In Ireland, there was a massive reduction in plastic bags and a huge increase in recycling. That is one of the reasons why my bill would have been successful. I congratulate the SNP and urge the Parliament to keep section 59 in the bill.

Alex Johnstone: On the day the bill was published, I read through it and found much that I thought positive, which I have gone on to support and perhaps improve, but when I reached section 59 I thought, “That’s cheeky,” because something the Parliament had previously considered and rejected had been stuck in the Climate Change (Scotland) Bill. I have felt a degree of hostility towards it ever since.

Much of what has been said so far in this brief debate is positive, and I agree with much of Des McNulty’s position. Since Mike Pringle introduced his bill and it was discussed in Parliament and the greater community, this is the one area in which ordinary individuals have been able to do the most to reduce the amount of waste the country produces.

Anyone who goes to a supermarket will see that many people are now using reusable bags, trying to reduce the number of bags they use and doing all they can to reduce packaging. Whatever the motivation for that, it is an example of how everyone is working voluntarily to try to reduce the amount of waste that society produces.

There is ample evidence that people in this country are already doing their bit and are working hard to ensure that we reduce waste. I believe that the carrot is always better than the stick. Evidence presented by none other than Jeremy Purvis tells
us that there are two towns in the Borders that are almost completely carrier bag free. That is an example of how the voluntary principle can work most effectively, and it is why section 59 is unnecessary.

Patrick Harvie: I spoke against an amendment to remove section 59 at stage 2 and I speak against one again now. At stage 2, and again today, some members have—accidentally or not—confused the proposal in the bill with the bill that was considered by Parliament. They are not the same. Mike Pringle’s bill concerned plastic bags, but section 59 concerns a much broader approach, which is to carrier bags. Alex Johnstone commented a couple of moments ago about towns in the Borders that might be carrier bag free. I am sure that they are not carrier bag free. People still carry things in bags. Carrier bags include all forms of bag, not just plastic ones.

The mix-up between carrier bags and plastic bags is not the only area of confusion. There have been other confused arguments. Des McNulty seems to be unclear whether he is saying that this is the wrong objective or the wrong way of achieving the objective. His argument about the environmental impact of additional pallet journeys and the impact of other types of bags suggest that reducing the use of disposable or single-use bags is the wrong objective, but he went on to say that what he is really saying is that a charge is the wrong way of achieving the objective. We must argue one way or the other: either this is the right thing to do but it is being done in the wrong way, or it is the wrong thing to do and we should not be trying to reduce single-use bags at all. Des McNulty needs to be clearer about that.

Voluntary measures have been taken, although they have been patchy. Some people take the issue seriously, others do not.

Johann Lamont (Glasgow Pollok) (Lab): When Patrick Harvie talks about carrier bags, does he mean single-use bags? He seems to be arguing that there is a broader definition of carrier bag, but if that is the case the need to exclude the provision of carrier bags is not so pressing because it is not an issue about the environment.

Patrick Harvie: When I say carrier bags I mean all forms of carrier bag. Section 59 does not discuss excluding the provision of carrier bags; it gives the Government the opportunity to make proposals, which the Parliament will scrutinise in detail. Different approaches may be taken to different types of bag. It is a straightforward point that the Government has that opportunity.

There are some good arguments about the environmental impacts of different types of bag; some completely spurious arguments have also been advanced, such as the idea that reusing bags will become some sort of public health menace because of their not being hygienic. The only way to quantify the impact of a proposal is to wait and see the detail of it. Deleting section 59, as Des McNulty proposes, would prohibit the Government from making detailed proposals, which the Parliament could examine on their merits, separating the good arguments from the spurious arguments and making a judgment. The Parliament should reject amendment 2 and retain section 59.

Stewart Stevenson: Amendment 2 aims to remove the proposed power for the Scottish ministers to require charges for carrier bags. A similar amendment was moved, and defeated, in committee.

Des McNulty’s argument appears to have two elements. First, a similar proposal was debated in relation to Mike Pringle’s Environmental Levy on Plastic Bags (Scotland) Bill, which was not supported by the Environment and Rural Development Committee. Secondly, a charge on plastic bags would have a negative effect on emissions because of substitution by paper bags etcetera. I direct Mr McNulty to section 59(2)(c), which states that ministers may specify “the carrier bags to which the requirement applies”.

There is flexibility to respond to circumstances were we to do what the Welsh Assembly Government is doing—the Labour minister, Jane Davidson, an excellent minister, albeit of another political persuasion, is moving to implement such a provision in Wales.

We are addressing the issue of carrier bags in general, not merely plastic bags. We rely on independent research from AEA Technology, which shows that a measure such as the one that we are proposing would save 5,000 tonnes of waste a year. That is not a huge saving, but it is a real saving and it relates to a waste stream that is a genuine problem, as any examination of rural fences, urban trees and motorway verges would undoubtedly demonstrate.

The Parliament’s work has been examined by the UK Government, which included a power to require charges for single-use bags in its Climate Change Act 2008. The provision in our bill is more carbon-friendly even than the one in the UK act, as ours could require charges for fabric bags for life, as well as for paper and plastic bags. The power is there to be used for that purpose.

In the meantime, the Scottish supermarket summit last year pioneered an agreement that was later extended across the whole of the UK: that the use of bags by retailers would, as at the end of last month, be reduced by 50 per cent compared with the 2006 baseline. We expect the results next month, but the indications are—as Jeremy Purvis
and other members have mentioned—that there has been a considerable decrease in use. It is open to debate whether such an agreement would have been arrived at without the prospect of legislation, pour encourager les autres.

If voluntary work by retailers—which Alex Johnstone rightly praised in the stage 1 debate—delivers results, we will not need to use the powers in section 59. We need them, however, in case voluntary measures fail to achieve the results that we have agreed on with the retailers.

Given that we are not in fact repeating work that was done in session 2, but building on its conclusions, and given that the powers in section 59 could bring real improvements, I invite Mr McNulty to withdraw amendment 2.

Des McNulty: It is certainly not my intention that the Government should not introduce legislation on this matter. It is perfectly open to the Government to do so. In fact, it would have been much better if the Government had introduced a bill on carrier bags, on packaging or whatever, constructing a bill in whatever way it found to be appropriate. Then, we could have considered the evidence in detail and the Government would have had to advance a thoroughly well-worked-through proposition on which we could have consulted widely. The problem is that the measure was tacked on to a bill about climate change, and the Government has not addressed that.

Stewart Stevenson: Is the member equally uncomfortable that the UK Government’s Climate Change Act 2008 contains provisions on carrier bags?

Des McNulty: Actually, I believe in devolution. If there are good arguments for taking a different approach in Scotland, we should do so. The arguments must be made in this Parliament. Many of them were tested during the passage of Mike Pringle’s Environmental Levy on Plastic Bags (Scotland) Bill and found wanting. When it came to the vote, Mr Pringle’s proposition did not even get the support of his own party colleagues. If we implement section 59, the risk is that a bill such as Mike Pringle’s will come in through the back door, and without the support of adequate evidence.

Ministers consulted on waste issues relatively recently. Of seven propositions, the least popular with the public was the one to do with carrier bags. That is evidence. The figures that I gave about the increased emissions consequences of the proposal are evidence, too. Patrick Harvie is extremely fond of quoting numbers and science when it suits him and extremely reluctant to accept them when they do not. He cannot pick and choose. Tonnes of carbon emissions would be produced as a consequence of implementing section 59. I see that I have annoyed Patrick Harvie.

Patrick Harvie: I would be grateful for a clear explanation. How on earth does Des McNulty expect us to accept that the impact of the proposal can be quantified in the way the industry suggests when we do not know the detail of what the charges will be, or of how, when or to what they will be applied?

Des McNulty: If we do not know what the proposal is, what it will do or how it will work, why should we vote it?

The Deputy Presiding Officer: The question is, that amendment 2 be agreed to. Are we agreed?

Members: No.

The Deputy Presiding Officer: There will be a division.

For
Aitken, Bill (Glasgow) (Con)
Alexander, Ms Wendy (Paisley North) (Lab)
Bailie, Jackie (Dumbarton) (Lab)
Baker, Claire (Mid Scotland and Fife) (Lab)
Baker, Richard (North East Scotland) (Lab)
Boyack, Sarah (Edinburgh Central) (Lab)
Brankin, Rhona (Midlothian) (Lab)
Brocklebank, Ted (Mid Scotland and Fife) (Con)
Brown, Gavin (Lothians) (Con)
Brownlee, Derek (South of Scotland) (Con)
Butler, Bill (Glasgow Anniesland) (Lab)
Carlaw, Jackson (West of Scotland) (Con)
Chisholm, Malcolm (Edinburgh North and Leith) (Lab)
Constance, Angela (Livingston) (SNP)
Craigie, Cathie (Cumbernauld and Kilsyth) (Lab)
Curran, Margaret (Glasgow Baillieston) (Lab)
Eadie, Helen (Dunfermline East) (Lab)
Ferguson, Patricia (Glasgow Maryhill) (Lab)
Foulkes, George (Lothians) (Lab)
Fraser, Murdo (Mid Scotland and Fife) (Con)
Gillon, Karen (Clydesdale) (Lab)
Glen, Marilyn (North East Scotland) (Lab)
Goldie, Annabel (West of Scotland) (Con)
Gordon, Charlie (Glasgow Cathcart) (Lab)
Grant, Rhoda (Highlands and Islands) (Lab)
Gray, Iain (East Lothian) (Lab)
Henry, Hugh (Paisley South) (Lab)
Jamieson, Cathy (Carrick, Cumnock and Doon Valley) (Lab)
Johnstone, Alex (North East Scotland) (Con)
Kelly, James (Glasgow Rutherglen) (Lab)
Kerr, Andy (East Kilbride) (Lab)
Lamont, Johann (Glasgow Pollok) (Lab)
Lamont, John ( Roxburgh and Berwickshire) (Con)
Livingstone, Marilyn (Kirkcaldy) (Lab)
Macdonald, Lewis (Aberdeen Central) (Lab)
Macintosh, Ken (Eastwood) (Lab)
Martin, Paul (Glasgow Springburn) (Lab)
McAveety, Mr Frank (Glasgow Shettleston) (Lab)
McCabe, Tom (Hamilton South) (Lab)
McGrigor, Jamie (Highlands and Islands) (Con)
McLetchie, David (Edinburgh Pentlands) (Con)
McMahon, Michael (Hamilton North and Bellshill) (Lab)
McNeill, Duncan (Greenock and Inverclyde) (Lab)
McNeill, Pauline (Glasgow Kelvin) (Lab)
McNulty, Des (Clydebank and Milngavie) (Lab)
Milne, Nanette (North East Scotland) (Con)
### Amendment 2 disagreed to.

The Deputy Presiding Officer: Group 26 is on public engagement. Amendment 86, in the name of Brian Adam, is the only amendment in the group.

**Brian Adam (Aberdeen North) (SNP):** Amendment 86 will create an obligation on the Scottish ministers to produce a new strategy on public engagement. I feel that it is extremely important to ensure that we fully engage people in the process of tackling climate change, in which we, as legislators, have had the opportunity to engage today and over the past few months.

The voluntary sector has made considerable efforts to persuade the Government and, indeed, all members to produce the bill that is likely to be passed at 5 o’clock. However, after 5 o’clock, it will be a question of delivery, which will be at the hands of not just ministers and public bodies but all of us. We must provide a mechanism whereby the public can engage in the strategy for delivering the bill’s provisions. There is no doubt that the eco-congregation movement was extremely active in trying to persuade the Government and the rest of us to support a public engagement route. I was pleased to lodge an amendment on the subject at stage 2, and I am delighted to have lodged a stage 3 amendment that will allow public engagement to take place.

I know that communities of interest wish to be involved in helping to deliver the bill’s provisions, but that will not happen just because we pass a law: it will happen because people will make it happen. A public engagement strategy must be part and parcel of that.

15:15

The public engagement measure will have to be kept up to date, which is why I have included a requirement to review it at least once every five years. If not just MSPs but all the people of Scotland work together, we can make a real difference in tackling climate change. We have heard that the bill is world-leading legislation, but it would be even better if the delivery were world leading, because there will be an impact not just...
on us and our communities but well beyond Scotland’s shores.

I commend amendment 86 to members. I hope that we can allow people such as those in the eco-congregation movement and other communities of interest to engage in delivering this important legislation.

I move amendment 86.

Des McNulty: I hope that I am more successful in supporting amendment 86 than I was in moving the previous amendment. However, I have taken the precaution of allying myself with the Government’s chief whip, which no doubt will assist me greatly in the process.

The minister will be aware that public engagement has been a constant theme of my speeches on climate change from the first debate that we had on the issue following the election in 2007. I am delighted that it has now been accepted that a public engagement strategy will be part of the bill and an important aspect of how its measures will be delivered. Brian Adam is right: we can impose all the duties that we want on ministers and public bodies and we can create targets and so on, but it will be the people of Scotland who deliver differences in climate change emissions. Unless we engage effectively with them and help them to achieve their potential for contributing to the climate change agenda by collective and shared effort, we are unlikely to succeed, whatever target we set ourselves.

There have already been good examples of organisations and groups taking the climate change agenda forward: Brian Adam referred to eco-congregations in that regard, I was fortunate to host a members’ business debate on eco-congregations last year and I have been fortunate to meet many eco-congregations across Scotland. Superb work is going on in church communities and excellent work is going on in schools throughout Scotland. Young people seem much more personally engaged in ecological activity and eco-awareness than do people of my age. Perhaps we must learn from our sons, daughters and grandchildren how to take that agenda forward. It really is the case that every little bit helps, but people acting together sensibly can do a lot. Many of the things that they can do are effective not just ecologically but economically, because they are ways of saving or avoiding wasting money.

Amendment 86 is important. I am pleased that there will be a public engagement strategy and that it will be regularly refreshed. I am also pleased about the Church of Scotland’s role in bringing the strategy to the chamber. I warmly support amendment 86.

Stewart Stevenson: I am happy to support amendment 86. To achieve the targets that are set out in the bill, the Government will need to encourage everyone to contribute to reducing greenhouse gas emissions. We will achieve that only if people are fully engaged in tackling climate change and if they understand which of their own actions can contribute to reducing emissions. A public engagement strategy will help to raise awareness and engage people in taking direct action to reduce emissions.

In the past few weeks, I spent two and a half hours speaking on climate change to people of Buchan presbytery in my constituency, who are very much engaged in the eco-congregation initiative that the faith communities have introduced, and who impressed on me the importance of this amendment.

Robin Harper (Lothians) (Green): The minister will be aware that 90 per cent of Scotland’s primary schools are now eco-schools and that more than half of them have got their green flag. However, progress has been rather slower in the secondary sector. Would the minister be amenable to considering whether extra resources could be found for that sector?

Stewart Stevenson: The member makes the very general point that we need to engage widely with communities. In the past six months or so, I spoke in this very chamber to an international gathering of senior school students, who had some terrific ideas, and I know of very good examples of initiatives in secondary schools throughout Scotland that complement the progress that is being made in primary schools. That is an example of the engagement that we need right across our communities. The eco-congregations have taken the lead on promoting this amendment, but its applicability stretches far beyond that community to the whole community of Scotland.

Brian Adam: I am very pleased with the general support for amendment 86. I know that groups outwith the chamber are waiting anxiously for the bill to be passed so that they can get involved in delivering its provisions.

Amendment 86 agreed to.

Section 62—Equal opportunities

Amendment 5 moved—[Cathy Peattie].
Amendment 5A not moved.
Amendment 5 agreed to.

After section 62

The Deputy Presiding Officer: Group 27 is on the Scottish Executive budget—impact on
greenhouse gases. Amendment 141, in the name of Patrick Harvie, is the only amendment in the group.

**Patrick Harvie:** In 2007, I proposed that the Cabinet Secretary for Finance and Sustainable Growth introduce a carbon assessment tool for the Scottish budget that would look at the direct and indirect impact of Scottish Government spending decisions on climate change, suggesting that such a move would recognise that the Scottish public sector in the broadest sense is a significant part of the economy and has a significant role in reducing climate change emissions.

The Scottish Government agreed to the suggestion and is now developing a carbon assessment tool; indeed, my colleagues on the Transport, Infrastructure and Climate Change Committee were grateful to receive an update on its progress. As I have recognised from the start, the concept is complex and innovative and we simply cannot take something off the shelf, set it up and get it running straightaway. However, the Scottish Government seems confident that the carbon assessment mechanism will be available for use in the 2010-11 budget.

As a result, during the passage of the Climate Change (Scotland) Bill and at other times over the past year when the cabinet secretary has appeared before our committee, I have asked whether the Government would be open to the idea of a legislative requirement for a carbon assessment of the budget. Such a measure might seem a bit technical and obscure beside the bill’s headline measures on interim and annual targets, but I believe that making an effective and robust carbon assessment of the Scottish budget a requirement for every future Government could be every bit as significant as the emissions reduction targets.

Although the minister saw the principle behind my stage 2 amendment on this matter, he rejected some of the wording and terms that I used. I have attempted to take on board those comments in amendment 141, which seeks to require the Scottish Government, at the same time as laying a draft budget before Parliament, to lay before Parliament

“a document describing the direct and indirect impact on greenhouse gas emissions of the activities to be funded”.

I hope that the ministers find the amendment acceptable. If not, I would be grateful to know what other mechanism they intend to use to lock in this requirement. Indeed, I hope that they agree that such a requirement should be locked in. Their work on a carbon assessment tool is valuable and welcome, but it will be worth very little if a future Government reverses the measure.

I move amendment 141.

**George Foulkes:** The minister and particularly the cabinet secretary will be aware that I have asked a number of questions about the travel arrangements of ministers. If we are to urge everyone else in the country not to create carbon emissions and to get out of their cars and walk—

**Members:** Do you?

**George Foulkes:** I have walked from my flat to the Parliament on many occasions. [Interruption.]

**The Deputy Presiding Officer:** Order.

**George Foulkes:** I have asked about the First Minister. He does not even walk from St Andrew’s house to here. He takes the car every time. That is not setting an example. People say that he is busy and has lots to do, but we should set an example. How can we expect other people to change their habits and lifestyles if we do not set an example? That example should be set by the Scottish ministers, and principally the First Minister.

I compliment Stewart Stevenson on regularly using public transport.

**Patrick Harvie:** On a point of order, Presiding Officer. I ask for your guidance. Is the member required to make a speech that is relevant to the amendment that is under debate, or is an utterly irrelevant speech in order?

**The Deputy Presiding Officer:** It is my judgment that the member is in order in terms of addressing the amendment. Otherwise, I would have stopped him.

**George Foulkes:** I knew that, Presiding Officer. You are a very wise Presiding Officer.

**The Deputy Presiding Officer:** I would, however, urge the member not to stretch my patience too much.

**George Foulkes:** I will not. I think that I have made my point.

**Stewart Stevenson:** It is clear to all of us that every action that we take as human beings has an effect. The very exhalation of one breath of air has a carbon impact. Would that some members fell in with what has been an exceptionally positive and consensual approach to the bill. I am afraid that although I graciously accept Mr Foulkes’s praise for the 400 miles that I have so far walked as a minister—it felt much further—we must return to the substance of amendment 141.

Patrick Harvie used a phrase with which I am happy to associate myself. He said that competence exists within the Government. Mr Foulkes might care to take tent of Patrick Harvie’s phrase.

I am pleased to say to Patrick Harvie that, this time, we can accept the wording of his
The Deputy Presiding Officer: Group 28 is on judicial review. Amendment 142, in the name of Alison McInnes, is the only amendment in the group.

Amendment 141 agreed to.

The Deputy Presiding Officer: Group 28 is on judicial review. Amendment 142, in the name of Alison McInnes, is the only amendment in the group.

Alison McInnes: The Aarhus convention, which was developed under the auspices of the United Nations, sets out three strands: access to information, public participation and access to justice. Amendment 142 addresses the third strand.

The convention says that access to judicial review on environmental matters—such as will arise from the bill—should be available to the interested public. In Scotland there is uncertainty about the standing of environmental interests. That is not the case in England. Moreover, as far as I can see, in Scotland there is no established provision to limit the financial risks that are associated with pursuing a case, whereas the English courts have established the use of protective costs orders.

When I lodged a similar amendment at stage 2, the minister said that it was unnecessary, because the issues were either covered by Scots law or under active consideration by the Lord President of the Court of Session. The minister said that clarity on the rules of standing was unnecessary. However, when similar circumstances arose regarding the Land Reform (Scotland) Bill, the Parliament, the courts, and the then Scottish Executive took the opposite view and chose actively to clarify rules of standing with respect to non-governmental organisations, in line with Aarhus. Clarity is needed regarding the Climate Change (Scotland) Bill, too.

I am aware that the Lord President is considering protective costs orders, with a view to determining whether changes to court rules are necessary. I did not press my amendment at stage 2, because I had secured a commitment from the minister that he would discuss the matter with the Lord President, so I will be interested to hear what the minister has to say.

I move amendment 142.

Stewart Stevenson: I had a conversation on the matter with the Lord President on Monday. He is reviewing the position on protective costs orders in general. Of course, changes to court rules would not just relate to the bill but would have much broader applicability. The Lord President wants to have the benefit of the report of Lord Gill's review of civil justice before he makes a decision. I took it from my conversation with him that he understands the importance of the issue.

Lord Gill's report is expected shortly. It would be wrong of us to pre-empt the Lord President's consideration by legislating on protective costs orders at this stage. The Lord President's engagement on the matter is an important indication that it is being taken seriously.

Amendment 142 is identical to an amendment that the member lodged at stage 2. Subsections (1) and (2) of the new section that amendment 142 would introduce deal with title and interest and would apply a test from the Aarhus convention. No evidence from past cases in the environmental field suggests that the Court of Session would not take a suitably wide approach to title and interest in cases that fell within the scope of the convention. Therefore, there is no need for those subsections.

Subsection (5) concerns the scope of judicial review proceedings. Again, we cannot see that it would usefully add to Scots law. Over a long period, the Court of Session has shown itself to be flexible in developing its judicial review jurisdiction and I am not aware of a reason why we need to innovate by statute in the field of judicial reviews that concern matters arising under the bill.

The outcome of Lord Gill's review will be relevant in relation not just to subsections (3) and
(4) but to other provisions in amendment 142. Even if the Government accepted the need for the provisions—we do not—we would prefer not to legislate in a piecemeal fashion. I hope that Alison McInnes accepts that my conversation with the Lord President about amendment 142 shows that matters are in hand and that she agrees that the amendment is unnecessary. I urge her to seek to withdraw amendment 142.

Alison McInnes: I thank the minister for his full response to my query, and for his reassurances. I am heartened that the Lord President is actively considering the issue, and I therefore seek leave to withdraw amendment 142.

Amendment 142, by agreement, withdrawn.

Section 64—Subordinate legislation
Amendment 87 moved—[Stewart Stevenson]—and agreed to.

The Deputy Presiding Officer: I remind members that, if amendment 88 is agreed to, amendments 3 and 4 will be pre-empted.

Amendment 88 moved—[Stewart Stevenson]—and agreed to.

After section 64
Amendment 89 moved—[Stewart Stevenson]—and agreed to.

Section 65—Interpretation
Amendment 90 moved—[Stewart Stevenson]—and agreed to.

Amendment 143 moved—[Sarah Boyack]—and agreed to.

Amendment 91 not moved.

Section 67—Short title and commencement
Amendment 144 moved—[Sarah Boyack]—and agreed to.

Amendment 92 moved—[Stewart Stevenson]—and agreed to.

Amendment 145 moved—[Sarah Boyack]—and agreed to.

Long Title
Amendment 93 moved—[Stewart Stevenson]—and agreed to.

The Deputy Presiding Officer: That ends our consideration of amendments.
in extraordinary detail, as was demonstrated today by his handling of the debate in the chamber.

I cannot reflect on where we have come from and the achievements that have been made in the consideration of the bill without talking of the body of opinion that has existed outwith the Parliament and the way in which Parliament has engaged with it in considering the issues that are at stake.

Many of the non-governmental organisations with whom we have been familiar over the 10 short years of this Parliament have worked together under the Stop Climate Chaos banner to send to Parliament and the people of this country a coherent and co-ordinated message that we should consider and, frankly, be inspired by. As a consequence of the commitment and the contribution that has been made by the individuals in those organisations, working hand in hand with members of the public in Scotland—some of whom have come to Parliament to witness a truly historic day, and whom Stewart Stevenson and I had the pleasure of meeting at lunch time—a tremendous range of opinions and ideas has been marshalled, with the result that we can rightly and justifiably claim that the Scottish Parliament will today pass world-leading legislation on climate change that can set an example to others. That partnership between the people and Parliament has worked to an extraordinarily successful extent.

For the purposes of rule 9.11 of the standing orders, I am required at the outset to advise the Parliament that, having been informed of the purport of the Climate Change (Scotland) Bill, Her Majesty has consented to place her prerogative orders, I am required at the outset to advise the Parliament that, having been informed of the purport of the Climate Change (Scotland) Bill, Her Majesty has consented to place her prerogative and interests in so far as they are affected by the bill at the disposal of the Parliament for the purposes of the bill. Members might want to reflect on that issue in conversation with Her Majesty on Friday evening.

As has been correctly expressed throughout the debate, climate change affects all the peoples of our planet. None of us in the Parliament has suggested, at any stage in our consideration of the bill, that we in Scotland have nothing to contribute to the solution to the problem. Despite the fact that we are a relatively small contributor in the grand scheme of things, in terms of emissions, we have all accepted that we have a duty to make a contribution to that process at this stage.

At 5 o’clock today, we will approve the bill, which will set an example to others and give direction to the nations of the world that will meet in Copenhagen in December to negotiate a post-Kyoto protocol climate change agreement. Those discussions will be significant in setting the pace of tackling climate change through a new global agreement to accelerate emissions reductions across our planet.

We will have made a contribution to that debate by the manner in which we, as a country, have considered the issues, with our NGOs and members of the public informing and leading debate, and Parliament considering and reflecting on what we can do to deliver on those aspirations. Without a doubt, we must now focus on the contents of the delivery plan to achieve the targets on climate change that are implicit in the bill. That plan, which was published by the Government last week, sets out the transformational measures that are required to move Scotland on to the correct pathway to a low-carbon economy that will deliver our long-term emissions reduction targets.

Those measures include massive increases in green energy; the wholesale adoption of electric vehicles that are powered by green energy; major improvements in energy efficiency and reductions in demand; and significant increases in forestry cover. They will focus our thinking and deliver on the significant commitments that we have made today to an 80 per cent reduction in emissions by 2050 and a 42 per cent reduction by 2020, subject to agreements at European Union level. Those are the directions in which the Parliament now sets off to ensure that we deliver on our commitments to achieve the targets.

We will do that in a variety of ways. We will do it by taking the adaptation and transformational measures to which I referred. We will ensure that, when we make our financial choices and set out the budget provisions—which Patrick Harvie raised a few moments ago in his amendment on the budget—we set a range of priorities throughout Government that are utterly consistent with the achievement of the objectives in the bill. The bill cannot relate to only one area of Government policy; it must relate to every area of Government policy. Crucially, the debate is not only about Government and the actions over which we have direct control; it is about motivating, enthusing, encouraging and, at times, requiring other organisations to make a contribution.

In the debate so far, the Government has set out an approach that is designed to combine all those attributes and to ensure that we lead by example, that we set a clear agenda and that we motivate and encourage others to make their contribution. During the earlier debate in which Mr Adam and Mr McNulty were involved, the role of eco-congregations and the wider question of public engagement was raised. That is central to the achievement of all our ambitions. The Government cannot do everything on its own, although it will give the greatest priority to ensuring that we are successful. Today, Parliament sets an example to the people of Scotland on what we must all do in our lives to make our contribution to tackling climate change. As we embark on the Parliament’s
10th anniversary celebrations, we can be justifiably proud of the achievement that the bill enshrines.

I move,

That the Parliament agrees that the Climate Change (Scotland) Bill be passed.

15:47

Sarah Boyack (Edinburgh Central) (Lab):
Almost every day, we hear reports of new scientific evidence that warns us of the potential negative impacts of unchecked climate change and, crucially, of the changes that are already taking place in our world. Climate change is no longer an issue that exclusively interests environmentalists; it has become a factor for businesses, the education system and government at every level. As was demonstrated at lunch time today, more and more of our constituents are concerned about the issue. The challenge is to move away from business as usual to a low-carbon society. Each debate on the issue that we have had in Parliament has set down a new marker on members’ knowledge of and commitment to the issue. Over time, more and more members have been drawn into the debates and into the thinking that is needed to underpin the required policy development.

As John Swinney said, three committees took up the task of scrutinising the bill and engaging with the many witnesses and organisations who presented a range of evidence and views that we had to take into account. That involved a huge amount of work by members, witnesses, clerks and Scottish Government officials, all of whom should be thanked for their sterling work. In particular, we should thank the clerks and Government officials who helped us at stage 3. We are all aware that there was a lot of burning of midnight oil. Perhaps we will avoid that in the future, but it was completely necessary for the bill.

I associate myself with John Swinney’s remarks about the handling of the process by his deputy minister Stewart Stevenson. I have been in charge of difficult bills and I realise that the present one was particularly difficult. I suspect that, as a minority Government, the Administration faced a new set of challenges in getting the bill through in one piece and in a way that is legislatively competent. Members can see the bits of the bill to which they contributed and, even more important, people outside the Parliament feel that they helped to construct it. As part of the democratic process, as we hit the Parliament’s 10-year anniversary, that is a significant achievement. It sets the bar for future bills, as well as for implementation of this one.

Labour members have been particularly proud that the United Kingdom Government has genuinely led the way in trying to get other countries to sign up to ever more radical measures to address climate change. EU countries have been crucial in leading the way across the globe. The election of Barack Obama signalled that the United States wanted to play a much more constructive part in tackling climate change globally and trying to ensure that we do not have a humanitarian disaster and economic catastrophe—which will come if we do not avert dangerous climate change. There is a mood around the world that we want to do more. We have debated the impact on developing countries if we fail, given that even minimal rises in sea level or increases in temperature could make parts of the world simply uninhabitable.

Although we produce a relatively small part of the emissions in our world, the debates that we have had on the bill have demonstrated our desire for Scotland to play its full part not just in reducing our emissions but in participating in the wider global debate. I agree with John Swinney that our bill has been strengthened immeasurably by the process of democratic debate and discussion, which is a good thing.

I am sure that we will hear lots of warm speeches today, but the challenge is what we do next to implement the bill, particularly considering the substantial amendments to which we agreed at stage 2 and stage 3. Labour members are committed to the bill. We do not think that the devolution settlement limits us in taking groundbreaking action; we see the bill as a big opportunity to go further. Our challenge is to develop action on climate change that goes with the grain of our principles of social justice and economic fairness. That is why we were so keen to see sustainable development built into the bill.

I hope that ministers will seize the day, having voted for our interim target—and having decided to go further. I noted John Swinney’s comments when he intervened on Des McNulty. I very much hope that the 42 per cent target, which he said was seen as absolutely doable if we sign up to the deal at Copenhagen, can be realised. I hope that we can also consider carefully amendment 94, which we agreed to today. It is a fallback amendment; we will absolutely go to 42 per cent if a deal is reached at Copenhagen, but our amendment provides the opportunity to look at how much further we can go than our initial advice from the Committee on Climate Change suggested, should that not happen. We have all signed up to that now, so the challenge is where we go next.

We are in a recession and we have to build our way out of it using low-carbon technologies, redesigning our public services, looking at the carbon-counting commitment that John Swinney...
will bring forward in next year’s budget and looking at how we redesign our public services to avoid dangerous greenhouse gas emissions. The Royal Society of Edinburgh warned us that, given that we are in a recession, we should not assume that any decrease in emissions has happened as a result of the good things that we are doing in the Parliament; it might have happened because of the recession. Secondly, as we clamber out of recession, there is a danger that the trends that we saw before the recession will pick up again. There is a real warning for us to look at the detail and to work harder on emission reductions.

There are many things in the bill of which Labour members in particular feel proud. They include earlier action targets; making the most of our employment opportunities and public procurement targets; looking hard at the contribution of domestic action, with clear limits on international carbon credits; duties for public bodies, which we have strengthened today; and a public engagement strategy, to which every member is signed up 110 per cent—let us see what we can do to take that further, given the emotion, energy and commitment around the bill. There were specific amendments on the land use strategy and sectoral work—on key sectors in which we have to do better, such as energy efficiency, production of energy, and transport.

The work that we have done on energy efficiency is something of which we can all be proud, although the real challenge is making it happen. We have all debated the promise, made in 2002, for the early action energy efficiency strategy. Now it is in the bill. It really must happen and we must all sign up to what comes from that.

Regulations on domestic renewables will come into force more quickly. I am delighted that we agreed to a commitment on planning, which will mean that with all new housing and buildings we will be able to seize the day by taking the opportunities that come from low-carbon buildings and technologies and looking at how we decentralise our energy networks and go for decarbonised energy.

The bill contains a huge amount that is fantastic. Every one of us is under a huge obligation. I have noticed that more members from across the parties have engaged in the debates. The challenge lies in ensuring that they remain engaged. The three committees that were involved and the colleagues who lodged stage 2 amendments must stay on track.

The Government has a key challenge of leadership. We have made a complex bill more complex—that was the clear will of Parliament. Stewart Stevenson’s burden was to guide us through that. We need to consider a revised delivery plan, how the bill will work, the annual targets that we have set and the parliamentary mechanisms—the accountability mechanisms—about which I remember John Swinney was enthusiastic when he introduced the bill at stage 1.

The bill contains a lot for everyone. The Parliament needs to assert its role in holding the Government to account and to do that constructively with ministers. Labour members will not just vote to pass the bill, but commit themselves to remaining enthusiastic about it and to working hard to ensure that its implementation is delivered.

15:56

Alex Johnstone (North East Scotland) (Con):
This is indeed a great day—it is always a great day when a bill completes its passage through Parliament. The bill has presented to the Government, to Parliament and to individuals in Parliament one of the biggest challenges that we have had to deal with.

I repeat the congratulations and thanks to all those who contributed to the process. I offer the most thanks to the committee clerks, some of whom worked extremely hard to assist in drafting amendments at late hours, which was above and beyond the call of duty. I am eternally grateful for that.

The nature of the bill will probably not dawn on us fully for many years. I am confident that we have produced a good piece of legislation, but its effects might not be truly felt as late as 2050, when we will know whether we have achieved what we set out to do.

My objective during the passage of the bill has perhaps annoyed some people. Some in Parliament are keen to take up the lobbying and encouragement from a range of organisations, including our NGOs, but one of our greatest achievements in the Parliament has been managing to keep competing interests and diverse groups on side and in line with the bill’s objectives. If one or two people—perhaps even those in the public gallery—are still disappointed at how I or others in the Parliament voted at stage 2 or 3, I say that that was largely to do with the fact that we must serve competing interests and keep them on board with the process. It would not have served us at all to have allowed anybody to become detached from the process. Every party—including the Conservatives—has been keen to keep the process together.

As I have said before, when I have come across people who might instinctively support my party and who have grave doubts about the nature of climate change or the requirement to deal with it, the position that I have taken has allowed me to argue the case for the bill and against such
arguments, rather than find myself incapable of so doing.

As a result, we have made good progress. We made unanimous progress on a range of issues and we found common ground on the handful of issues on which we could not agree distinctly at the outset.

The process has at times been entertaining and I have enjoyed elements of it. Late in the debate on amendments this afternoon, I almost thought that Stewart Stevenson would turn into one of the Proclaimers, because he claimed that he had walked 500 miles and that he would walk—

The Minister for Transport, Infrastructure and Climate Change (Stewart Stevenson): Four hundred.

Alex Johnstone: Okay—400 miles. I presumed that he was to be the man who walked 1,000 miles to deliver the bill.

I apologise to anyone who was involved that, unfortunately, I could not attend the lobby event today that Stop Climate Chaos Scotland organised, but I will describe an entertaining moment at an earlier event on the lawns beside the Parliament. I managed to get myself photographed beside two people in fancy dress; one was dressed as a panda and the other as an orang-utan. Amazingly—though perhaps unsurprisingly—the photograph found its way into the Holyrood magazine caption competition. It is a measure of how far the Conservative party in Scotland has come that no one entered a caption in which the words “three rare species” appeared.

There has been a great deal of debate today on the nature and specifics of the bill. It is an ambitious bill and it is world-leading legislation. However, we started out on a controversial note in deciding to support the 42 per cent target for 2020, and not the 34 per cent target. For me, that was perhaps the most difficult point of the day. I accepted the figure, as did the Conservative party, in good faith and on the information that the Government brought forward to defend its original decision. We have done the right thing, but I will have to defend the decision in the weeks and months to come. If we proceed properly and appropriately, I believe that the figures are achievable. Indeed, much of what we did following that decision will serve the purpose of taking us towards that target.

Achievability must be what the bill is about. As I said this morning, I find target setting instinctively difficult—it is not an approach that I like to take—but it is inevitable in a bill of this nature that target setting is a key provision. The figures that we agreed on during stage 3 amendments give us the opportunity to make progress against the targets.

Another significant decision that we took today was to reinforce the practical measures in the bill to deliver the change that we want. I refer in particular to green council tax discounts. The Conservatives want our power companies, councils and the Scottish Government to work together to make Scotland greener. Until now, Scotland has been losing out on green council tax rebates that, south of the border, range between £50 and £125. An estimated 1.8 million Scottish homes could benefit from such a scheme. Power companies such as British Gas already contribute to the cost in England. We think that it is not fair that Scotland should lose out. We believe that these moves will encourage more households and businesses to go greener. That would mean lower bills for the consumer and help to cut greenhouse gas emissions. I am delighted that our amendment that was agreed to today will extend the possibility of green discounts to businesses across Scotland. In addition to making Scotland greener, once again the Scottish Conservatives have been shown to be a party with creative plans on how to reduce and reform the council tax.

People will look back on today as a milestone in the process of averting climate change. I hope that the decisions that we have made today will go down as the right ones in the long term.

16:03

Alison McInnes (North East Scotland) (LD): Although passing the bill has been a long process, all too often over the past few weeks it has also seemed like a hectic rush. That may be a typical experience—I do not know—as I said in the stage 1 debate, this is the first substantive bill that I have led on for our group since I was elected to the Parliament.

At this point, it is rightly traditional to pass on my thanks to those who helped me over the course of the bill. I thank whole-heartedly the committee clerks whose endless work and late nights made the complexity understandable and the process smooth. I must also thank the thousands of people who responded to the initial consultation last year and the many lobbyists who have contacted me since that time. Their thoughts, insights and arguments were an invaluable help.

Most important, I thank the hundreds of my constituents who wrote asking me to help make the bill a world beater. I say to them that I tried my hardest to strengthen the bill. Their letters, e-mails and telephone calls provided me with the encouragement of knowing that my position on the bill was the right one.

Another stage 3 tradition dictates that I welcome the constructive nature of the proceedings, the excellence of the bill that we are passing and the
positive impact that it will have. I hope that members will forgive me for saying that I cannot be quite as fulsome in that regard as I may have wished to be. Two months ago, I told members that it was a privilege to have the opportunity to work on the bill—and it was. I also said that I wanted to be proud of the bill. I am proud of many parts of it. Parts of it will make good things happen and stand us in good stead for the future. We have agreed on the inclusion of a cumulative emissions budget, which is a huge step in ensuring that our emissions reduction targets are properly based on the science of what is needed; that will truly make a difference. After much campaigning, sectoral targets have been included. They will help to ensure that every part of Scotland’s economy will play its role in reducing emissions. We have committed to including emissions from aviation and shipping in the emissions accounts from the outset. That truly sets an example for the world to follow. The Government has also adopted our proposal to introduce an iterative process for analysing, questioning and working to improve the proposals that it will put forward on policies that will, I hope, meet the targets that have been set. I will always be proud of having played a part in making those things law.

I am not, sadly, totally satisfied with everything that we will agree to today. We have all echoed the same words from the start. We have said that the bill is the most important bill that the Parliament will pass and that we must show real ambition. So far, we have heard quite a lot of self-congratulation; I fear that I am about to dampen the celebrations a little. [Interruption.] I hear the groans.

Party lines should have been set aside in considering the bill. We should have united in pushing for far-reaching targets and worked for consensus right from the start. I have been genuinely disappointed that that has not happened. A little analysis of what we got on the journey is necessary. We got broken manifesto commitments from the Scottish National Party. We then got its ambition not to set the world an example, but to imitate what had already been done at Westminster. Finally, when the SNP was in danger of being left behind, there was a belated understanding that there was a true desire in Scotland for us to take action that will make a difference.

I am sorry that Labour prevaricated a lot. That was followed by what seemed to be a sudden rush to get in on the act. It seems that the ambition was to get headlines, not to get early action. There was a desperate late scramble to try to make up for missed opportunities at stage 2.

The word “disinterested” probably best describes the Tories’ approach. There was not much sign of David Cameron’s vote blue, go green delusions. I am sorry; I meant to say aspirations.

Despite the strengthening of annual targets that our agreement to introduce a cumulative budget will bring, I remain sceptical about the showpiece amendment that we agreed to earlier, which will put the interim target at 42 per cent with strings attached. I want it to stay at 42 per cent, but I fear that it might not do so much past the end of the year. Over the next six months, it is our responsibility to make the case that Scotland can achieve that target—that our emissions can be 42 per cent lower than the baseline by 2020. We must aim high.

As Sarah Boyack said, the bill is not the solution; rather, it is an opportunity for us to take the initiative and show that Scotland can lead the way. We can make it work and we can make a difference.

16:08

Shirley-Anne Somerville (Lothians) (SNP): This is a definitive moment for the Scottish Parliament. This is the day on which we set Scotland on a path to create a greener, more sustainable economy for the future. The danger of climate change has taken political centre stage today and, given the number of reporting requirements in the bill, it will rightly continue to do so. Indeed, those reporting requirements will mean that the minister and the Transport, Infrastructure and Climate Change Committee will see quite a lot of each other over the coming years.

Climate change is not only an environmental issue; it raises an important moral question that cuts to the heart of every political decision that we make. Should we blindly continue to support unsustainable lifestyles, regardless of their impact on the poorest people on our planet, or should we take action to create a more just and fair society, recognising our global responsibilities? The bill signals the strong intention of the Scottish Government—and, more important, that of the Scottish Parliament—to ensure that we take the latter path.

Des McNulty (Clydebank and Milngavie) (Lab): What the member says is important, but the substantive difference between Labour and the SNP is that the SNP lodged amendments to water down domestic efforts and make it easier to push our responsibilities on to the international community. We need to work together on that in a constructive way to ensure that what the member says is what we do.

Shirley-Anne Somerville: I fully agree that we need to work together. I am therefore disappointed that a Labour amendment to give ministers power to decrease a target, rather than continuously
upgrade it, was considered today for the first time. I am pleased that the amendment was agreed to as amended, which puts the matter back in the hands of the experts.

The bill, if passed, will put Scotland at the forefront of the global effort to tackle the clear and present danger of climate change. It will commit successive Scottish Governments to reducing emissions by 80 per cent over 40 years. It will also require annual targets, beginning next year, and robust annual reporting to ensure that every Scottish Government, regardless of its colour, is far more accountable for its actions.

It is not only the end point, but how we get there that is important. That is why I am very pleased that members agreed to the amendments that I moved today to ensure that cumulative emissions are taken into account. I am also pleased that another of my amendments was accepted at stage 2, to report on the emissions from consumption. The bill is believed to be the first in the world to include a measure of the effects of importing consumer goods that are produced in other countries. That measure will ensure that we are aware of Scotland’s true carbon footprint and take responsibility for emissions that are produced abroad as well as those that are a result of our actions at home. I pay tribute to WWF Scotland for its assistance in drafting that amendment.

The Climate Change (Scotland) Bill as it now stands has come a long way since its promising beginnings. I welcome the tireless efforts of everyone involved, particularly the NGOs, led by the Stop Climate Chaos Coalition, and the many concerned individuals who wrote or spoke to me over the past few months and at lunch time today—they kept up their lobbying right until the last minute. All that input undoubtedly helped to make the bill as strong as it can be.

All of us who have been interested in the bill realise that its passage is not the end of the process, but the beginning. Politicians, the NGOs and their members must now get out to sell the bill and, more important, the policies that are required to achieve its targets, to the Scottish public. We must remember, as other members have already said, that the bill itself does not tackle climate change. What we do with it is what counts and I am afraid that, if we take the tack that Alison McInnes has done, we will not sell the bill, will fail in the policies and will lose the people.

The bill fulfils one other important function: it shows that Scotland and its Parliament can pass world-leading legislation. For the sake of people in Scotland and, more important, further afield, let us hope that when the rest of the world meets in Copenhagen at the end of the year it is listening to the debate and examining the efforts that we have made today.

16:12

Cathy Peattie (Falkirk East) (Lab): There can be no doubt that the bill is one of the most important pieces of legislation that the Scottish Parliament will ever pass. Not only does it define what Scotland can do to address the challenge of climate change—reduce emissions, build a green economy and adapt to change—it contributes to global action against climate change and allows us to set an example and raise the bar for climate change legislation. We have worked hard to incorporate many strands of policy and action into the bill to ensure that we encourage the best use of technology, the best practice in our public bodies and the best development of working practices and to ensure that we promote sustainable travel for work and leisure, public participation and awareness raising.

Scotland can be proud of the bill. I thank the clerks for their hard work. They must have used candles to stay up late at night to make sense of our amendments. I congratulate all those who have campaigned and lobbied for a strong Climate Change (Scotland) Bill. The Stop Climate Chaos Coalition has been fantastic. I also thank everyone who is present at the debate, everyone who has written, everyone who is working to change the way that we live and everyone who is doing what they can to contribute to a more sustainable use of our planet.

I am proud to have played a part in the bill, but the process does not end here; it is only the beginning of a new stage in our work to address climate change. The Copenhagen protocol has been published ahead of the forthcoming climate change talks. Reducing emissions will require a transition to an economy that is based on more sustainable production and consumption and the promotion of sustainable lifestyles. That must be underpinned by a just transition for the workforce, which is central to achieving an agreement that is based on the active participation of all stakeholders. Anything else would simply repeat the mistakes of the past. Economic reconstruction should not neglect industries and communities. I hope that the United Kingdom negotiators will reflect the widespread support among trade unions and other civic organisations for a just transition clause.

Of course, it is easy to be cynical about what people are trying to do to tackle climate change. People say to me, “Well, actually, it’s not a problem, so you’re talking nonsense.” Others choose not to think about the implication of not tackling climate change. Some people think, “Well, it’s just too big, so we can do absolutely nothing.” We have a real job to do to win hearts and minds in communities across Scotland and, indeed, across the world.
The idea that 2050 is too far into the future to think about is nonsense. Forty years is not a long time, looking back. This is my ruby wedding anniversary—I do not want presents or drinks. On this day, 40 years ago, I married as a teenager. I had no idea then what would happen in 2009. Indeed, apart from nuclear weapons, I was not interested in the possibility that anything might destroy our world. I might not be here in 2049, but I hope that my children and grandchildren—I am getting emotional now—will be, and I care about the world that they will inherit.

Let us pass the bill so that we can get on with the task of making this world a better place, both now and in the future.

16:16

Patrick Harvie (Glasgow) (Green): What can I say to Cathy Peattie, other than “Congratulations”?

John Swinney began his remarks by offering thanks to those who have well earned them, and it would be wrong for me to begin in any other way. I thank my fellow members of the Transport, Infrastructure and Climate Change Committee as well as other members from outwith the committee who have engaged constructively throughout the process. I thank our witnesses and our colleagues in the Scottish Parliament information centre. In particular, I thank our team of clerks, who have, perhaps more than any of us, earned a fabulous summer recess after the work that they have put in.

I also thank the NGO community, especially the Stop Climate Chaos Coalition—which was misreported today as the “Save Climate Change Coalition” by a newspaper sub-editor who does not seem to get it—for the wider pressure that has been applied. That pressure has come not just from campaign groups and activists but from people in the private sector—for example, Scottish and Southern Energy’s chief executive, Ian Marchant—and from others in faith organisations. Without that overwhelming pressure from outside Parliament, we would not have made the progress that has been made during the bill’s passage over the past few months.

Alex Johnstone spoke of those who might have grave doubts about the nature of climate change, but another criticism that might be made, which I do not direct at any particular party, is that many people out there might have even graver doubts about the nature of party politics. Despite the progress that has been made with the bill, the victory belongs to the outside campaigners. Perhaps the degree of posturing that has taken place—on all sides—is understandable and is a natural shortcoming of party politics, but we should think carefully about how, and whether, we might avoid that in future.

Despite those shortcomings, Scotland has shown itself, in passing the bill, to be not just environmentalist but rationalist and internationalist. We have recognised our responsibility for the unequal impact of the choices that we make not only on people here at home—as Cathy Peattie argued, we need a just transition—but also on people around the world. Des McNulty was right to remind us that we could, and should, have done better in that regard.

Sarah Boyack asked where we go from here. Again, my message is primarily to the campaigners and activists. Their work will continue to be vital if we are to turn the commitments that we have made into a reality. As I said to Des McNulty earlier, the headline target in the bill—the 42 per cent interim target—is a vote delayed rather than a vote that we have taken today. Some of the language used in the climate change delivery plan, in ministerial correspondence in recent days and in speeches today makes me fear that we will end up debating which powers are reserved and which are devolved, and arguing that we need reserved powers in order to reach the 42 per cent target. That is an argument that I do not intend to try to settle in this debate, but it will be settled in Parliament. To every one of the tens of thousands of people in Scotland who have lobbied us, who have argued with us and who have pressured us to do better, I say, “Keep going,” because if party politics shows itself to be wanting, we will have achieved very little by passing the bill.

Targets alone are not enough. They are necessary, but not sufficient. They will not be achieved without a radical shift in policy on transport, housing, land use, food and energy. An energy issue that has not come up in today’s debate is infrastructure. Pretty much every member who gets it on climate change recognises the need, for example, for upgrades to the grid, such as the controversial Beauly to Denny transmission line. Yet where is the leadership when people raise aesthetic objections? It is clear that the renewables demanded by the delivery plan will not be connected to the grid without that kind of upgrade. As we await the result of the public local inquiry on the Beauly to Denny line, all of us who argue for radical targets in the bill should be showing leadership on that issue.

We do not yet know the detail of all of the policy shifts that will be required over the next 40 years. It is as though people in the late 1960s drafted a bill setting targets for delivery today. They could not have anticipated the social, technological and economic changes that have taken place, and nor can we anticipate all the changes that will take
place, although we know that they will be more radical than any Government can imagine.

If party politics is found wanting at any stage in the coming decades, it is possible that only more radical approaches, such as those being prepared by people who are getting ready to take direct action on some of the most polluting activities—coal extraction, new coal-fired power stations and new road building—will prompt future politicians to take the radical steps that will be necessary to turn the targets in the bill from numbers on a page into reality.

16:23

Rob Gibson (Highlands and Islands) (SNP): The Climate Change (Scotland) Bill is a victory for the people of Scotland and the wider world. In the many and varied ways that we have agreed through the bill process, it will curb greenhouse gases and mitigate the effects of and help us adapt to climate change.

Unlike Patrick Harvie, I believe that the political parties in the Parliament have grown in stature as the bill has developed. He could not be believed by any of us when he said on Monday:

“This week will be crucial to Scotland’s future reputation, and if the SNP has to be dragged kicking and screaming to 40%, then so be it.”

Such intemperate language sounds like it comes from someone who is speaking from the outside, looking in. It is those of us who are inside who took the decisions today.

Patrick Harvie: Will Rob Gibson take an intervention?

Rob Gibson: We have heard from the member already.

The mainstream of climate change beliefs will be dealt with in the committee to which I belong and that Patrick Harvie convenes. Weekly—I suggest—for the months and years ahead, we will consider the secondary legislation to create the delivery of the ambitious climate change plans that we have agreed to today.

Some of the intemperate language was not needed, but it spurred us on to ensure that we have a stronger bill. It was due to the negotiations between the parties over the issues concerned that we have achieved the bill.

I have played my own part in helping to strengthen our adaptation rules and laws and to provide for specific Scottish scientific advice on our peat bogs and native pine woods, for example, which is part of the process of examining the impact of climate change. I am delighted that the Royal Society for the Protection of Birds has helped us to work towards that possibility.

I have taken a considerable interest in ensuring that there is a firm foundation for the HEET plan—on home energy efficiency targets—which is one of the most ambitious areas of delivery. The target of reaching 11 per cent of our renewable heat needs by 2020 marks a huge leap from where we are at present, and I believe that, thanks to the work done by Scottish Renewables and others, there is now a feeling that the industry is set to invest in Scotland and take up the challenges of creating renewable heat, using machinery such as boilers, and that the sort of green jobs that should flow from our statement of commitment today will be created.

Scotland has a huge potential in this context. We can meet our needs for renewable energy from the tides, the waves and the wind. The UK targets for climate change rely on our delivering that energy, and the same applies to our commitment and contribution for Europe. The scope of the discussions that we have had today and the opportunities that we have grasped in the Parliament, mainly by a consensual approach and in debates that have by and large strengthened the bill enormously, have allowed us to deliver within a short time one of the best bills on climate change that has been passed in the world. There were doubters that we could complete the bill by the summer; those doubts have been allayed. I do not believe that the bill is “staggeringly weak”; I believe that it will be one of the best pieces of legislation that this Parliament passes.

16:27

Patricia Ferguson (Glasgow Maryhill) (Lab): It is a privilege to speak in this debate. Like others, I am delighted that Scotland will have robust climate change legislation following today’s deliberations.

Not being a member of the lead committee can make it difficult for someone with an interest in a bill to follow its progress closely. On this occasion, I am particularly indebted to my colleagues on the Transport, Infrastructure and Climate Change Committee for keeping me and other members informed. I am also indebted to the many constituents of mine who have kept in touch with me along the way and who have ensured that I have known exactly what has been happening with the bill.

None of us is immune from the effects of climate change, and I am sure that we have all encountered problems in our own constituencies that have been caused wholly or in part by climate change. The bill seems to strike just about the right balance between carrot and stick measures. It will require us to continue to monitor and debate the situation as we go forward with secondary legislation. I am pleased that the bill contains such a rigorous measure of reporting.
On emissions, the bill allows us to say to those who are meeting later in the year in Copenhagen to discuss climate change that they should be ambitious, particularly as technology is changing constantly. If they are not ambitious, they will fall behind.

I was very much struck by a discussion between the minister and my colleague Sarah Boyack about how the climate change agenda feeds into so many others. I have an example of that from my constituency. Allied Vehicles constructs and makes electric cars. To me, those cars are for the future, yet they are also for today, as the company employs 300 people in construction work in an area of relatively high unemployment. The agenda is important and meets with many of our other objectives.

The Malawians call it chilala—warming earth. No matter what we call it, the effects of climate change are felt most by people in the developing world, by those who are most vulnerable and by those who are least able to recover from them. In this country, we each produce on average about 9.4 tonnes of emissions per annum. The average Malawian produces only about 0.1 tonnes per annum. Yet it is our friends in Malawi who feel the effects of our actions first and most deeply.

Those of us who have visited Malawi will have sampled chambo, the country’s most popular fish dish. Because the watercourses are drying up, catches of chambo reduced from 2,000 metric tonnes in 1993 to 200 metric tonnes in 2003. At the same time, it is generally accepted that the yearly pattern of wind and rain in Malawi is changing. Most crucially, it is no longer consistent, which means that planting times cannot be synchronised with the weather. It is no wonder that Malawians think that the weather is muddled. They are right—it is.

In Yemen, where there is no permanent river system, the Government is considering moving the capital city, because it foresees that it will not be able to sustain the population’s water supply in a few years’ time. In Burkina Faso, rainfall has fallen to between 400mm and 500mm a year, which represents a decline of almost 20 per cent. In many other parts of the world, local communities are taking action to adapt their lives and their communities to meet the challenges of climate change. Villagers in Bangladesh are moving their buildings—they are building up the height of the local schools so that they can survive heavier rainfall and provide shelter for entire villages if homes are lost to flooding.

We must not lose sight of the fact that such activity is necessary because of our actions. I am interested to know how the Government plans to assist in that regard. In my opinion, that should not be done at the expense of other international development work. We could end up in the same situation as those countries if we are not vigilant; we must use the situation that they are in as a warning to us.

When the Parliament was created, Donald Dewar said that devolution was not an event but a means to an end, and that end was social justice. For that reason, because climate change is a social justice issue, I am delighted to support the bill.

16:32

Malcolm Chisholm (Edinburgh North and Leith) (Lab): I am sure that, when they got up this morning, many of the people who have been involved with the bill for several months—if not, in some cases, years—were tempted to think that it was the beginning of the end, but of course we all know that it is merely the end of the beginning. Recognition of that fact is more crucial to our work on climate change than it is to our work on any other issue that faces us. Tomorrow we must recommit ourselves to delivering on the targets that we have included in the bill during today’s historic proceedings, but perhaps for one evening we can take some satisfaction from delivering what is certainly the most important bill of the parliamentary session.

Like others, I want to thank a number of people. I thank my constituents, hundreds of whom have shown how important an issue climate change is to them by writing to or contacting me about the bill. I also thank the Stop Climate Chaos Coalition, whose members have not only serviced the cross-party group in the Scottish Parliament on climate change—of which Shirley-Anne Somerville and I are co-conveners—but more importantly driven many of the developments in the bill through their energetic and unceasing engagement with MSPs on the big issues that we have discussed today. I know that they are slightly disappointed that some of the amendments that they supported have not been agreed to, but I am sure that they will take some satisfaction from the fact that, in many ways, the bill is stronger as a result of their efforts.

We must also give credit to two other extremely important groups. Credit is due to the Government, which we should remember was the first Government in the world to go for an 80 per cent target, which was the ideal starting point for debates on the bill. In addition—without being too self-congratulatory—we must give credit to the Parliament. It is invidious to mention too many people, but I would like to single out Des McNulty, who managed to get the domestic effort target into the bill. When it was first introduced, the bill did not contain such a target. We should also thank many people for the development of the interim target, including Sarah Boyack, who lodged an
amendment on the subject. Clearly, individuals in other parties, too, were instrumental in bringing about those developments.

The big debates today have been around domestic effort and the interim target. It struck me during the debate and previously that both targets are heavily influenced by emissions trading and that debates on both have been heavily influenced by our understanding of that trading. It was slightly disappointing that there was not more about that crucial issue in the documents that accompany the bill. Perhaps we still have to address that deficiency, because debate on the interim target will clearly continue.

The headline today is that we are united on the 42 per cent interim target—and we should take some satisfaction from that—but the focus tomorrow will be on delivery. We know from the delivery plan that reductions of 36 to 37 per cent are in train, but we must look for more because the point of a target is to stretch and change behaviour. I have just looked at the crucial table in the climate change delivery plan that shows what the targets will mean sector by sector. It struck me that the difference between 34 per cent and 42 per cent in the heat sector is the difference between a reduction of 42 per cent and one of 46 per cent by 2020, which is not an enormous or unachievable difference. In transport, the table shows that the difference is between 24 per cent and 33 per cent, which is a bigger difference but, again, not unachievable.

Somebody at a lobby in Parliament today said to me that he welcomed the announcement by the Minister for Transport, Infrastructure and Climate Change of the target of 10 per cent of all journeys to be made by bicycle by 2020 but that it had not been included in the delivery plan. Perhaps the minister can comment on that. We can do more, which is the message that we need to focus on in the weeks and months ahead.

I am delighted, as I think is everyone in the Parliament, about the amendment on public engagement—amendment 86—being passed. The Government and Parliament alone cannot achieve what the bill seeks, although we must continue to show leadership. Communities and individuals throughout Scotland will do the work in partnership with us. Let us therefore go forward together across the party divides and in partnership with the people.

16:37

Liam McArthur (Orkney) (LD): I raise a glass of bubbly in honour of Cathy Peattie’s ruby anniversary—well done.

At times like these, there is a risk that we lapse into hyperbole in a bid to capture the significance of the task that we are undertaking. Nevertheless, I believe that, in the challenge that we face in addressing climate change and bringing into a more sustainable balance the use to which we put the world’s resources, it is difficult to overstate the bill’s importance and what we seek to achieve through the measures that we are putting in place.

I warmly congratulate Stewart Stevenson on how he has piloted this signature bill through Parliament. I acknowledge the remarks by the Cabinet Secretary for Finance and Sustainable Growth about the bill’s scale and complexity. As I highlighted earlier today, difficulties arose because of the pace with which we elected to consider the bill but, given the imperative for radical early action, that approach was entirely justified.

The speed of the bill’s passage perhaps caught some members by surprise. After what I thought was an entertaining contribution to the debate this afternoon, we clearly could have benefited from hearing more from Alex Johnstone. Sadly, his monastic silence for long periods contrasted with the example of Shirley-Anne Somerville and Rob Gibson, who seemed more seized of the need to improve and strengthen their own Government’s bill.

The bill has been improved and strengthened in many important areas. Like Alison McInnes, I am proud of the role that Liberal Democrats have played in that, but I fully acknowledge that it has very much been a cross-party endeavour, including Alex Johnstone, but one that drew heavily on the expertise of external campaigning organisations and, indeed, the prompting of our constituents. Many members have rightly pointed to the importance of the public’s engagement with the debate that we have had. Parliamentary and committee staff, too, rose superbly to the challenge.

At the risk of eliciting groans from the cabinet secretary, I remain concerned that the bill remains a missed opportunity.

John Swinney: No.

Liam McArthur: There we go—no disappointment there.

For all the rhetoric about the bill being world leading, it can still be found wanting in a number of key respects. The lack of scientifically credible interim annual and sectoral targets means that, while the bill will make some improvements to the current situation, it ultimately risks falling short of fulfilling its potential. The Government is correct to set the target of 80 per cent for 2050—I acknowledge the comments that Malcolm Chisholm made in that regard—even though it is difficult to sustain the assertion that the target is now world leading, because it mirrors the figure set at UK level.
John Swinney: Liam McArthur is in danger of being contaminated by the Liberal Democrats’ doom and gloom. Perhaps if he casts his mind back he will remember that this Government’s proposal for an 80 per cent emissions reduction target was ridiculed by some. Now the UK Government has increased its own target to match an ambition that this Administration has had from day one.

Liam McArthur: I certainly echo the sentiments of Malcolm Chisholm, who conceded that very point in a non-partisan way, but the cabinet secretary’s comments illustrate the point that setting a simple 42 per cent target would provide a more unambiguous benchmark than what has been agreed today.

During the stage 1 debate, I welcomed ministers’ announcement that they were bringing forward the date of the interim target from 2030 to 2020. Stewart Stevenson triumphantly flourished the rabbit that he had just produced from his top hat, but the suspicion remained that all was not what it seemed. So it transpired: although the new interim date was ambitious, the emissions reduction target of 34 per cent was not.

Since that debate, there has been ample opportunity to put some backbone into the bill. For example, the Liberal Democrats have made strenuous efforts to get Parliament to commit to a scientifically credible interim target of 42 per cent. Unfortunately, the Government, supported by both Labour and the Tories, opposed such a move; indeed, in an attempt to outmanoeuvre the Government, Labour simply succeeded in priming the trapdoor through which ministers have gleefully escaped.

In his letter to all party leaders, Scottish and Southern Energy chief executive Ian Marchant said:

“If the 2050 target is 80% cut from the 1990 baseline, then by the halfway point, 2020, the cuts must be more than half way. That means at least 40% with no ifs or buts or politically-motivated caveats”.

He went on to add:

“With its rich natural resources, Scotland shouldn’t just be waiting for the pack, but leading it.”

Ambition has also been lacking in year-on-year targets, with the explicit commitment in the SNP manifesto dumped. The Stop Climate Chaos Coalition has urged the First Minister to honour his commitment to a 3 per cent annual target, while the World Development Movement criticised the decision not to do so as “incredibly disappointing”.

Such shortcomings are not insignificant, but the bill will still achieve much if we can ensure that it is implemented effectively. For example, it will lead to real improvements in the energy efficiency of domestic and non-domestic buildings and put in place important provisions on local and business tax incentives and permitted development rights. I am proud of the role that I have played in these areas and put on record my thanks to the Association for the Conservation of Energy, Friends of the Earth Scotland and the Stop Climate Chaos Coalition. Finally, I should add that the bill’s provisions on cumulative emissions have been greatly improved by the amendments that have been agreed to, due in no small part to my colleague Alison McInnes.

This is a signature bill for the Parliament; it is the most important that it will pass in this session—and perhaps the most important that it has passed so far. It falls short of what it might have been, but it will nevertheless have a significant impact in helping Scotland to play its part in tackling the challenge of climate change not just for us but, as Patricia Ferguson rightly said, for the many people in developing countries who will bear the brunt of climate change in the first instance. In passing, I note that, according to recent evidence, my own constituency might be in the front line in this country.

I thank everyone who has contributed to the scrutiny process and, again, I congratulate the minister on securing the bill’s successful passage. Notwithstanding our reservations, I commit the Liberal Democrats to ensuring that the legislation delivers in the weeks, months and years ahead.

16:43

Nanette Mline (North East Scotland) (Con):

Today’s long and well-fought battle will, at decision time, result in the passing of an extremely important piece of legislation that, following on from the UK Climate Change Act 2008, should ensure that our small island punches well above its weight in the battle against the global warming that threatens our planet’s future, and should set an example for others to follow.

We face an unprecedented environmental challenge and, although we in Scotland might get off relatively lightly, other countries, particularly in the poorest and most heavily populated parts of the world, face devastation unless we can achieve a significant and early reduction in the volume of greenhouse gases emitted from our terrestrial activities.

I have not been involved in the bill’s committee stages, so as an onlooker I feel well placed to acknowledge and pay tribute to the very hard work of the many people inside and outwith the Parliament who in a relatively short time have put in a tremendous amount of effort to ensure that the Climate Change (Scotland) Bill is as robust as possible, with challenging targets and duties
placed on ministers and others to ensure that every effort is put into achieving them.

It is a complex and technical bill, and it has been dealt with with commendable thoroughness and competence by all concerned. However, although I fully understand the need to have the legislation in place as early as possible, to my mind three weeks was not long enough for stages 2 and 3 of such a complex and far-reaching bill. The flurry of stage 3 amendments at the last minute made the final stages of the parliamentary process considerably more stressful for members and staff than they might have been.

The stakes are high and the challenges are awesome. If they are to be met, all of us, in every community, institution and business and in our homes, will have to make a determined effort to reduce our individual contributions to atmospheric pollution by carbon dioxide and other greenhouse gases. John Swinney and Brian Adam were right to highlight the need for public engagement in the delivery of the bill’s objectives, and I am glad that the Parliament has acknowledged that.

I am sure that significant efforts will be made in Scotland and the rest of the United Kingdom to meet the targets that are set for us, but I worry about some of the bigger players in the world whose impact on climate change is on a much bigger scale than ours but whose efforts to offset it are smaller. At least we are setting an example and beginning to move in the right direction.

Much of the focus in recent days has been on part 1 of the bill and the emissions reduction targets within it. We have been happy all along to support the target to reduce emissions by 80 per cent by 2050 and the recently amended interim target of 42 per cent by 2020. That is an ambitious target but, as Scottish and Southern Energy stated in its stage 3 briefing to us, it demonstrates the leadership to which Scotland rightly aspires. It should deliver greater competitive advantage for investment and economic opportunities in a low-carbon economy, with the jobs that that will create. It should also help Scotland to lead the way in securing the necessary policy actions elsewhere in the UK and the European Union.

With ambitious targets in place, it is clear that progress towards achieving them must be carefully monitored. We fully support the duties to be placed on ministers to make regular reports to the Parliament. That will give members the opportunity to question them effectively and openly and to hold them to account for meeting the targets. Although we prefer carrots rather than sticks to encourage businesses, public sector bodies and individuals to make the necessary changes to their behaviour in the interests of climate change mitigation, we accept that public bodies should have regard to the guidance that they will receive from ministers.

Finally, I will deal with a couple of aspects of part 5 of the bill that concerned my party. Following the Government’s decision to drop the forestry leasing proposals, we are pleased that the bill now requires ministers to lay a land use strategy before the Parliament by March 2011. Given the desire for significantly more woodland in Scotland and other competing land uses such as the food production that is so important for our food security, the increasing need for sustainable flood risk management and the need for land for industrial and housing development, it is extremely important that Scotland has a proper plan to use its land in the most appropriate and sustainable way.

On the Conservative benches, we are keen to encourage and improve energy efficiency, so we are pleased that the Parliament has approved the various amendments that will allow energy efficient improvements to dwellings and non-domestic properties. I join other members in commending Sarah Boyack for her immense contribution in that regard over the years. As a north-east MSP, I am also extremely pleased with the minister’s stated commitment to extend the combined heat and power schemes that a number of Aberdeen residents enjoy and his intention that that will be done from April next year.

I could say a great deal more about the detail of this groundbreaking legislation, but I conclude by welcoming the many measures that will help us to make progress in the battle to reduce and mitigate the effects of climate change. There are those who will not be happy with the progress that we have made, but the bill is a major step in the right direction and we will be happy to support it at decision time.

16:49

Des McNulty (Clydebank and Milngavie) (Lab): Like other members, I begin by expressing my particular thanks to the clerks. I probably caused them more late nights and problems than anyone else did at stages 1 and 2, although I probably did not quite do so at stage 3. I am conscious that giving the clerks more work had consequences not only for my fellow committee members but for members of the bill team, so I apologise to them for all the work that I caused them.

Collectively, we have substantially improved the bill. It will be interesting to compare the amended bill that we pass with the bill that was introduced, because that will provide a measure of how far we have come and how much we have added to and
adapted the bill, thereby substantially improving it, as I think members of all parties accept.

Our collective improvement of the bill is a great tribute to the Parliament’s committee system and how it differs from the Westminster system. Bills in the Scottish Parliament go to a specialist committee, whose members have a background and an interest in the committee’s work and build up an area of expertise. I am not saying that we are all experts, but in the context that I have described ministers cannot bring committees information and not expect to be asked difficult questions from time to time—and very difficult questions a fair part of the time.

The collective approach to improving the bill is also a tribute to the Government, given that the make-up of the Transport, Infrastructure and Climate Change Committee is such that the Government party is numerically weak. There are more Labour than SNP members on the committee. That not only presented the Government with problems, which Mr Stevenson and his SNP colleagues dealt with well, but placed a responsibility on Labour members, to which I hope that we responded by being constructive.

The process that the committee went through was all about persuasion. I say to Liam McArthur and Alison McInnes that to some extent their problem was that they did not successfully persuade us about matters that they chose to pursue. They might need to reflect on that. We all need to focus on our ability to persuade people on issues that we want to pursue. I did not persuade people to agree to all the changes that I or my party colleagues wanted to make to the bill, but we made significant changes, not by saying, “We are right and you are wrong,” but by saying, “How can we take this forward in a way that improves the bill?”

It is not just about improving the bill. As Malcolm Chisholm said, passing the bill is not the end of the process but the beginning of implementation. The setting of a target is meaningful only if we also set policy priorities that are consistent with the objectives in the bill. I thought that Mr Swinney’s comments jarred a bit in one area. He seems to regard the 42 per cent target as “34 per cent if the Europeans give in”. I do not think that that is where we have got to. The Parliament is not asking the Government to say that 34 per cent is as far as we can go. What Parliament is asking—and what Scotland wants—is for the Government to consider what additional, cost-effective measures can be brought in and what policy proposals must be reviewed so that we can move towards a higher target.

If David Kennedy is asked whether the bill’s 2020 target is inappropriate, as he was asked last week, he is likely to reply, “Well, 34 per cent is fine.” However, if we ask him what additional action we can take to drive up that target, I think that we will get a different answer. The onus is on the Government to come up with policy proposals that can drive up Scotland’s potential to achieve emissions reductions. The question that we want the UK Committee on Climate Change to answer is, “What is Scotland’s potential and how do we achieve it?”

The bill is a good one. It might not be as good as it could be and some aspects of it might have been improved, but it will provide a solid foundation. We must drive the process forward in real terms, by engaging people and acting in a way that will deliver the objectives that we have set out.

16:54

The Minister for Transport, Infrastructure and Climate Change (Stewart Stevenson): I thank John Swinney for the name check in his opening remarks in the debate. I also thank members around the chamber for their warm words. The contributions of a large number of parliamentarians can be seen in the bill, and those parliamentarians have been informed by widespread action and lobbying from outside the chamber.

The bill is complex, and I quite enjoy engaging with complex bills. Quite early in my business career, I was told that when a person did a job well, their reward was that they got to do it again; but I hope that the cabinet secretary does not have anything immediately in mind in that regard. We shall see.

Alex Johnstone congratulated the clerks to the Transport, Infrastructure and Climate Change Committee, and I would like to congratulate the bill team, whose efforts on occasions could only be described as heroic. The team responded to ministers but, in addition, and through the process of engagement that we have sought to create, they responded to members of other political parties, and tried to support them. The process has been a model for how the Parliament can work. It is very much how we, as a minority Government, would wish to go about our business, now and in the future.

We ended up with a substantial area of common ground, and we now have a substantial set of proposals to which we can compare our views with satisfaction. Alex Johnstone tried to compare himself with an orang-utan; I have agreed with his wife that I will ensure that, at least in circumference, that comparison will not be true.

Cathy Peattie made a particular contribution by being here on her ruby wedding anniversary. I am only three weeks—no, four weeks, no, five
weeks—away from mine. [Laughter.] But with Gavin Brown, I am waiting to see whether the most important delivery of the day has happened. He has been on tenterhooks, waiting to find out whether his next child has been delivered today. We have drawn people in from all the airts; we have created a priority for this bill, and people have respected that.

Patrick Harvie raised questions in relation to devolved and reserved matters. However, on this particular subject, there is common purpose between the United Kingdom Administration and ourselves. That is not least because we have to be part of the UK’s efforts. Our success will be part of its success.

Patrick Harvie also talked about direct action. I counsel him, very severely, that we have to behave responsibly, and that we have to take the people of Scotland with us. We must turn this legislation—[Interruption.]

The Presiding Officer (Alex Fergusson): Order. There is an awful lot of background noise and I would prefer less of it.

Stewart Stevenson: We must turn this legislation into real action.

Patricia Ferguson referred to Allied Vehicles in her constituency. Within the past week, I was delighted to drive one of its electric vehicles. It is interesting to note that battery technology is probably the technology that is not yet up to the mark. A lot of work will be done on that. In Scotland, we have biotech industries and some electrical engineers, and that will probably help. Patricia Ferguson also mentioned Malawi—a topic that brings home the whole idea of social justice that is at the heart of what we are trying to do.

Today has largely been a day in which we have looked inwards. However, we must now look outwards towards Scotland’s comity, to countries around the world, and to the United Nations conference in Copenhagen in December. Most of all, we must look outwards to the poor and disadvantaged in Africa, India, China, Brazil and other countries all round the world.

The bill is not an economic bill, although it will have economic effects. It is not legislation to gather dust on the shelves of hundreds of lawyers; it is a moral step we take that will be important for the world.

When I had dinner with Ian Marchant a couple of weeks ago at the business delivery group, he gave me a copy of Douglas Adams’s “The Hitchhiker’s Guide to the Galaxy”. Ford Prefect had come from another world to look at the earth, and he was working on an entry in the guide that said that the earth was “harmless”. After vigorous research, he converted that assessment to “mostly harmless”. Through this bill, let us turn the earth and humans’ efforts on earth into something that is mostly harmless. Let us also remember that the answer to everything in the hitchhiker’s guide to the galaxy is one that is relevant to today. The answer was 42.
Climate Change (Scotland) Bill

[AS PASSED]

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Schedule 1—The Scottish Committee on Climate Change
Schedule 2—Minor and consequential modifications
Climate Change (Scotland) Bill

[AS PASSED]

An Act of the Scottish Parliament to set a target for the year 2050, an interim target for the year 2020, and to provide for annual targets, for the reduction of greenhouse gas emissions; to provide about the giving of advice to the Scottish Ministers relating to climate change; to confer power on Ministers to impose climate change duties on public bodies; to make further provision about mitigation of and adaptation to climate change; to make provision about energy efficiency, including provision enabling council tax discounts; to make provision about the reduction and recycling of waste; and for connected purposes.

PART 1

EMISSIONS REDUCTION TARGETS

The 2050 target

1 The 2050 target

(1) The Scottish Ministers must ensure that the net Scottish emissions account for the year 2050 is at least 80% lower than the baseline.

(2) In this Act, the target set out in subsection (1) is known as the “2050 target”.

The interim target

A2 Setting and modification of interim target

(1) The Scottish Ministers must ensure that the net Scottish emissions account for the year 2020 is at least 42% lower than the baseline.

(2) In this Act, the target set out in subsection (1) is known as the “interim target”.

(3) The Scottish Ministers may, by order, modify the percentage figure mentioned in subsection (1) so as to substitute—

(a) a figure provided by the relevant body by virtue of subsection (4)(b); or

(b) a higher figure,

for the one for the time being mentioned there.

(4) The Scottish Ministers must, as soon as reasonably practicable after the Bill for this Act receives Royal Assent, request advice from the relevant body as to (having regard to the criteria set out in subsection (5))—
(a) whether the percentage figure for the time being mentioned in subsection (1) is the highest achievable interim target; and
(b) if not, what the highest achievable interim target is.

(5) The criteria referred to in subsection (4) are—
   (a) scientific knowledge about climate change;
   (b) technology relevant to climate change;
   (c) economic circumstances, in particular the likely impact of the target on—
      (i) the Scottish economy;
      (ii) the competitiveness of particular sectors of the Scottish economy;
      (iii) small and medium-sized enterprises;
      (iv) jobs and employment opportunities;
   (d) fiscal circumstances, in particular the likely impact of the target on taxation, public spending and public borrowing;
   (e) social circumstances, in particular the likely impact of the target on those living in poorer or deprived communities;
   (f) the likely impact of the target on those living in remote rural communities and island communities;
   (g) energy policy, in particular the likely impact of the target on energy supplies, the renewable energy sector and the carbon and energy intensity of the Scottish economy;
   (h) environmental considerations and, in particular, the likely impact of the targets on biodiversity;
   (i) European and international law and policy relating to climate change.

(6) The Scottish Ministers must publish the advice requested under subsection (4) by 31 December 2009 (or, if the advice is not published by that date, as soon as reasonably practicable afterwards).

(7) Where the relevant body has provided advice of the kind mentioned in subsection (4)(b), the Scottish Ministers must, as soon as reasonably practicable after that advice is published under subsection (6), comply with either of the duties set out in subsection (8).

(8) The duties are—
   (a) to lay before the Scottish Parliament a draft of a statutory instrument containing an order under subsection (3) substituting for the percentage figure for the time being mentioned in subsection (1) the figure provided by the relevant body by virtue of subsection (4)(b); or
   (b) to make a statement to the Scottish Parliament setting out the reasons why no such order has been laid.

(9) If an appropriate Community instrument comes into force, the Scottish Ministers must, before the expiry of the appropriate period, lay a draft of a statutory instrument containing an appropriate order before the Scottish Parliament.

(10) An “appropriate order” means an order under subsection (3) modifying the percentage figure mentioned in subsection (1) so as to substitute a figure of at least 42%.
(11) An “appropriate Community instrument” means a Community instrument—

(a) which contains a commitment to reduce greenhouse gas emissions by at least 30% compared to 1990 levels by 2020; and

(b) which amends Decision 406/2009/EC of the European Parliament and of the Council of 23 April 2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community’s greenhouse gas emission reduction commitments up to 2020 in the manner envisaged in Article 8(2) of the Decision.

(12) The “appropriate period” means the period of 3 months beginning with the day on which the appropriate Community instrument comes into force.

(13) If a draft of an appropriate order is not laid before the expiry of the appropriate period, the Scottish Ministers must lay the draft as soon as reasonably practicable afterwards.

(14) Subsections (9) to (13) cease to apply if a figure higher than 42% is, by virtue of a draft of a statutory instrument of the kind mentioned in subsection (8)(a) having been approved by the Scottish Parliament, the percentage figure for the time being mentioned in subsection (1).

### Annual targets

3 **Annual targets**

(1) The Scottish Ministers must—

(a) for each year in the period 2010-2050, set a target for the maximum amount of the net Scottish emissions account;

(b) ensure that the net Scottish emissions account for each year in that period does not exceed the target set for that year.

(2) The target—

(a) for 2010, must be set at an amount that is less than the estimated net Scottish emissions account for 2009;

(b) for each year in the period 2011-2019, must be set at an amount that is consistent with a reduction over that period of net Scottish emissions accounts which would allow the interim target and the 2050 target to be met;

(c) for each year in the period 2020-2050, must be set at an amount that is—

(i) consistent with a reduction over that period of net Scottish emissions accounts which would allow the 2050 target to be met; and

(ii) at least 3% less than the target for the preceding year.

(3) In this Act—

(a) an “annual target” for any year means the target for the maximum amount of the net Scottish emissions account set for that year in accordance with this section and section 4;

(b) references to an annual target being met are references to the net Scottish emissions account for a year not exceeding the annual target for that year (and cognate expressions are to be construed accordingly).
4 Setting annual targets

(1) The Scottish Ministers must, by order, set the annual targets for each year in the periods mentioned in paragraphs (a) to (g) of subsection (2).

(2) The Scottish Ministers must set the annual targets for each year—

(a) in the period 2010-2022, no later than 1 June 2010;
(b) in the period 2023-2027, no later than 31 October 2011;
(c) in the period 2028-2032, no later than 31 October 2016;
(d) in the period 2033-2037, no later than 31 October 2021;
(e) in the period 2038-2042, no later than 31 October 2026;
(f) in the period 2043-2047, no later than 31 October 2031;
(g) in the period 2048-2050, no later than 31 October 2036.

(3A) The Scottish Ministers must, when setting annual targets, have regard to any advice they receive from the relevant body as to the cumulative amount of net Scottish emissions for the period 2010-2050 that is consistent with a reduction over that period of net Scottish emissions accounts which would allow the 2050 target to be met.

(4) The Scottish Ministers must, when setting annual targets, also have regard to the following matters (the “target-setting criteria”)—

(aa) the objective of not exceeding the fair and safe Scottish emissions budget;
(a) scientific knowledge about climate change;
(b) technology relevant to climate change;
(c) economic circumstances, in particular the likely impact of the target on—
   (i) the Scottish economy;
   (ii) the competitiveness of particular sectors of the Scottish economy;
   (iii) small and medium-sized enterprises;
   (iv) jobs and employment opportunities;
(d) fiscal circumstances, in particular the likely impact of the target on taxation, public spending and public borrowing;
(e) social circumstances, in particular the likely impact of the target on those living in poorer or deprived communities;
(f) the likely impact of the target on those living in remote rural communities and island communities;
(g) energy policy, in particular the likely impact of the target on energy supplies, the renewable energy sector and the carbon and energy intensity of the Scottish economy;
(ga) environmental considerations and, in particular, the likely impact of the targets on biodiversity;
(h) European and international law and policy relating to climate change.

(5) If annual targets for a period are not set by the corresponding date mentioned in paragraphs (a) to (g) of subsection (2), the Scottish Ministers must set the annual targets as soon as reasonably practicable afterwards.
In this Act, the “fair and safe Scottish emissions budget” is the aggregate amount of net Scottish emissions for the period 2010-2050 recommended by the relevant body as being consistent with Scotland contributing appropriately to stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.

5 Advice before setting annual targets

(1) The Scottish Ministers must, before laying a draft of a statutory instrument containing an order under section 4(1) before the Scottish Parliament, request advice from the relevant body.

(1A) The request for advice must include requests for the relevant body’s views—

(a) in the case of annual targets proposed for years in the period 2010-2020, as to whether those targets are consistent with a reduction over that period of net Scottish emissions accounts which would allow the interim target and the 2050 target to be met;

(b) in the case of annual targets proposed for years in the period 2021-2050, as to whether those targets are consistent with a reduction over that period of net Scottish emissions accounts which would allow the 2050 target to be met;

(c) in any case—

(i) as to what annual targets are appropriate by reference to the target-setting criteria;

(ii) as to the extent to which the annual targets should be met—

(A) by taking action to reduce net Scottish emissions;

(B) by the use of carbon units that in accordance with section 12(1A) and regulations under section 12(2) may be credited to the net Scottish emissions account;

(iii) as to the respective contributions towards meeting the annual targets and the domestic effort target that should be made—

(A) by the traded sector of the Scottish economy;

(B) by the other sectors of the Scottish economy;

(iv) as to the respective contributions towards meeting the annual targets and the domestic effort target that should be made by—

(A) energy efficiency;

(B) energy generation;

(C) land use;

(D) transport.

(1B) The Scottish Ministers must publish the advice requested under subsection (1) as soon as reasonably practicable after they receive it.

(2) As soon as reasonably practicable after laying such a draft, the Scottish Ministers must publish a statement setting out in respect of the annual targets set by the order—

(a) the reasons for setting those annual targets at those levels;

(b) the extent to which those targets take account of the target-setting criteria.
If the order under section 4(1) makes provision different from that recommended by the relevant body, the Scottish Ministers must publish a statement setting out the reasons why.

Advice requested under subsection (1) or a statement under subsection (2) or (3) may be published in such manner as the Scottish Ministers consider appropriate.

In this Part, the “relevant body” means—

(a) where no order has been made under section 19(1) designating a person or body as the advisory body, the UK Committee on Climate Change; or
(b) where such an order has been made, the advisory body.

In subsection (5)(a), the “UK Committee on Climate Change” means the Committee on Climate Change established under section 32 of the Climate Change Act 2008 (c.27) (the “2008 Act”).

In this section, “traded sector” means the sectors of the Scottish economy which are covered by trading schemes within the meaning of section 44 of the 2008 Act.

Modifying annual targets etc.

The Scottish Ministers may, by order, modify—

(a) the percentage figure mentioned in section 3(2)(c);
(b) an annual target set by virtue of section 4(1);
(c) any date mentioned in paragraphs (a) to (g) of section 4(2);
(d) the target-setting criteria in section 4(4).

The Scottish Ministers must, at the same time as laying a draft of a statutory instrument containing an order under subsection (1)(a) before the Scottish Parliament, lay before the Parliament a report explaining why the modification is being proposed.

The Scottish Ministers must, as soon as reasonably practicable after laying a report before the Scottish Parliament under subsection (1A), and in so far as reasonably practicable, make a statement to the Parliament relating to the report.

The Scottish Ministers may make an order under subsection (1)(a) only if they consider that it is no longer necessary for annual targets to be set by reference to that percentage figure.

The Scottish Ministers may make an order under subsection (1)(b) only if they consider that it is appropriate to do so as a result of—

(a) a modification of the interim target; or
(b) another significant change to the basis on which the annual target was set.

The Scottish Ministers may make an order under subsection (1)(c) or (d) only if they consider it appropriate to do so.

The power in subsection (1)(a) may not be exercised so as to substitute a percentage of less than zero.

The power in subsection (1)(b)—

(a) may be exercised only before the beginning of the year to which the target relates;
(b) may not be exercised if the effect of doing so would be that the target for the year would be greater than the target for the preceding year.
7  **Advice before modifying annual targets etc.**

(1) The Scottish Ministers must, before laying a draft of a statutory instrument containing an order under section 6(1) before the Scottish Parliament, request advice from the relevant body.

(2) If the order under section 6(1) makes provision different from that recommended by the relevant body, the Scottish Ministers must lay before the Scottish Parliament a report setting out the reasons why.

(3) The Scottish Ministers must, as soon as reasonably practicable after laying a report before the Scottish Parliament under subsection (2), and in so far as reasonably practicable, make a statement to the Parliament relating to the report.

7A  **Achievement of annual targets: domestic effort target**

(1) The Scottish Ministers must ensure that reductions in net Scottish emissions of greenhouse gases account for at least 80% of the reduction in the net Scottish emissions account in any target year.

(2) In this Act, the target set out in subsection (1) is known as the “domestic effort target”.

(2A) For the purposes of ascertaining whether the domestic effort target has been met, any reduction to the net Scottish emissions account as a result of the crediting to that account of a net amount of European carbon units mentioned in subsection (2B) is to be treated as though it is a reduction in net Scottish emissions.

(2B) In subsection (2A), “European carbon units” means carbon units which are surrendered by participants in—

(a) the European Union Emissions Trading Scheme (“EUETS”); or

(b) such other trading scheme making provision equivalent to the EUETS as the Scottish Ministers may, by order, specify.

(2C) In subsection (2B), “trading scheme” means a trading scheme within the meaning of section 44 of the 2008 Act.

(3) The Scottish Ministers may, by order, modify the percentage figure mentioned in subsection (1) so as to substitute a higher figure for the one for the time being mentioned there.

(4) The Scottish Ministers must, before laying a draft of a statutory instrument containing an order under subsection (3) before the Scottish Parliament, request advice from the relevant body.

(5) If the order under subsection (3) makes provision different from that recommended by the relevant body, the Scottish Ministers must publish a statement setting out the reasons why.

(6) A statement under subsection (5) may be published in such manner as the Scottish Ministers consider appropriate.

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8  **Progress towards targets**

(1) The Scottish Ministers must in each year, beginning with the year 2011, request the relevant body to prepare a report setting out that body’s views on—
Climate Change (Scotland) Bill

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(a) progress towards achievement of—
   (i) annual targets;
   (ii) the interim target;
   (iii) the 2050 target;
(b) whether the annual targets, the interim target or the 2050 target are likely to be achieved;
(c) any further effort which may be necessary to achieve annual targets, the interim target or the 2050 target.

(2) No later than the end of the second year following a year for which an annual target has been set (a “target year”), the Scottish Ministers must request the relevant body to prepare a report setting out that body’s views on—
(a) whether the annual target for the target year was met;
(b) the ways in which those targets were or were not met;
(c) the action taken by the Scottish Ministers to reduce net Scottish emissions during that year.

(3) The Scottish Ministers must lay a response to the relevant body’s report under this section before the Scottish Parliament as soon as reasonably practicable after they receive that body’s report.

Greenhouse gases

(1) In this Act, a “greenhouse gas” means—
   (a) carbon dioxide;
   (b) methane;
   (c) nitrous oxide;
   (d) hydrofluorocarbons;
   (e) perfluorocarbons;
   (f) sulphur hexafluoride.

(2) The Scottish Ministers may, if they consider it appropriate to do so, by order, modify subsection (1) so as to—
(a) add a gas;
(b) modify the description of a gas.

(3) The power in subsection (2)(a) may be exercised only if it appears to the Scottish Ministers that an agreement or arrangement at European or international level recognises that the gas to be added contributes to climate change.

(4) The Scottish Ministers must, before laying a draft of a statutory instrument containing an order under subsection (2) before the Scottish Parliament, request advice from the relevant body.
(5) If the order makes provision different from that recommended by the relevant body, the Scottish Ministers must publish a statement setting out the reasons why.

(6) A statement under subsection (5) may be published in such manner as the Scottish Ministers consider appropriate.

**Baseline**

10 **The baseline**

(1) In this Act, the “baseline” means the aggregate amount of—
   
   (a) net Scottish emissions of carbon dioxide for 1990; and
   
   (b) net Scottish emissions of each of the greenhouse gases other than carbon dioxide for the year that is the baseline year for that gas.

(2) The baseline years for greenhouse gases other than carbon dioxide are—
   
   (a) for methane, 1990;
   
   (b) for nitrous oxide, 1990;
   
   (c) for hydrofluorocarbons, 1995;
   
   (d) for perfluorocarbons, 1995;
   
   (e) for sulphur hexafluoride, 1995.

11 **Baselines for additional greenhouses gases**

(1) This section applies where the Scottish Ministers have made an order under section 9(2)(a) adding a greenhouse gas.

(2) In this section, such a gas is referred to as an “additional greenhouse gas”.

(3) The Scottish Ministers may, by order, make provision as to the manner of determining, in the case of an additional greenhouse gas, the amount of net Scottish emissions for the baseline year.

(4) An order under subsection (3) may in particular—
   
   (a) designate a year as the baseline year for the additional greenhouse gas;
   
   (b) provide for the amount of net Scottish emissions of the gas for that year to be treated for the purposes of this Act as the amount of net Scottish emissions of that gas for that baseline year.

**Supplementary**

12 **The net Scottish emissions account**

(1) The net Scottish emissions account means the aggregate amount of net Scottish emissions of greenhouse gases—
   
   (a) reduced by the amount of carbon units credited to the net Scottish emissions account for the period in accordance with regulations under subsection (2);
   
   (b) increased by the amount of carbon units that, in accordance with such regulations, are to be debited from the net Scottish emissions account for the period.
(1A) The net amount of carbon units credited to the net Scottish emissions account for a year for which an annual target has been set (a “target year”) must not exceed the allowable amount.

(1B) The “allowable amount” is—

(a) the amount equal to the limit, set by virtue of section 18A(1), on the net amount of carbon units that may be credited to net Scottish emissions accounts during the period which includes the target year; or

(b) where a net amount of carbon units has been credited to the net Scottish emissions account for any other target year in that period, the balance (if any) remaining of the amount referred to in paragraph (a).

(1C) In subsections (1A) and (1B), the “net amount of carbon units” has the meaning given by section 18A(3).

(2) The Scottish Ministers may, by regulations, make provision about—

(a) the circumstances in which carbon units may be credited to the net Scottish emissions account for a period;

(b) the circumstances in which such units may be debited from that account for a period;

(c) the manner in which this is to be done.

(3) The regulations must contain provision for ensuring that carbon units that are credited to the net Scottish emissions account for a period cease to be available to offset other greenhouse gas emissions.

12A Restriction on use in 2010-2012 of carbon units purchased by Scottish Ministers

(1) The Scottish Ministers may not, where subsection (2) applies, credit to the net Scottish emissions account for a year in the period 2010-2012 any carbon units purchased by them.

(2) This subsection applies provided the percentage figure mentioned in section 2(1) is 34%.

(3) The Scottish Ministers may only credit to the net Scottish emissions account for a year in the period 2013-2017 any carbon units purchased by them up to a limit of 20% of the reduction in the amount of the net Scottish emissions account planned for that year.

13 Attribution of emissions to Scotland

For the purposes of section 15(1), emissions of a greenhouse gas are attributable to Scotland if—

(a) they are emitted from sources in Scotland;

(b) they are attributed to Scotland by virtue of an order under section 14(1).

14 Scottish share of emissions from international aviation and international shipping

(1) The Scottish Ministers may, by order, make provision regarding the emissions of greenhouse gases from international aviation and international shipping that are attributable to Scotland.

(2) An order under subsection (1)—
(a) must make provision for emissions from international aviation and international shipping of—

(i) in the case of the first order under that subsection, each greenhouse gas; and

(ii) in the case of any subsequent order under subsection (1), any gas added to the list of greenhouse gases in section 9(1) since the last such order was made,

to be taken into account as Scottish emissions of each such gas in the period starting with the 1 January following the order being approved by the Scottish Parliament and ending on 31 December 2050;

(aa) may make provision as to any past period in which emissions of a greenhouse gas are to be taken into account as Scottish emissions of that gas;

(ab) may not, once emissions from international aviation and international shipping of a greenhouse gas are, by virtue of a previous order under subsection (1), being taken into account as Scottish emissions of that gas, provide for such emissions to cease to be taken into account as Scottish emissions of that gas;

(b) must, subject to subsection (2ZA), make provision as to the manner in which emissions from international aviation and international shipping of each greenhouse gas are to be taken into account in determining Scottish emissions of that gas—

(i) for the year that is the baseline year for that gas; and

(ii) in the period during which such emissions of that gas are to be taken into account as Scottish emissions of that gas.

(2ZA) Provision made by virtue of subsection (2)(b) must include the use, for each greenhouse gas, of a multiplier which reflects the direct and indirect non-carbon dioxide climate change impacts of emissions at altitude from international aviation.

(2A) A draft of a statutory instrument containing the first order under subsection (1) must be laid before the Scottish Parliament no later than 1 June 2010.

(2B) If a draft of the first order is not laid by the date mentioned in subsection (2A), the Scottish Ministers must lay the draft as soon as reasonably practicable afterwards.

(3) The Scottish Ministers must, before laying a draft of a statutory instrument containing an order under subsection (1) before the Scottish Parliament, request advice from the relevant body (including advice as to an appropriate multiplier for each greenhouse gas for the purposes of subsection (2ZA)).

(4) If the order makes provision different from that recommended by the relevant body, the Scottish Ministers must publish a statement setting out the reasons why.

(5) A statement under subsection (4) may be published in such manner as the Scottish Ministers consider appropriate.
“Scottish emissions”, in relation to a greenhouse gas, means emissions of that gas which are attributable to Scotland;
“Scottish removals”, in relation to a greenhouse gas, means removals of that gas from the atmosphere due to land use, land-use change or forestry activities in Scotland;
“the net Scottish emissions” for a period, in relation to a greenhouse gas, means the amount of Scottish emissions of that gas for the period reduced by the amount of Scottish removals of that gas for the period.

(2) The Scottish Ministers may, if they consider it appropriate to do so, by order, modify the definition of Scottish removals in subsection (1).

(3) The amount of Scottish emissions and Scottish removals of a greenhouse gas for a period must, in so far as reasonably practicable, be determined consistently with international carbon reporting practice.

16 Measurement of emissions etc.

(1) For the purposes of this Act, greenhouse gas emissions, reductions of such emissions and removals of greenhouse gases from the atmosphere are measured or calculated in tonnes of carbon dioxide equivalent.

(2) A “tonne of carbon dioxide equivalent” means one metric tonne of carbon dioxide or an amount of any other greenhouse gas with an equivalent global warming potential (calculated consistently with international carbon reporting practice).

17 International carbon reporting practice

In this Act, “international carbon reporting practice” means accepted practice in relation to reporting for the purposes of—

(a) the protocols to the United Nations Framework Convention on Climate Change;

(b) such other agreements or arrangements at European or international level as the Scottish Ministers may, by order, specify.

18 Carbon units and carbon accounting

(1) The Scottish Ministers may, by regulations, make provision for a scheme—

(a) for registering or otherwise keeping track of carbon units;

(b) for establishing and maintaining accounts in which carbon units may be held, and between which they may be transferred, by the Scottish Ministers.

(2) Regulations under subsection (1) may, in particular, provide for an existing scheme to be adapted for these purposes.

(3) The regulations may also include provision—

(a) designating a person or body to administer the scheme;

(b) establishing a person or body for that purpose and making such provision in relation to the appointment of members, staffing, expenditure, procedure and otherwise of the person or body as the Scottish Ministers consider appropriate;

(c) conferring power on the Scottish Ministers to give guidance or directions to the person or body administering the scheme;
(d) conferring power on the Scottish Ministers to delegate the performance of any of the functions conferred on them by the regulations;

(e) requiring the payment by persons using the scheme of such charges as are reasonably required to cover the reasonable costs incurred in operating the scheme.

(4) In this Act, a “carbon unit” means a unit of a kind specified in regulations made under subsection (1) and which represents—

(a) a reduction in an amount of greenhouse gas emissions;

(b) the removal of an amount of greenhouse gas from the atmosphere;

(c) an amount of greenhouse gas emissions allowed under a scheme or arrangement imposing a limit on such emissions.

18A Limits on use of carbon units

(1) The Scottish Ministers must, by order, set a limit on the net amount of carbon units that may be credited to net Scottish emissions accounts during the periods mentioned in paragraphs (a) to (i) of subsection (2).

(2) The Scottish Ministers must set the limit—

(a) for the period 2010-2012, no later than 1 June 2010;

(b) for the period 2013-2017, no later than 31 December 2011;

(c) for the period 2018-2022, no later than 31 December 2016;

(d) for the period 2023-2027, no later than 31 December 2021;

(e) for the period 2028-2032, no later than 31 December 2026;

(f) for the period 2033-2037, no later than 31 December 2031;

(g) for the period 2038-2042, no later than 31 December 2036;

(h) for the period 2043-2047, no later than 31 December 2041;

(i) for the period 2048-2050, no later than 31 December 2046.

(3) The “net amount of carbon units” means C minus D, where—

“C” is the amount of carbon units credited to net Scottish emissions accounts during the period in accordance with regulations under section 12(2);

“D” is the amount of carbon units debited from net Scottish emissions accounts during the period in accordance with such regulations.

(4) An order under subsection (1) may provide that carbon units of a description specified in the order do not count towards the limit.

(5) If the limit for a period is not set by the corresponding date mentioned in paragraphs (a) to (i) of subsection (2), the Scottish Ministers must set the limit as soon as reasonably practicable afterwards.

18B Modifying limits on use of carbon units etc.

(1) The Scottish Ministers may, by order, modify—

(a) a limit on the use of carbon units set by virtue of section 18A(1);
(b) any date mentioned in paragraphs (a) to (i) of section 18A(2).

(2) The Scottish Ministers may make an order under subsection (1)(a) only if they consider that it is appropriate to do so as a result of—

(a) a modification of the interim target; or

(b) another significant change to the basis on which the limit on the use of carbon units was set.

(3) The Scottish Ministers may make an order under subsection (1)(b) only if they consider it appropriate to do so.

(4) An order under subsection (1)(a) may provide that carbon units of a description specified in the order do not count towards the limit.

18C Advice before setting or modifying limits on use of carbon units etc.

(1) The Scottish Ministers must, before laying a draft of a statutory instrument containing an order under section 18A(1) or 18B(1) before the Scottish Parliament, request advice from the relevant body.

(2) If the order under section 18A(1) or 18B(1) makes provision different from that recommended by the relevant body, the Scottish Ministers must publish a statement setting out the reasons why.

(3) A statement under subsection (2) may be published in such manner as the Scottish Ministers consider appropriate.

PART 2

ADVISORY FUNCTIONS

Advisory body

19 Meaning of advisory body

(1) The Scottish Ministers may, by order, designate—

(a) a body established under section 20(1); or

(b) such other public body as they consider appropriate,

to exercise the functions mentioned in subsection (3) (the “advisory functions”).

(2) In this Act, the body designated by virtue of subsection (1) is the “advisory body”.

(3) The advisory functions are—

(a) the function of providing advice, analysis, information and other assistance to the Scottish Ministers in respect of Ministers’ duty under section A2(1) and functions under sections 5, 7, 8 and 9(4);

(b) the functions conferred on the advisory body by sections 22 to 27 and 45C; and

(c) such other functions relating to advice on climate change as the Scottish Ministers may confer by an order under subsection (1).

(4) An order under subsection (1) may in particular provide—

(a) for the conferral of functions on the advisory body relating to advice on climate change;
Part 2—Advisory functions

(5) In subsection (1)(b), a “public body” means a person or body with functions of a public nature.

20 Scottish Committee on Climate Change

(1) The Scottish Ministers may, by order, establish a body for the purpose of exercising the advisory functions.

(2) The body established by virtue of subsection (1) is to be known as the Scottish Committee on Climate Change (the “Committee”).

(3) Schedule 1 makes further provision about the Committee.

(4) An order under subsection (1) may in particular provide—

(a) for the conferral of functions on the Committee relating to advice on climate change;

(b) in relation to the status, constitution and proceedings of the Committee as the Scottish Ministers consider appropriate;

(c) for the information that the Committee’s advice must contain;

(d) for the factors to which the Committee is to have regard in giving that advice;

(e) for the period within which the Committee must give that advice;

(f) as to whom that advice is to be given;

(g) for the form and manner in which that advice is to be published and laid before the Scottish Parliament.

21 Application of sections 22 to 27

(1) Sections 22 to 27 and 45C have effect only from—

(a) the date when an order made by the Scottish Ministers under section 19(1) comes into force; or

(b) such later date or dates as the Scottish Ministers may specify in an order under that section.

(2) When an order under section 19(1)—

(a) bringing section 24 into effect comes into force, subsection (3) of section 8 ceases to have effect;

(b) bringing section 45C into effect comes into force, subsection (4) of section 45B ceases to have effect.
Advice on annual targets etc.

(1) When requested to do so by the Scottish Ministers, the advisory body must provide the Scottish Ministers with advice as regards—

(a) annual targets Ministers propose to set under section 4;
(b) a modification Ministers propose to make under section 6.

(2) When providing advice under subsection (1)(a), the advisory body must express a view—

(a) in the case of annual targets proposed for years in the period 2010-2020, as to whether those targets are consistent with a reduction over that period of net Scottish emissions accounts which would allow the interim target and the 2050 target to be met;
(b) in the case of annual targets proposed for years in the period 2021-2050, as to whether those targets are consistent with a reduction over that period of net Scottish emissions accounts which would allow the 2050 target to be met;
(c) in any case, as to what annual targets are appropriate by reference to the target-setting criteria.

(3) When providing advice under subsection (1)(a), the advisory body must also express a view as to—

(a) the extent to which the annual targets should be met—

(i) by taking action to reduce net Scottish emissions;
(ii) by the use of carbon units that in accordance with section 12(1A) and regulations under section 12(2) may be credited to the net Scottish emissions account;

(b) the respective contributions towards meeting the annual targets and the domestic effort target that should be made—

(i) by the traded sector of the Scottish economy;
(ii) by the other sectors of the Scottish economy;

(ba) the respective contributions towards meeting the annual targets that should be made by—

(i) energy efficiency;
(ii) energy generation;
(iii) land use;
(iv) transport.

(3A) When providing advice under subsection (1)(a), the advisory body may also express a view as to any other matter that body considers appropriate including, in particular, as to any sectors of the Scottish economy in which there are particular opportunities for contributions to be made towards meeting annual targets through reductions in emissions of greenhouse gases.

(3B) When providing advice under subsection (1)(a), the advisory body must also express a view as to the cumulative amount of net Scottish emissions for the period 2010-2050 that is consistent with a reduction over that period of net Scottish emissions accounts which would allow the 2050 target to be met.
(4) The advisory body must provide advice under this section within such period as the Scottish Ministers may reasonably request.

(5) In subsection (3)(b)(i), “traded sector” means the sectors of the Scottish economy which are covered by trading schemes within the meaning of section 44 of the 2008 Act.

### 23 Reporting on progress towards targets

(1) The advisory body must, in each year beginning with the specified year, prepare a report setting out that body’s views on—

(a) progress towards achievement of—

(i) annual targets;

(ii) the interim target;

(iii) the 2050 target;

(b) whether the annual targets, the interim target or the 2050 target are likely to be achieved;

(c) any further effort which may be necessary to achieve annual targets, the interim target or the 2050 target.

(2) In subsection (1), the “specified year” means such year as the Scottish Ministers may, by order, specify.

(3) A report prepared in a relevant year must also set out the advisory body’s views on the matters mentioned in subsection (3C).

(3A) In subsection (3), the “relevant year” means such year as the Scottish Ministers may, by order, designate in accordance with subsection (3B).

(3B) The year which may be designated under subsection (3A) is the first year following a year for which an annual target has been set (a “target year”) or the second year following a target year.

(3C) The matters referred to in subsection (3) are—

(a) whether the annual target for the target year was met;

(aa) whether the domestic effort target was met in that target year;

(b) the ways in which those targets were or were not met;

(c) the action taken by the Scottish Ministers to reduce net Scottish emissions during that year.

(4) The advisory body must lay a report under this section before the Scottish Parliament no later than—

(a) 31 January in the third year following the target year; or

(b) such other date as the Scottish Ministers may, by order, appoint.

### 24 Scottish Ministers’ response to reports on progress

(1) The Scottish Ministers must lay before the Scottish Parliament a response to a report laid by the advisory body before the Parliament under section 23.

(2) The response to the advisory body’s report must be laid before the Parliament no later than—
(a) 31 March in the third year following the year for which an annual target has been set; or
(b) such other date as the Scottish Ministers may, by order, appoint.

25 **Duty of advisory body to provide advice or other assistance**

When requested to do so by the Scottish Ministers, the advisory body must provide advice, analysis, information or assistance as regards—

(a) the exercise of the Scottish Ministers’ functions under this Act;
(b) the exercise of Ministers’ functions in relation to climate change other than under this Act;
(c) other matters relating to climate change.

26 **Guidance to advisory body**

(1) The advisory body must have regard to any guidance given by the Scottish Ministers to it in relation to the exercise of its functions under this Act.

(2) The Scottish Ministers may not give the advisory body guidance as to the content of any advice or report.

(3) The power to give guidance under subsection (1) includes power to vary or revoke the guidance.

27 **Power to give directions to advisory body**

(1) The Scottish Ministers may, if they consider it appropriate to do so, give the advisory body directions as to the exercise of its functions under this Act.

(2) The Scottish Ministers may not direct the advisory body as to the content of any advice or report.

(3) The power to give directions under subsection (1) includes power to vary or revoke the directions.

(4) The advisory body must comply with any directions given under subsection (1).

**PART 3**

**REPORTING DUTIES**

28 **Reports on annual targets**

(1) The Scottish Ministers must lay before the Scottish Parliament a report in respect of each year in the period 2010-2050 for which an annual target has been set (a “target year”).

(2) The report must state whether the annual target for the target year has been met.

(3) If the annual target has not been met, the report must explain why.

(3A) The report must also state whether the domestic effort target has been met in the target year to which the report relates.

(3B) If the domestic effort target has not been met, the report must explain why.
(4) The report must also contain the information mentioned in section 29.

(5) The report under this section must be laid before the Parliament no later than 31 October in the second year after the target year.

29 Reports on annual targets: content

(1) In respect of each greenhouse gas, the report must—
(a) state the amount of net Scottish emissions for the baseline year;
(b) state the amount of net Scottish emissions for the target year;
(c) state whether the amount of net Scottish emissions represents an increase or decrease compared to the equivalent amount for the previous target year;
(d) identify the methods used to measure or calculate the amount of net Scottish emissions (including in particular any change to those methods).

(2) The report must also set out the aggregate amount for the target year of net Scottish emissions.

(3) The report must also—
(a) state the amount of the net Scottish emissions account for the target year;
(aa) state the proportion of the reduction in the net Scottish emissions account which is accounted for by reductions in net Scottish emissions;
(b) state the total amount of carbon units—
(i) that have been credited to or debited from the net Scottish emissions account for the target year;
(ii) that have been purchased in the target year;
(iii) that have been held and not surrendered in the target year;
(c) give details of the number and type of those carbon units.

(4) The report must also—
(a) state the amount of Scottish gross electricity consumption for the target year;
(b) state the amount of Scottish electricity generation for the target year;
(c) state the average greenhouse gas emissions per megawatt hour of electricity generated in Scotland in the target year;
(d) state the average greenhouse gas emissions per megawatt hour, and the estimated lifetime cumulative emissions, of any new electricity generation capacity greater than 50 megawatts approved in Scotland in the target year.

(4A) The report for each year in the period 2011-2050 must—
(a) state the amount of the net Scottish emissions account for each preceding target year;
(b) state the cumulative amount of the net Scottish emissions account for the target year and all preceding target years.

(5) If the method of measuring or calculating net Scottish emissions changes and that change is such as to require adjustment of an amount for an earlier target year, the report must specify the adjustment required and state the adjusted amount.
(6) An adjustment under subsection (5) must, in so far as reasonably practicable, be made in accordance with international carbon reporting practice.

(6A) If an amount mentioned in subsection (3)(a) or subsection (4A)(a) or (b) for an earlier period requires to be adjusted, the report must—

(a) explain why the adjustment is required;
(b) specify the adjustment required; and
(c) state the adjusted amount.

(7) The report may contain such other information as the Scottish Ministers consider appropriate and, in particular, may state the amount of Scottish electricity generation from each source for the target year.

30 Reports on proposals and policies for meeting annual targets

(1) As soon as reasonably practicable after making an order under section 4(1) setting annual targets, the Scottish Ministers must lay before the Scottish Parliament a report containing the following information.

(1A) The Scottish Ministers must, before laying a report under this section before the Scottish Parliament, lay a draft of the report before the Parliament.

(1B) The Scottish Ministers may not lay the report before the expiry of the period for Parliamentary consideration.

(1C) In subsection (1B), the “period for Parliamentary consideration” means the period of 60 days, of which no fewer than 30 must be days on which the Parliament is not dissolved or in recess.

(1D) The Scottish Ministers must, before laying the report before the Parliament, have regard to—

(a) any representations on the draft report made to them;
(b) any resolution relating to the draft report passed by the Parliament; and
(c) any report relating to the draft report published by any committee of the Parliament for the time being appointed by virtue of standing orders.

(1E) The Scottish Ministers must, when laying the report before the Parliament, lay a statement setting out—

(a) details of any representations, resolutions or reports mentioned in subsection (1D);
(b) the changes (if any) they have made to the report in response to such representations, resolutions or reports and the reasons for those changes.

(1F) The Scottish Ministers must, as soon as reasonably practicable after laying a report under this section, and in so far as reasonably practicable, make a statement to the Parliament relating to the report.

(2) The report must, in particular, set out—

(a) the Scottish Ministers’ proposals and policies for meeting the annual targets;
(b) how those proposals and policies are expected to contribute towards the achievement of the interim target, the 2050 target and, in each target year, the domestic effort target;
(c) the timescales over which those proposals and policies are expected to take effect.
(2A) The report must also set out the Scottish Ministers’ proposals and policies regarding the respective contributions towards meeting the annual targets that should be made by—
(a) energy efficiency;
(b) energy generation;
(c) land use;
(d) transport.

(3) The report must also explain how the proposals and policies set out in the report are expected to affect different sectors of the Scottish economy.

(4) The second and each subsequent report under this section—
(a) must contain an assessment of the progress towards implementing proposals and policies set out in earlier reports;
(b) may make such adjustments to those proposals and policies as the Scottish Ministers consider appropriate.

31 Reports on proposals and policies where annual targets not met

(1) This section—
(a) applies if the Scottish Ministers lay a report under section 28 which states that an annual target has not been met or that the domestic effort target has not been met in the target year to which the report relates;
(b) does not apply if that report relates to the annual target for 2050.

(2) As soon as reasonably practicable after the report referred to in subsection (1)(a) has been laid, the Scottish Ministers must lay a report before the Scottish Parliament setting out proposals and policies to compensate in future years for the excess emissions.

31A Reports on emissions attributable to Scottish consumption of goods and services

(1) The Scottish Ministers must lay before the Scottish Parliament a report in respect of each year in the period 2010-2050 containing the following information.

(2) The report must, in so far as reasonably practicable, set out the emissions of greenhouse gases (whether in Scotland or elsewhere) which are produced by or otherwise associated with the consumption and use of goods and services in Scotland during that year.

(3) The report may also contain such other information as the Scottish Ministers consider appropriate.

31AA Reports on impact on emissions of exercise of electricity generation related functions

(1) The Scottish Ministers must lay before the Scottish Parliament a report in respect of each year in the period 2010-2050 containing the following information.

(2) The report must, in so far as reasonably practicable, set out the impact on net Scottish emissions during that year resulting from the exercise by the Scottish Ministers of the functions conferred on them by virtue of any enactment relating to electricity generation.
31B Report on progress towards meeting the interim target

(1) The Scottish Ministers must, no later than 31 December 2015, lay before the Scottish Parliament a report on progress towards meeting the interim target.

(2) The report must, in particular, state the progress that has been made in reducing net Scottish emissions and indicate whether this progress is consistent with a reduction over the period 2010-2020 of net Scottish emissions accounts which would allow the interim target and the 2050 target to be met.

32 Report on the interim target

(1) The Scottish Ministers must lay before the Scottish Parliament a report containing the following information in respect of the year 2020.

(2) The report must state whether the interim target has been met.

(3) If the interim target has not been met, the report must explain why.

(4) In respect of each greenhouse gas, the report must state the amount of net Scottish emissions for 2020.

(5) The report must also—
   (a) state the amount of the net Scottish emissions account for 2020;
   (aa) state the cumulative amount of the net Scottish emissions account for the period 2010-2020;
   (b) state the total amount of carbon units—
      (i) that have been credited to or debited from the net Scottish emissions account for 2020;
      (ii) that have been purchased in 2020;
      (iii) that have been held and not surrendered in 2020;
   (c) give details of the number and type of those carbon units.

(6) In subsections (4) and (5), the amount means the amount set out in the report for 2020 made under section 28.

(7) The report may contain such other information as the Scottish Ministers consider appropriate.

(8) The report under this section must be laid before the Parliament no later than 31 October 2022.

33 Report on the 2050 target

(1) The Scottish Ministers must lay before the Scottish Parliament a report containing the following information in respect of the year 2050.

(2) The report must state whether the 2050 target has been met.

(3) If the 2050 target has not been met, the report must explain why.

(4) In respect of each greenhouse gas, the report must state the amount of net Scottish emissions for 2050.

(5) The report must also—
   (a) state the amount of the net Scottish emissions account for 2050;
(aa) state the cumulative amount of the net Scottish emissions account for the period 2010-2050;

(b) state the total amount of carbon units—

   (i) that have been credited to or debited from the net Scottish emissions account for 2050;

   (ii) that have been purchased in 2050;

   (iii) that have been held and not surrendered in 2050;

(c) give details of the number and type of those carbon units.

(6) In subsections (4) and (5), the amount means the amount set out in the report for 2050 made under section 28.

(7) The report may contain such other information as the Scottish Ministers consider appropriate.

(8) The report under this section must be laid before the Parliament no later than 31 October 2052.

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34 Reports: provision of further information to the Scottish Parliament

(1) Where the Scottish Ministers lay a report mentioned in subsection (2) before the Scottish Parliament, they must—

   (a) immediately send a copy of the report to the persons who convene and chair such committees of the Scottish Parliament as are for the time being appointed by virtue of standing orders; and

   (b) as soon as reasonably practicable after doing so, and in so far as reasonably practicable, make a statement to the Parliament relating to the report.

(2) Those reports are reports under—

   (a) section 28(1) (report on annual target);

   (c) section 31(2) (report on proposals and policies to compensate for excess emissions);

   (d) section 32(1) (report on interim target);

   (e) section 33(1) (report on 2050 target).

(3) Where the Scottish Ministers lay a report referred to in subsection (2)(a), they must also, as soon as reasonably practicable after doing so, and in so far as reasonably practicable, attend, if invited, the proceedings of any such committees of the Scottish Parliament as are for the time being appointed by virtue of standing orders, for the purposes of giving evidence on the report.

(4) The Scottish Ministers must have regard to—

   (a) any resolution passed by the Scottish Parliament;

   (b) any report published by any committee of the Parliament for the time being appointed by virtue of standing orders, relating to the content of any report referred to in subsection (2).
35 Further provision about reporting duties

(1) The Scottish Ministers may, if they consider it appropriate to do so, by order, make further provision imposing duties on themselves to report to the Scottish Parliament.

(2) An order under subsection (1) may in particular—

(a) provide for the information to be provided under the duties;

(b) provide for the period in relation to which that information is to be provided;

(c) provide for the period within which that information is to be provided.

PART 4
DUTIES OF PUBLIC BODIES RELATING TO CLIMATE CHANGE

36 Duties of public bodies relating to climate change

(A1) A public body must, in exercising its functions, act—

(a) in the way best calculated to contribute to the delivery of the targets set in or under Part 1 of this Act;

(b) in the way best calculated to help deliver any programme laid before the Scottish Parliament under section 45;

(c) in a way that it considers is most sustainable.

(A2) In this Part, a “public body” means a Scottish public authority within the meaning of section 3(1)(a) of the Freedom of Information (Scotland) Act 2002 (asp 13).

(1) The Scottish Ministers may, if they consider it appropriate to do so, by order, make further provision relating to the imposition on relevant public bodies of duties relating to climate change.

(1A) The duties imposed by subsection (A1) and any duty imposed by virtue of an order under subsection (1) are referred to in this Act as “climate change duties”.

(2) In this Part, a public body which has climate change duties under subsection (A1) or by virtue of subsection (1) is a “relevant public body”.

(3) An order under subsection (1) may in particular—

(a) impose climate change duties on—

(i) all public bodies;

(ii) public bodies of a particular description;

(iii) individual public bodies;

(b) impose different climate change duties on different public bodies or descriptions of public body;

(c) remove climate change duties.

(4) Before laying a draft of a statutory instrument containing an order under subsection (1) before the Scottish Parliament, the Scottish Ministers must consult, in so far as reasonably practicable, the persons mentioned in subsection (5).

(5) Those persons are—

(a) such associations of local authorities; and
(b) such other persons,
as the Scottish Ministers consider appropriate.

(6) The Scottish Ministers must co-operate with a relevant public body to help that body comply with its climate change duties.

37 Guidance to relevant public bodies

(1) The Scottish Ministers must give guidance to relevant public bodies in relation to climate change duties and those bodies must have regard to such guidance.

(2) Before giving guidance under subsection (1), the Scottish Ministers must consult, in so far as reasonably practicable, the persons mentioned in subsection (3).

(3) Those persons are—

(a) such associations of local authorities; and
(b) such other persons,
as the Scottish Ministers consider appropriate.

(4) The Scottish Ministers may vary or revoke guidance given under this section and where guidance is varied to a substantial extent, subsections (2) and (3) apply.

(5) The Scottish Ministers must publish any guidance given under this section.

38 Reporting on climate change duties

(1) The Scottish Ministers may, by order, make provision—

(a) requiring relevant public bodies to prepare reports on compliance with climate change duties;

(aa) requiring any relevant public body found, following an investigation under section 40, to be failing to comply with its climate change duties, to prepare a report on the actions it has taken, is taking or intends to take to secure future compliance with those duties;

(b) subject to subsection (1A), setting out what information reports must contain;

(c) setting out the form and manner of reports;

(d) setting out the period within which reports must be sent to the Scottish Ministers.

(1A) A report required by virtue of subsection (1)(a) must, in particular, contain information relating to how—

(a) procurement policies of relevant public bodies; and

(b) procurement activity by relevant public bodies,
have contributed to compliance with climate change duties.

(2) An order under subsection (1) may in particular—

(a) require two or more relevant public bodies to prepare a joint report in relation to compliance with one or more climate change duties; and

(b) require those bodies to co-operate with each other for the purpose of preparing that report.
Climate Change (Scotland) Bill

Part 4—Duties of public bodies relating to climate change

Monitoring body

39 Appointment of monitoring body
(1) The Scottish Ministers may, by order, designate one or more persons or bodies to monitor whether relevant public bodies are—
   (a) complying with climate change duties;
   (b) having regard to any guidance given under section 37.
(2) In this Part, a person or body designated under subsection (1) is the “monitoring body”.

Investigations

40 Investigations
(1) The monitoring body may carry out an investigation into—
   (a) a relevant public body’s compliance with climate change duties;
   (b) whether a relevant public body is having regard to guidance given under section 37.
(2) The monitoring body must carry out an investigation if the Scottish Ministers direct it to do so.

41 Investigations: investigators’ powers
(1) In this section an “investigator” means—
   (a) the monitoring body;
   (b) a person authorised by the monitoring body for the purpose of carrying out investigations.
(2) An investigator may use the powers set out in subsections (3) to (5) if the investigator considers that it is necessary to do so for the purposes of or in connection with an investigation.
(3) An investigator may, by notice in writing, require any relevant public body to provide any relevant document or relevant information in the possession, or under the control, of the relevant public body.
(4) An investigator may require any person who possesses or controls any document or information referred to in subsection (3) to provide an explanation of the document or information.
(5) An investigator may take copies of, or extracts from, any document or information produced in accordance with subsection (3).
(6) Nothing in this section authorises an investigator to require the disclosure of anything which a person would be entitled to refuse to disclose on grounds of confidentiality in proceedings in the Court of Session.

42 Reporting by monitoring body
(1) The Scottish Ministers may direct the monitoring body to prepare a report relating to—
   (a) the monitoring body’s activities under this Part;
(b) investigations carried out by the monitoring body;
(c) its use of resources in carrying out its functions under this Part;
(d) any other matters the Scottish Ministers may direct.

(2) The report may include information relating to a continuing investigation only if the Scottish Ministers direct that information to be included.

(3) The monitoring body must send the report to the Scottish Ministers.

(4) The Scottish Ministers must lay the report before the Scottish Parliament.

43 Guidance to monitoring body

(1) The monitoring body must have regard to any guidance given by the Scottish Ministers to it in relation to the exercise of its functions under this Part.

(2) Before giving guidance under subsection (1), the Scottish Ministers must consult, in so far as reasonably practicable, the persons mentioned in subsection (3).

(3) Those persons are—

(a) the monitoring body; and

(b) such other persons,
as the Scottish Ministers consider appropriate.

(4) The Scottish Ministers may vary or revoke guidance given under this section and where guidance is varied to a substantial extent, subsections (2) and (3) apply.

(5) The Scottish Ministers must publish any guidance given under this section.

44 Power to direct monitoring body

(1) The Scottish Ministers may give directions to the monitoring body relating to the exercise of its functions under this Part.

(2) The Scottish Ministers may vary or revoke a direction given under this section.

(3) The monitoring body must comply with a direction given under this section.

PART 5
OTHER CLIMATE CHANGE PROVISIONS

CHAPTER 1
ADAPTATION

Adaptation programmes

45 Programmes for adaptation to climate change

(1) This section applies where the Secretary of State lays a report under section 56 of the 2008 Act (report on impact of climate change) before Parliament.

(2) The Scottish Ministers must lay a programme before the Scottish Parliament—

(b) setting out—
(i) their objectives in relation to adaptation to climate change;
(ii) their proposals and policies for meeting those objectives;
(iia) the arrangements for involving employers, trade unions and other stakeholders in meeting those objectives;
(iib) the mechanisms for ensuring public engagement in meeting those objectives;
(iii) the period within which those proposals and policies will be introduced;
and
(c) otherwise addressing the risks identified in the report under section 56 of the 2008 Act.

(3) Where the report laid under section 56 of the 2008 Act is a subsequent report (within the meaning of subsection (3) of that section), the programme must contain an assessment of the progress made towards implementing the objectives, proposals and policies set out in the previous programme.

(4) The Scottish Ministers must lay each programme as soon as reasonably practicable after they receive the copy of the Secretary of State’s report.

45A Reports on progress towards implementation of programmes for adaptation

(1) This section applies where the Scottish Ministers lay a programme under section 45(2) before the Scottish Parliament.

(2) The Scottish Ministers must lay before the Scottish Parliament reports setting out their assessment of the progress made towards implementing the objectives, proposals and policies set out in the programme.

(3) The first report under this section must be laid before the Scottish Parliament no later than the expiry of the period of 12 months beginning with the day on which the programme is laid.

(4) The second and subsequent reports under this section must be laid before the Scottish Parliament no later than the expiry of each subsequent period of 12 months.

45B Progress towards implementation of programmes for adaptation

(1) This section applies where—

(a) the Scottish Ministers lay a programme under section 45(2) before the Scottish Parliament;

(b) the Secretary of State lays a second or subsequent report under section 56 of the 2008 Act before Parliament.

(2) Where subsection (1)(a) applies, the Scottish Ministers must, before the expiry of the period of 2 years beginning with the day on which the programme is laid, request the relevant body to prepare a report setting out its assessment of the progress made towards implementing the objectives, proposals and policies set out in that programme.
(3) Where subsection (1)(b) applies, the Scottish Ministers must, as soon as reasonably practicable after they receive the copy of the report laid, request the relevant body to prepare a further report setting out its assessment of the progress made towards implementing the objectives, proposals and policies set out in the most recent programme laid by the Scottish Ministers under section 45(2).

(4) The Scottish Ministers must, as soon as reasonably practicable after they receive the relevant body’s report under subsection (2) or, as the case may be, further report under subsection (3), lay it before the Scottish Parliament.

### 45C Reports on programmes for adaptation

(1) This section applies where—

   (a) the Scottish Ministers lay a programme under section 45(2) before the Scottish Parliament;

   (b) the Secretary of State lays a second or subsequent report under section 56 of the 2008 Act before Parliament.

(2) Where subsection (1)(a) applies, the advisory body must, before the expiry of the period of 2 years beginning with the day on which the programme is laid, prepare a report setting out its assessment of the progress made towards implementing the objectives, proposals and policies set out in that programme.

(3) Where subsection (1)(b) applies, the advisory body must, as soon as reasonably practicable after the report is laid, prepare a further report setting out its assessment of the progress made towards implementing the objectives, proposals and policies set out in the most recent programme laid by the Scottish Ministers under section 45(2).

(4) The advisory body must, as soon as reasonably practicable after preparing a report under subsection (2) or, as the case may be, a further report under subsection (3), lay it before the Scottish Parliament.

### Land use strategy

### 45D Duty to produce a land use strategy

(1) The Scottish Ministers must, no later than 31 March 2011, lay a land use strategy before the Scottish Parliament.

(2) The strategy must, in particular, set out—

   (a) the Scottish Ministers’ objectives in relation to sustainable land use;

   (b) their proposals and policies for meeting those objectives; and

   (c) the timescales over which those proposals and policies are expected to take effect.

(3) The objectives, proposals and policies referred to in subsection (2) must contribute to—

   (a) achievement of the Scottish Ministers’ duties under section 1, A2(1) or 3(1)(b); and

   (b) achievement of the Scottish Ministers’ objectives in relation to adaptation to climate change, including those set out in any programme produced by virtue of section 45(2); and

   (c) sustainable development.
(4) Before laying the strategy before the Scottish Parliament, the Scottish Ministers must publish a draft strategy and consult with such bodies as they consider appropriate and also with the general public.

(5) The strategy must be accompanied by a report setting out—

(a) the consultation process undertaken in order to comply with subsection (4); and

(b) the ways in which views expressed during that process have been taken account of in finalising the strategy (or stating that no account has been taken of such views).

(6) The Scottish Ministers must, no later than—

(a) five years after laying a strategy before the Scottish Parliament under subsection (1); and

(b) the end of every subsequent period of five years,

lay a revised strategy before the Scottish Parliament; and subsections (2) to (5) apply to a revised strategy as they apply to a strategy laid under subsection (1).

**Muirburn**

**46 Variation of permitted times for making muirburn**

After section 23 of the Hill Farming Act 1946 (c.73) (prohibition of muirburn at certain times), insert—

“23A Power to vary permitted times for making muirburn

(1) The Scottish Ministers may, by order, modify section 23 so as to substitute for any of the dates for the time being mentioned in subsection (1), (2) or, as the case may be, (3) of that section such other dates as they consider appropriate as the dates before which or after which it is lawful to make muirburn in any year.

(3) The Scottish Ministers may make an order under subsection (1) only if they consider it necessary or expedient to do so in relation to climate change.

(3A) An order under subsection (1) may not modify any of the dates for the time being mentioned in section 23 if the modification would result in a period during which it is lawful to make muirburn in any year being shorter than the corresponding period which applied immediately before the coming into force of section 46 of the Climate Change (Scotland) Act 2009 (asp 00).

(4) The power conferred by subsection (1) is exercisable by statutory instrument.

(5) No statutory instrument containing an order under subsection (1) may be made unless a draft of the instrument has been laid before, and approved by resolution of, the Scottish Parliament.”.

**CHAPTER 2**

**FORESTRY**

**47 Power to modify functions of Forestry Commissioners**

(1) The Scottish Ministers may, by order, modify the functions of the Forestry Commissioners in or as regards Scotland.
(2) The Scottish Ministers may make an order under subsection (1) only where they consider it necessary or expedient to do so—

(a) in order to comply with their duty under section 1, A2(1) or 3(1)(b); or

(b) otherwise in relation to climate change.

(3) An order under subsection (1) may in particular include provision enabling the Forestry Commissioners to—

(a) form, or participate in the forming of, a body corporate;

(b) invest in a body corporate;

(c) provide loans;

(d) establish a trust;

(e) act, or appoint a person to act, as—

(i) an officer of a body corporate; or

(ii) a trustee of a trust.

(3A) Any body corporate formed or trust established by the Forestry Commissioners by virtue of an order under subsection (1) is a public body or office holder for the purposes of section 1 of the Nature Conservation (Scotland) Act 2004 (asp 6).

CHAPTER 3
ENERGY EFFICIENCY
Promotion of energy efficiency

48 Duty of Scottish Ministers to promote energy efficiency

(1) The Scottish Ministers must prepare and publish a plan for—

(a) promoting energy efficiency; and

(b) improving the energy efficiency of living accommodation, in Scotland.

(2A) The plan must set annual energy efficiency targets and describe how those targets are to be reported on.

(2AA) The plan must also include details of how the Scottish Ministers intend to update planning and building regulations to ensure that all new buildings avoid a specified and rising proportion of the projected greenhouse gas emissions from their use, calculated on the basis of the approved design and plans for the specific building, through the installation and operation of low and zero-carbon generating technologies.

(3) The plan prepared under subsection (1) must be published no later than 12 months after the day on which this section comes into force.

(4) The Scottish Ministers—

(a) may, from time to time; and

(b) must, before the end of the period mentioned in subsection (5), review the plan prepared and published under this section.
(5) The period referred to in subsection (4)(b) is the period of 3 years beginning with the date on which—
   (a) the plan is first published; or
   (b) the plan was last reviewed under subsection (4).

(6) Where, following a review under subsection (4), the Scottish Ministers vary the plan, they must, as soon as reasonably practicable after so doing, publish the plan as so varied.

(7) In preparing or varying the plan, the Scottish Ministers must have regard to the contributions which improvements to buildings and changes in building standards can make to the delivery of energy efficiency and to the reduction of greenhouse gas emissions.

(8) In this section—
   “energy efficiency” includes the use of—
   (a) technologies (other than those used for the production of heat) reliant on renewable sources of energy;
   (b) materials and equipment the manufacture or use of which produces or involves lower emissions of greenhouse gases than other materials and equipment; and
   (c) surplus heat from electricity generation or other industrial processes for district heating or other purposes;

   “fossil fuel” means—
   (a) coal;
   (b) lignite;
   (c) peat;
   (d) natural gas (within the meaning of the Energy Act 1976 (c.76));
   (e) crude liquid petroleum;
   (f) petroleum products (within the meaning of that Act);
   (g) any substance produced directly or indirectly from a substance mentioned in paragraphs (a) to (f);

   “renewable sources” means sources other than fossil fuel and nuclear fuel.

Promotion of renewable heat

48A Duty of Scottish Ministers to promote renewable heat

(1) The Scottish Ministers must prepare and publish a plan for the promotion of the use of heat produced from renewable sources.

(1A) The plan must, in particular—
   (a) set—
      (i) targets for the percentage of heat to be produced from renewable sources; and
      (ii) in relation to each target, the date by which it should be met; and
(b) describe how those targets are to be reported on.

(2) The plan prepared under subsection (1) must be published no later than 12 months after the day on which this section comes into force.

(3) The Scottish Ministers—

(a) may, from time to time; and

(b) must, before the end of the period mentioned in subsection (4), review the plan prepared and published under this section.

(4) The period referred to in subsection (3)(b) is the period of 2 years beginning with the date on which—

(a) the plan is first published; or

(b) the plan was last reviewed under subsection (3).

(5) Where, following a review under subsection (3), the Scottish Ministers vary the plan, they must, as soon as reasonably practicable after so doing, publish the plan as so varied.

(6) In this section, “renewable sources” has the same meaning as in section 48(8).

49 Laying of plans and reports

(1) The Scottish Ministers must, as soon as reasonably practicable after publishing a plan under section 48(1) or (6) or section 48A(1) or (5), lay it before the Scottish Parliament.

(2) The Scottish Ministers must, before the end of the period mentioned in subsection (3), lay before the Parliament a report on what steps have been taken in implement of the plan.

(3) The period referred to in subsection (2) is the period of 12 months beginning with the date on which—

(a) the plan is first published; or

(b) a report was last laid under subsection (2).

(4) Where the Scottish Ministers lay a plan mentioned in subsection (1) or a report mentioned in subsection (2) before the Parliament, they must, as soon as reasonably practicable after doing so, and in so far as reasonably practicable, make a statement to the Parliament relating to the plan or, as the case may be, report.

Energy performance of non-domestic buildings

50 Non-domestic buildings: assessment of energy performance and emissions

(1) The Scottish Ministers must, by regulations—

(a) provide for the assessment of—

(i) the energy performance of non-domestic buildings;

(ii) the emission of greenhouse gases produced by or otherwise associated with such buildings or with activities carried out in such buildings;

(b) require owners of such buildings to take steps, identified by such assessments, to—
(i) improve the energy performance of such buildings;
(ii) reduce such emissions.

(2) The regulations may in particular include provision about—
(a) the circumstances in which the regulations apply;
(b) the non-domestic buildings to which the regulations apply;
(c) the persons who may be required to have assessments carried out;
(d) the periods within which such assessments must be carried out;
(e) the procedure and methodology for assessing the energy performance of buildings;
(f) the procedure and methodology for assessing the greenhouse gas emissions produced by or otherwise associated with buildings or activities carried out in buildings;
(g) the persons who may carry out such assessments;
(h) the issuing of certificates following such assessments, including the form, manner and content of such certificates;
(ha) the form of any recommendations, contained in such certificates, as to the improvement of the energy performance of buildings and the reduction of emissions produced by or otherwise associated with buildings or activities carried out in buildings;
(hb) the manner in which and periods within which persons must take steps to comply with any recommendations contained in such certificates;
(hc) the registration of such certificates;
(hd) the disclosure of information which is entered in the register;
(i) subject to subsection (3), the enforcement authority in relation to the regulations;
(j) subject to subsection (4), the functions of that authority;
(k) the keeping of information and its production to the enforcement authority;
(l) the enforcement of the duties imposed by the regulations;
(m) offences in relation to failures to comply with requirements of the regulations.

(3) The enforcement authority provided for in the regulations is to be such person or body as the Scottish Ministers consider appropriate.

(3A) The regulations may provide for the functions of the enforcement authority to be exercised by two or more such authorities and about the functions of each such authority.

(4) The functions of the enforcement authority may include power to levy charges to recover the reasonable costs incurred by it in exercising its functions under the regulations.

(4A) The Scottish Ministers must, no later than 12 months after the day on which this section comes into force, publish a report setting out—
(a) what measures they intend to take to reduce emissions from non-domestic buildings; and
(b) when they intend to make provision as mentioned in paragraphs (ha) and (hb) of subsection (2).

(5) In this section, “non-domestic building”—

(a) means a building other than a dwelling;

(b) does not include—

(i) any yard, garden, outbuilding or other land or buildings;

(ii) any common areas, associated with such a dwelling.

Energy performance of living accommodation

50A Living accommodation: assessment of energy performance and emissions

(1) The Scottish Ministers must, by regulations—

(a) provide for the assessment of—

(i) the energy performance of living accommodation;

(ii) the emission of greenhouse gases produced by or otherwise associated with such accommodation;

(b) require owners of such accommodation to take steps, identified by such assessments, to—

(i) improve the energy performance of such accommodation;

(ii) reduce such emissions.

(2) The regulations may in particular include provision about—

(a) the circumstances in which the regulations apply;

(b) the living accommodation to which the regulations apply;

(c) the persons who may be required to have assessments carried out;

(d) the periods within which such assessments must be carried out;

(e) the procedure and methodology for assessing the energy performance of living accommodation;

(f) the procedure and methodology for assessing the greenhouse gas emissions produced by or otherwise associated with living accommodation;

(g) the persons who may carry out such assessments;

(h) the issuing of certificates, following such assessments, including the form, manner and content of such certificates;

(ha) the form of any recommendations, contained in such certificates, as to the improvement of the energy performance of, and the reduction of emissions produced by or otherwise associated with, living accommodation;

(hb) the manner in which and periods within which persons must take steps to comply with any recommendations contained in such certificates;

(hc) the registration of such certificates;
(hd) the disclosure of information which is entered in the register;
(i) subject to subsection (3), the enforcement authority in relation to the regulations;
(j) subject to subsection (4), the functions of that authority;
(k) the keeping of information and its production to the enforcement authority;
(l) the enforcement of the duties imposed by the regulations;
(m) offences in relation to failures to comply with requirements of the regulations.

(3) The enforcement authority provided for in the regulations is to be such person or body as the Scottish Ministers consider appropriate.

(3A) The regulations may provide for the functions of the enforcement authority to be exercised by two or more such authorities and about the functions of each such authority.

(4) The functions of the enforcement authority may include power to levy charges to recover the reasonable costs incurred by it in exercising its functions under the regulations.

(5) The Scottish Ministers must, no later than 12 months after the day on which this section comes into force, publish a report setting out—
   (a) what measures they intend to take to reduce emissions from living accommodation; and
   (b) when they intend to make provision as mentioned in paragraphs (ha) and (hb) of subsection (2).

(6) In this section, “living accommodation”—
   (a) means a dwelling; and
   (b) includes—
      (i) any building having a total useful floor area of 50m² or more; and
      (ii) any common areas, associated with such a dwelling.

Energy efficiency discount schemes

50AA Duty of local authorities to establish energy efficiency discount schemes

(1) The Local Government Finance Act 1992 (c.14) is amended as follows.

(2) After section 80 (reduced amounts payable in respect of council tax), insert—

“80A Local authority’s power to reduce amount of tax payable

(1) A local authority must establish a scheme for reducing the amounts which persons are liable to pay in respect of council tax where improvements are made to the energy efficiency of chargeable dwellings.

(2) A scheme established under subsection (1) is an “energy efficiency discount scheme”.

(3) An energy efficiency discount scheme may make such provision as the local authority considers appropriate, including, in particular, provision about—
(a) the energy efficiency improvements to which the scheme applies;
(b) the chargeable dwellings to which the scheme applies;
(c) the reduction, which may be made under the scheme, in the amount which persons are liable to pay in respect of council tax;
(d) applications under the scheme.

(4) But, under an energy efficiency discount scheme, the amount which a person is liable to pay in respect of council tax may be reduced only where each of the conditions mentioned in subsection (5) is met (whatever other conditions may require to be met under the scheme).

(5) Those conditions are—
(a) the person is liable to pay council tax in respect of a chargeable dwelling and any day;
(b) improvements are made to the energy efficiency of that dwelling (whether by the person liable to pay or not);
(c) those improvements are made during the same financial year to which the reduction of the amount which the person is liable to pay in respect of council tax relates;
(d) the amount which the person is liable to pay in respect of that year has not already been reduced under the scheme in respect of those improvements;
(e) the amount which any other person is liable to pay in respect of council tax in respect of that dwelling and that year has not been reduced under the scheme in respect of those improvements.

(6) In ascertaining whether the condition in subsection (5)(f) is met, no account is to be taken of any person who is jointly and severally liable, with the person mentioned in subsection (5)(a), to pay council tax in respect of the dwelling.

(6A) The minimum reduction which may be provided for under an energy efficiency discount scheme must be—
(a) where the amount which the person is liable to pay in respect of council tax is £50 or more, no less than £50;
(b) where the amount which the person is liable to pay in respect of council tax is less than £50, an amount equal to that person’s liability.

(7) The local authority may, under an energy efficiency discount scheme, reduce the amount which a person is liable to pay in respect of a dwelling to nil.

(8) In this section—
“energy efficiency” includes the use of—
(a) technologies reliant on sources of energy other than fossil fuel and nuclear fuel;
(b) materials the manufacture or use of which produces or involves lower emissions of greenhouse gases than other materials; and
(c) surplus heat from electricity generation or other industrial sources for district heating or other purposes;
“fossil fuel” means—
(a) coal;
(b) lignite;
(c) peat;
(d) natural gas (within the meaning of the Energy Act 1976 (c.76));
(e) crude liquid petroleum;
(f) petroleum products (within the meaning of that Act);
(g) any substance produced directly or indirectly from a substance
mentioned in paragraphs (a) to (f);

“greenhouse gas” has the meaning given by section 9(1) of the Climate
Change (Scotland) Act 2009 (asp 00).”.

(3) In schedule 2, after paragraph 21 (effect of reduction of liability to pay council tax under
section 13A), insert—

“22 (1) This paragraph applies where a local authority establishes an energy efficiency
discount scheme under section 80A.

(2) Where, under an energy efficiency discount scheme, the amount which a
person is liable to pay in respect of council tax is reduced, any amount in
relation to which the reduction applies is to be treated for the purposes of this
schedule as subject to a discount equal to the amount of the reduction.”.

50AB Review of energy efficiency discount schemes

(1) The Scottish Ministers must, as soon as practicable after 31 March 2012 and annually
thereafter, lay before the Scottish Parliament a report on the operation of energy
efficiency discount schemes established under section 80A of the Local Government
Finance Act 1992 (c.14), which must include an assessment of whether the reductions
thereby provided for have contributed effectively to promoting energy efficiency.

(2) The Scottish Ministers may, if they consider it appropriate, by order amend section 80A
of the Local Government Finance Act 1992 for the purpose of improving the
contribution of energy efficiency discount schemes to promoting energy efficiency.

50DA Non-domestic rates: discounts for energy efficiency etc.

In section 153 (power to prescribe amount of non-domestic rate) of the Local
Government etc. (Scotland) Act 1994 (c.39), in subsection (3)—

(a) the words “whose rateable value exceeds, and those whose rateable value does not
exceed, a prescribed figure” become paragraph (a), and

(b) at the end insert—

“(b) whose energy efficiency and greenhouse gas emissions fall into different
categories prescribed for the purpose of this paragraph in rules under
subsection (1).

(3A) Regulations under this section may make provision in relation to how lands
and heritages are to be determined to fall within a category prescribed for the
purpose of subsection (3)(b) in rules under subsection (1).”.
Climate change burdens

50DB Climate change burdens

After section 46 (health care burdens) of the Title Conditions (Scotland) Act 2003 (asp 9), insert—

“Climate change burdens

46A Climate change burdens

(1) On and after the day on which this section comes into force, it shall be competent to create a real burden in favour of a public body or trust, or of the Scottish Ministers, for the purpose of reducing greenhouse gas emissions; and any such burden shall be known as a “climate change burden”.

(2) A climate change burden may only consist of an obligation, in the event of the burdened property being developed, for the property to meet specified mitigation and adaptation standards.

(3) For the purposes of this section, a “public body” means a body listed in Part I or II of the Schedule to the Title Conditions (Scotland) Act 2003 (Conservation Bodies) Order 2003 (SSI 2003/453).”

Tenement Management Scheme

50E Tenement Management Scheme: definition of “maintenance”

In schedule 1 (Tenement Management Scheme) to the Tenements (Scotland) Act 2004 (asp 11), in the definition of “maintenance” in rule 1.5, after “replacement,” insert “the installation of insulation,”.

Permitted development rights

51A Air source heat pumps and micro wind turbines in domestic properties: permitted development rights

(1) The Scottish Ministers must exercise their functions under sections 30 and 31 of the Town and Country Planning (Scotland) Act 1997 (c.8) so as to make provision specifying the circumstances in which development of the class mentioned in subsection (2) is granted planning permission by virtue of an order under section 30 of that Act.

(2) That class is the installation, alteration or replacement, within the curtilage of a dwellinghouse or building containing one or more flats, of—

(a) air source heat pump microgeneration equipment; or

(b) wind turbine microgeneration equipment.

(3) The Scottish Ministers must comply with subsection (1) no later than 6 months after the day on which this section comes into force.

(4) Before complying with subsection (1), the Scottish Ministers must consult—

(a) such persons appearing to them to represent the producers and suppliers of the equipment mentioned in paragraphs (a) and (b) of subsection (2); and

(b) such other persons as the Scottish Ministers consider appropriate.
(5) In this section, “microgeneration” has the meaning given in section 82(6) of the Energy Act 2004 (c.20).

51B Microgeneration in non-domestic buildings: permitted development rights

(1) The Scottish Ministers must exercise their functions under sections 30 and 31 of the Town and Country Planning (Scotland) Act 1997 (c.8) so as to make provision specifying the circumstances in which development of the class mentioned in subsection (2) is granted planning permission by virtue of an order under section 30 of that Act.

(2) That class is the installation, alteration or replacement, within the curtilage of a non-domestic building, of microgeneration equipment.

(3) The Scottish Ministers must comply with subsection (1) no later than 12 months after the day on which this section comes into force.

(4) Before complying with subsection (1), the Scottish Ministers must consult—

(a) such persons appearing to them to represent the producers and suppliers of the equipment mentioned in subsection (2); and

(b) such other persons as the Scottish Ministers consider appropriate.

(5) In this section—

“microgeneration” has the same meaning as in section 51A(5);

“non-domestic building” has the same meaning as in section 50(5).

Development plans

51BA Development plans: inclusion of greenhouse gas emissions policies

After section 3E of the Town and Country Planning (Scotland) Act 1997 (c.8) insert—

“3F Greenhouse gas emissions policies

A planning authority, in any local development plan prepared by them, must include policies requiring all developments in the local development plan area to be designed so as to ensure that all new buildings avoid a specified and rising proportion of the projected greenhouse gas emissions from their use, calculated on the basis of the approved design and plans for the specific development, through the installation and operation of low and zero-carbon generating technologies.”.

51BB Annual report on operation of section 51BA

(1) The Scottish Ministers must—

(a) not later than one year after the day on which section 51BA comes into force; and

(b) annually thereafter,

lay before the Scottish Parliament a report on the operation of the requirement on relevant planning authorities to include policies within development plans under that section, including an assessment of whether those requirements have contributed effectively to the reduction of greenhouse gas emissions from developments.
(2) The fourth and subsequent reports under subsection (1) must include an assessment of the continuing need or otherwise for the requirement on relevant planning authorities to include policies within development plans; and if the requirement is considered by the Scottish Ministers to be no longer necessary, the Scottish Ministers may, by order, repeal section 3F of the Town and Country Planning (Scotland) Act 1997 and this section.

Promotion of water conservation and water-use efficiency

51BC Duty of Scottish Water to promote water conservation and water-use efficiency
In section 56(1) of the Water Industry (Scotland) Act 2002 (asp 3), after paragraph (a) insert—

“(aa) requiring it to promote water conservation and water-use efficiency,”.

CHAPTER 3A
THE SCOTTISH CIVIL ESTATE

51C Energy performance of buildings procured for the Scottish civil estate
(1) The Scottish Ministers must, in so far as reasonably practicable, ensure that the energy performance of any building that becomes part of the civil estate in Scotland falls within the top quartile of energy performance.
(2) For the purposes of subsection (1), a building becomes part of the civil estate if it is procured or constructed by or on behalf of the Scottish Ministers.
(3) The Scottish Ministers may, by regulations, provide that the duty under subsection (1) does not apply in respect of specified buildings or categories of buildings.

51D Report on the Scottish civil estate
(1) The Scottish Ministers must, in respect of each financial year beginning with 2010-2011, lay before the Scottish Parliament a report containing an assessment of the progress made in the year towards improving—

(a) the efficiency; and
(b) the contribution to sustainability,
of buildings that are part of the civil estate in Scotland.
(2) If the energy performance of a building mentioned in subsection (3) does not fall within the top quartile of energy performance, the report must state the reasons why the building has become part of the civil estate.
(3) That building is a building—

(a) to which section 51C applies; and
(b) which becomes part of the civil estate in the financial year to which the report relates.
(4) The report under this section must be laid before the Parliament no later than 31 October next following the end of the financial year to which the report relates.
51E Scottish civil estate: supplementary

(1) For the purposes of this section and sections 51C and 51D—
   (a) “building” means a building that uses energy for heating or cooling the whole or any part of its interior; and
   (b) a building is part of the civil estate in Scotland if it—
      (i) is used for the purposes of Scottish central government administration; and
      (ii) is of a description of buildings for which the Scottish Ministers have responsibilities in relation to efficiency and sustainability.

(2) The Scottish Ministers may, by order, provide—
   (a) for buildings of a description specified in the order to be treated as being, or as not being, part of the civil estate;
   (b) for uses specified in the order to be treated as being, or as not being, uses for the purposes of Scottish central government administration.

CHAPTER 4

WASTE REDUCTION AND RECYCLING

Waste prevention and management plans

52 Waste prevention and management plans

(1) The Scottish Ministers may, by regulations, require persons of the kinds specified—
   (a) to prepare plans for the prevention, reduction, management, recycling, use and disposal of waste produced by or otherwise associated with their activities;
   (b) to comply with those plans.

(2) The regulations may in particular include provision about—
   (a) the circumstances in which plans must be prepared, including when more than one plan must be prepared;
   (b) the kinds of waste in relation to which plans must be prepared;
   (c) the periods—
      (i) to which plans relate;
      (ii) within which plans must be prepared;
   (d) the content of plans;
   (e) subject to section 60—
      (i) the enforcement authority in relation to the regulations; and
      (ii) the functions of that authority, including the approval by it of plans prepared under the regulations;
   (f) the keeping of plans and other information and their production to the enforcement authority;
   (g) the enforcement of the duties imposed by the regulations;
   (h) offences in relation to failures to comply with requirements of the regulations.
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(3) The enforcement authority must have regard to any guidance given by the Scottish Ministers to it in relation to the functions conferred on it by the regulations.

(4) In this Chapter—

“recycling”, in relation to any waste, includes recovery and re-use (whether or not the waste is subjected to any process) (and cognate expressions are to be construed accordingly);

“specified” means specified in regulations (and cogitate expressions are to be construed accordingly);

“waste” has the meaning given by section 75(2) of the Environmental Protection Act 1990 (c.43) (the “1990 Act”).

Waste data

53 Information on waste

(1) The Scottish Ministers may, by regulations, require persons of the kinds specified to provide SEPA with information on the waste produced by or otherwise associated with such persons’ activities.

(2) The regulations may in particular include provision about—

(a) the circumstances in which information must be provided;

(b) the information required to be provided, including the periods to which the information relates;

(c) the form and manner in which information must be provided;

(d) the periods within which information must be provided;

(e) the functions of SEPA in relation to the regulations;

(f) the keeping of information and its production to SEPA;

(g) the enforcement of the duties imposed by the regulations;

(h) offences in relation to failures to comply with requirements of the regulations.

(3) The power to make regulations under this section is without prejudice to section 34(5) of the 1990 Act and any other enactment to the same effect as that section; and any duty imposed on any person by regulations under this section is without prejudice to any duty to provide information on waste imposed by regulations under that section or by virtue of any other such enactment.

(4) SEPA may give guidance to persons to whom the regulations apply on how to comply with the requirements of the regulations.

(4A) A draft of a statutory instrument containing the first regulations under subsection (1) must be laid before the Scottish Parliament no later than 12 months after the day on which this section comes into force.

(5) In this section and in section 60, “SEPA” means the Scottish Environment Protection Agency.
54 Recyclable waste: facilities for deposit etc.

(1) The Scottish Ministers may, by regulations, require—

(a) persons of the kinds specified to provide facilities for the deposit of waste;

(b) authorised persons—

(i) to collect waste deposited by virtue of paragraph (a);

(ii) to ensure, in so far as reasonably practicable, that such waste collected by
or transferred to them (whether in accordance with section 34 of the 1990
Act or otherwise) is recycled.

(2) The regulations may in particular include provision about—

(a) the circumstances in which facilities must be provided, including the places at
which they must be provided;

(b) the persons for whom facilities must be provided;

(c) the kinds of waste for which facilities must be provided;

(d) the circumstances in which authorised persons must collect waste, including
which authorised persons must do so;

(e) the charging by authorised persons for collecting waste, for recycling waste and
for otherwise ensuring waste is recycled;

(f) subject to section 60—

(i) the enforcement authority in relation to the regulations; and

(ii) the functions of that authority;

(g) the keeping of records and their production to the enforcement authority;

(h) the enforcement of the duties imposed by the regulations;

(i) offences in relation to failures to comply with requirements of the regulations.

(3) The enforcement authority must have regard to any guidance given by the Scottish
Ministers to it in relation to the functions conferred on it by the regulations.

(4) The Scottish Ministers may not, by regulations under this section, impose requirements
on persons to provide facilities for the deposit of waste in circumstances in relation to
which regulations under section 55 may be made.

(5) In this section and in section 55, “authorised person” has the same meaning as in section
34(3) of the 1990 Act.

55 Recyclable waste: facilities for deposit at events etc.

(1) The Scottish Ministers may, by regulations, confer power on local authorities to issue
notices requiring—

(a) persons responsible for organising temporary events open to the public to provide
facilities for the deposit of waste by persons attending those events;

(b) authorised persons to—

(i) collect waste deposited by virtue of paragraph (a);
(ii) ensure, in so far as reasonably practicable, that such waste collected by or transferred to them (whether in accordance with section 34 of the 1990 Act or otherwise) is recycled.

(2) The regulations may in particular include provision about—

(a) the events in relation to which notices can be issued;

(b) the circumstances in which facilities must be provided, including the places at which they must be provided;

(c) the persons for whom facilities must be provided;

(d) the kinds of waste for which facilities must be provided;

(e) the persons to whom notices can be issued;

(f) the content of notices;

(g) the form of and manner in which notices can be issued, including the times at which notices can be issued;

(h) appeals against notices;

(i) the circumstances in which authorised persons must collect waste, including which authorised persons must do so;

(j) the charging by authorised persons for collecting waste, recycling waste and otherwise ensuring waste is recycled;

(k) subject to section 60—

(i) the enforcement authority in relation to notices; and

(ii) the functions of that authority;

(l) the keeping of records by persons to whom notices are issued and their production to the enforcement authority;

(m) the enforcement of duties imposed by notices;

(n) offences in relation to failures to comply with requirements of notices.

(3) Local authorities must have regard to any guidance given by the Scottish Ministers to them in relation to the functions conferred on them by the regulations.

(4) The enforcement authority must have regard to any guidance given by the Scottish Ministers to it in relation to the functions conferred on it by the regulations.

**Procurement of recyclate**

(1) The Scottish Ministers may, by regulations, require persons of the kinds specified to comply with the requirement in subsection (2).

(2) That requirement is to ensure that things procured or constructed by or on behalf of such persons—

(a) comprise of; or

(b) include or contain a certain proportion of, recyclate.
(3) The regulations may in particular include provision about—

(a) the circumstances in which the requirement applies;
(b) the kinds of things in relation to which the requirement applies;
(c) the proportion of recyclate that such things must include or contain;
(d) how such proportions are to be determined;
(e) the circumstances in which a person may apply to the Scottish Ministers to have the requirement disapplied;
(f) subject to section 60—
   (i) the enforcement authority in relation to the regulations; and
   (ii) the functions of that authority;
(g) the keeping of records and their production to the enforcement authority;
(h) the enforcement of the duties imposed by the regulations;
(i) offences in relation to failures to comply with requirements of the regulations.

(4) The enforcement authority must have regard to any guidance given by the Scottish Ministers to it in relation to the functions conferred on it by the regulations.

(5) Persons to whom the regulations apply must have regard to any guidance given by—

(a) the Scottish Ministers;
(b) the enforcement authority,
to them in relation to the requirements imposed by the regulations.

(6) In this section, “recyclate” means waste that has been recycled.

Reduction of packaging

57 Targets for reduction of packaging etc.

(1) The Scottish Ministers may, by regulations—

(a) set targets—
   (i) for the reduction of packaging;
   (ii) for the reduction of greenhouse gas emissions produced by the manufacture of or otherwise associated with packaging;

(b) require persons of the kinds specified to comply with those targets.

(2) The regulations may in particular include provision about—

(a) the circumstances in which the requirement in subsection (1)(b) applies;
(b) the kinds of packaging in relation to which targets may be set;
(c) the targets in relation to such packaging (including how targets may be set);
(d) the methods of determining whether targets have been met;
(e) subject to section 60—
   (i) the enforcement authority in relation to the regulations; and
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(ii) the functions of that authority;

(f) the keeping of records and other information and their production to the
enforcement authority (including the periods to which records or information must
relate and within which it must be produced to the authority);

(g) the enforcement of the duties imposed by the regulations;

(h) offences in relation to failures to comply with requirements of the regulations.

(3) The enforcement authority must have regard to any guidance given by the Scottish
Ministers to it in relation to the functions conferred on it by the regulations.

(4) In this section and in section 58, “packaging” has the meaning given by Article 3 of
packaging waste.

Deposit and return

58 Deposit and return schemes

(1) The Scottish Ministers may, by regulations, establish deposit and return schemes.

(2) A “deposit and return scheme” is a scheme under which—

(a) the sale price of articles includes a returnable element (a “deposit”);

(b) persons who return—

(i) such articles;

(ii) the packaging associated with such articles (“returnable packaging”); or

(iii) both such articles and such packaging,

are entitled to be paid a sum equal to that deposit.

(3) Retailers may be required, under a deposit and return scheme, to—

(a) include a deposit in the price of articles placed on the market by them;

(aa) accept the return to them of—

(i) such articles;

(ii) returnable packaging; or

(iii) both such articles and such packaging;

(b) pay a sum equal to the deposit to persons who return to them—

(i) such articles;

(ii) returnable packaging; or

(iii) both such articles and such packaging;

(ba) return such articles to the producers of them;

(c) return returnable packaging to the producers of it or of the articles with which it is
associated.

(4) Producers may be required, under a deposit and return scheme, to—

(a) include a deposit in the price of articles placed on the market by them;
(aa) accept the return to them of—
   (i) such articles;
   (ii) returnable packaging; or
   (iii) both such articles and such packaging;

(b) pay a sum equal to the deposit to retailers who return to them—
   (i) such articles;
   (ii) returnable packaging; or
   (iii) both such articles and such packaging;

(c) recycle, or have recycled—
   (i) such articles;
   (ii) returnable packaging; or
   (iii) both such articles and such packaging.

(5) A deposit and return scheme may also provide for a person or body (a “scheme administrator”) to—

(a) ensure that deposits are included in the price of articles placed on the market;
(b) accept the return of—
   (i) such articles;
   (ii) returnable packaging; or
   (iii) both such articles and such packaging;

(c) pay sums equal to deposits to persons who return—
   (i) such articles;
   (ii) returnable packaging; or
   (iii) both such articles and such packaging;

(ca) return such articles to the producers of them;
(d) return returnable packaging to the producers of it or of the articles with which it is associated;
(e) recover sums equal to deposits from such producers;
(f) recycle, or have recycled—
   (i) such articles;
   (ii) returnable packaging; or
   (iii) both such articles and such packaging.

(6) The Scottish Ministers may make regulations under this section only where they consider it necessary or expedient to do so for the purpose of promoting or securing an increase in the recycling of materials.

(7) The regulations may in particular include provision about—

(a) the persons who are retailers and producers for the purposes of deposit and return schemes;
(b) the articles to which such schemes apply;
(c) the deposits to be included in the price of such articles;
(ca) the inclusion, in the sale price of articles, of a non-returnable element to cover the reasonable costs incurred by retailers, producers or a scheme administrator in administering such schemes;
(cb) the articles the return of which entitles persons to payment of sums equal to deposits;
(cc) the methods by which such articles are to be identified;
(d) the packaging which is returnable packaging for the purposes of such schemes;
(e) the methods by which returnable packaging is to be identified;
(f) information on the operation of schemes (including notices on premises where articles are offered for sale and the content of such notices);
(fa) the places to which articles can be returned;
(g) the places to which returnable packaging can be returned;
(h) the registration of retailers and producers to whom schemes apply (including the reasonable fees payable in relation to such registration);
(ha) the scheme administrator;
(i) subject to section 60—
   (i) the enforcement authority in relation to the regulations; and
   (ii) the functions of that authority;
(j) the keeping of records and other information and their production to the enforcement authority;
(k) the enforcement of the duties imposed by the regulations;
(l) offences in relation to failures to comply with requirements of the regulations.

58A Deposit and return schemes: designation of scheme administrator

(1) The Scottish Ministers may, by order, designate—
   (a) a body established under section 58B(1); or
   (b) such other person or body as they consider appropriate (an “existing body”),
as a scheme administrator of a deposit and return scheme established by virtue of section 58.

(2) An order under subsection (1)(b) may, in so far as the Scottish Ministers consider it necessary or expedient to do so, modify the functions of an existing body by—
   (a) conferring functions on;
   (b) removing functions from; or
   (c) otherwise varying the functions of,
the body.

(3) That order may in particular include provision about—
(a) borrowing by the existing body (with the approval of the Scottish Ministers);
(b) the charging by the body, in respect of the exercise of its functions in relation to a
   deposit and return scheme, of such reasonable amounts as the Scottish Ministers
   consider appropriate.

(4) In exercising functions in relation to a deposit and return scheme, a scheme
   administrator must comply with any written directions of a general or specific nature as
   the Scottish Ministers may from time to time give to it in relation to those functions.

58B Power to establish scheme administrator

(1) The Scottish Ministers may, by order, establish a body to be a scheme administrator of a
   deposit and return scheme established by virtue of section 58(1).

(2) A body established under subsection (1) is to be a body corporate.

(3) The body may do anything which appears to it—
   (a) to be necessary or expedient for the purpose of, or in connection with, the exercise
       of its functions in relation to a deposit and return scheme;
   (b) to be conducive to the exercise of those functions.

(4) In particular, the body may—
   (a) enter into contracts;
   (b) with the agreement of the Scottish Ministers, borrow money;
   (c) charge, in respect of the exercise of its functions in relation to a deposit and return
       scheme, such reasonable amounts as the Scottish Ministers consider appropriate.

(5) An order under subsection (1) may in particular include provision about—
   (a) the status and constitution of the body;
   (b) the status of the members and any employees of the body;
   (c) the remuneration, allowances and pensions of such members and such employees;
   (d) the conferral of functions on the body;
   (e) the keeping by the body of accounts and accounting records.

58C Finance of scheme administrator

(1) The Scottish Ministers may, for the purpose of or in connection with the exercise by a
   scheme administrator of functions in relation to a deposit and return scheme—
   (a) pay grants;
   (b) make loans,
   to the administrator of such amounts as Ministers may determine.

(2) Any such grant or loan may be paid or, as the case may be, made, on such terms and
   subject to such conditions (including, in the case of a loan, conditions as to repayment)
   as the Scottish Ministers consider appropriate.

(3) The Scottish Ministers may, from time to time after any grant or loan is paid or, as the
   case may be, made, vary the terms and conditions on which it was paid or made.
(4) The Scottish Ministers may guarantee, in such manner and on such conditions as they consider appropriate, the discharge of any financial obligation in connection with any sums borrowed by a scheme administrator for the purpose of, or in connection with, the exercise of its functions in relation to a deposit and return scheme.

**Carrier bag charges**

### 59 Charges for supply of carrier bags

(1) The Scottish Ministers may, by regulations, require suppliers of goods—

- (a) to charge for carrier bags supplied at the place where the goods are supplied for the purpose of enabling the goods to be taken away or delivered;
- (b) to apply the net proceeds raised by such charges to the advancement of environmental protection or improvement or to any other purposes that may be reasonably regarded as analogous.

(2) The regulations may in particular include provision about—

- (a) the circumstances in which the requirement applies;
- (b) the suppliers to whom the requirement applies;
- (c) the carrier bags to which the requirement applies;
- (d) the minimum amount to be charged for each carrier bag;
- (e) how the net proceeds raised by the charge are to be ascertained;
- (f) the purposes to which those net proceeds are to be applied;
- (g) subject to section 60—
  - (i) the enforcement authority in relation to the regulations; and
  - (ii) the functions of that authority;
- (h) the keeping of records and their production to the enforcement authority;
- (i) the enforcement of the duties imposed by the regulations;
- (j) offences in relation to failures to comply with requirements of the regulations.

(3) The enforcement authority must have regard to any guidance given by the Scottish Ministers to it in relation to the functions conferred on it by the regulations.

### 60 Enforcement authorities

(1) This section applies to any regulations made under this Chapter other than under section 53.

(2) The enforcement authority provided for in the regulations is to be—

- (a) SEPA;
- (b) a local authority; or
- (c) such other person or body as the Scottish Ministers consider appropriate.
(3) The regulations may provide for the functions of the enforcement authority in relation to the regulations to be exercised by two or more such authorities and about the functions of each such authority.

(4) The regulations may also provide for enforcement authorities to levy charges to recover the reasonable costs incurred by them in exercising their functions under the regulations.

61 Penalties

(1) A person who commits an offence under regulations made under this Part is liable to such penalties, not exceeding those mentioned in subsection (2), as are provided for in the regulations.

(2) Those penalties are—
   (a) on summary conviction, a fine not exceeding the statutory maximum;
   (b) on conviction on indictment, a fine.

PART 6
GENERAL AND MISCELLANEOUS

61ZA Public engagement

(1) The Scottish Ministers must prepare and publish a strategy (a “public engagement strategy”) setting out the steps they intend to take to—
   (a) inform persons in Scotland about the targets specified by virtue of this Act;
   (b) encourage them to contribute to the achievement of those targets.

(2) The public engagement strategy must, in particular, identify actions which persons in Scotland may take to contribute to the achievement of the targets referred to in subsection (1)(a).

(3) The public engagement strategy must be published no later than 31 December 2010.

(4) The Scottish Ministers—
   (a) may, from time to time; and
   (b) must, before the end of the period mentioned in subsection (5), review the strategy.

(5) The period referred to in subsection (4)(b) is the period of 5 years beginning with the date on which—
   (a) the strategy is first published; or
   (b) the strategy was last reviewed under subsection (4).

(6) Where, following a review under subsection (4), the Scottish Ministers vary the public engagement strategy, they must, as soon as reasonably practicable after so doing, publish the strategy as so varied.

(7) A strategy published under subsection (6) must contain an assessment of the progress made towards implementing the steps set out in earlier strategies.
(8) The public engagement strategy may be published in such manner as the Scottish Ministers consider appropriate.

(9) The Scottish Ministers must lay the public engagement strategy before the Scottish Parliament as soon as reasonably practicable after it is published.

61A Sustainable development

(1) The persons mentioned in subsection (2) must, in exercising functions conferred on them by virtue of this Act, take into account the need to do so in a way that contributes to the achievement of sustainable development.

(2) Those persons are—

(a) the Scottish Ministers;

(b) the advisory body.

62 Equal opportunities

(1) The persons mentioned in subsection (2) must exercise their functions under this Act in a manner which encourages equal opportunities and in particular the observance of the equal opportunities requirements.

(2) Those persons are—

(a) the Scottish Ministers;

(b) the advisory body;

(c) public bodies (as defined in section 36(A2)).

(3) In this section, “equal opportunities” and the “equal opportunities requirements” have the same meanings as those expressions have in section L2 of Part 2 of Schedule 5 to the Scotland Act 1998 (c.46).

62A Scottish Executive budget: impact on greenhouse gases

(1) The Scottish Ministers must, at the same time as laying before the Scottish Parliament any document setting out draft proposals for the use of resources in any financial year, lay before the Scottish Parliament a document describing the direct and indirect impact on greenhouse gas emissions of the activities to be funded by virtue of the proposals.

(2) In this section, “use of resources” has the meaning given in section 1(3) of the Public Finance and Accountability (Scotland) Act 2000 (asp 1).

63 Crown application

(1) This Act and any orders and regulations made under it bind the Crown.

(2) No contravention by the Crown of any provision made by virtue of this Act makes the Crown criminally liable.

(3) But the Court of Session may, on the application of any public body or office-holder having responsibility for enforcing that provision, declare unlawful any act or omission of the Crown which constitutes such a contravention.

(4) Despite subsection (2), any provision made by virtue of this Act applies to persons in the public service of the Crown as it applies to other persons.
Subordinate legislation

(1) Any power conferred by this Act on the Scottish Ministers to make orders or regulations is exercisable by statutory instrument.

(2) Any such power—

(a) may be exercised so as to make different provision for different cases or descriptions of case or for different purposes;

(b) includes power to make such consequential, incidental, supplementary, transitory, transitional or saving provision as the Scottish Ministers consider appropriate.

(3) An order or regulations under this Act may modify any enactment (including this Act).

(4) Subject to subsections (5) to (8) and to section 64A, no statutory instrument containing an order or regulations under this Act (other than an order under section 67(2)) may be made unless a draft of the instrument has been laid before, and approved by resolution of, the Scottish Parliament.

(5) A statutory instrument containing an order mentioned in subsection (6) or regulations mentioned in subsection (7) is subject to annulment in pursuance of a resolution of the Scottish Parliament.

(6) Those orders are orders under—

(a) section 17(b);

(b) section 38(1);

(c) paragraph 2(2) of schedule 1.

(7) Those regulations are—

(a) the second or subsequent regulations under section 12(2) (other than regulations which make provision altering the amount by which a carbon unit credited or debited to the net Scottish emissions account for a period reduces or, as the case may be, increases the net Scottish emissions account for that period);

(b) the second or subsequent regulations under section 18(1) (other than regulations which make provision specifying a carbon unit of a kind not previously specified in regulations under that section);

(d) regulations under section 58(1) which make provision about one or more of the following matters only—

(i) the deposits mentioned in section 58(7)(c);

(ii) the form and content of notices mentioned in section 58(7)(f);

(iii) setting the registration fees mentioned in section 58(7)(h);

(c) regulations under Chapter 4 of Part 5 which make provision about the matter mentioned in section 60(4) only.

(8) Subsection (5) does not apply to an order or regulations which includes provision modifying an Act or an Act of the Scottish Parliament.
64A **Subordinate legislation: pre-laying procedure**

(1) This section applies where the Scottish Ministers propose to lay before the Scottish Parliament a draft of a statutory instrument containing the first regulations under section 58 or 59 (other than a draft containing regulations mentioned in section 64(7)(d) or (e) to which section 64(5) applies).

(2) The Scottish Ministers must, before doing so, lay before the Parliament—

   (a) a copy of the proposed regulations; and
   
   (b) a statement setting out their reasons for proposing to make those regulations.

(3) The Scottish Ministers must, when laying such a copy, specify a period (the “representation period”) during which representations on the proposed regulations may be made to them.

(4) The representation period must be at least 90 days, of which no fewer than 30 must be days on which the Parliament is not dissolved or in recess.

(5) The Scottish Ministers must, as soon as reasonably practicable after laying a copy of the proposed regulations, publicise them in such manner as they consider appropriate.

(6) The Scottish Ministers must, before laying the proposed regulations before the Parliament, have regard to—

   (a) any representations on the proposed regulations made to them;
   
   (b) any resolution relating to those regulations passed by the Parliament; and
   
   (c) any report relating to those regulations published by any committee of the Parliament for the time being appointed by virtue of standing orders, before the expiry of the representation period.

(7) The Scottish Ministers must, when laying such proposed regulations, lay a statement setting out—

   (a) details of any representations, resolutions or reports mentioned in subsection (6);
   
   (b) the changes (if any) they have made to the proposed regulations in response to such representations, resolutions or reports and the reasons for those changes.

(8) In this section, “proposed regulations” means a draft of a statutory instrument to which subsection (1) applies.

65 **Interpretation**

In this Act—

   “additional greenhouse gas” has the meaning given by section 11(2);

   “advisory body” has the meaning given by section 19(2);

   “advisory functions” has the meaning given by section 19(3);

   “annual target” has the meaning given by section 3(3);

   “authorised person” has the meaning given by section 54(5);

   “baseline” has the meaning given by section 10(1);

   “baseline year” means—
(a) in relation to a greenhouse gas mentioned in subsection (2) of section 10, the year mentioned in paragraph (a), (b), (c), (d) or, as the case may be, (e) of that subsection;

(b) in relation to an additional greenhouse gas, any year designated by virtue of section 11(3);

“carbon unit” has the meaning given by section 18(4);

“climate change duties” has the meaning given by section 36(1A);

“Committee” means the Scottish Committee on Climate Change;

“deposit and return scheme” means a scheme established by virtue of section 58(1);

“domestic effort target” has the meaning given by section 7A(2);

“emissions” has the meaning given by section 15(1);

“energy efficiency” has the meaning given by section 48(8);

“greenhouse gas” has the meaning given by section 9(1);

“interim target” has the meaning given by section A2(2);

“international carbon reporting practice” has the meaning given by section 17;

“local authority” means a council constituted under section 2 of the Local Government etc. (Scotland) Act 1994 (c.39);

“monitoring body” has the meaning given by section 39(2);

“net Scottish emissions” has the meaning given by section 15(1);

“net Scottish emissions account” has the meaning given by section 12(1);

“packaging” has the meaning given by section 57(4);

“public body” (except in Part 4 and section 62) has the meaning given by section 19(5);

“relevant body” has the meaning given by section 5(5);

“relevant public body” has the meaning given by section 36(2);

“recycling” has the meaning given by section 52(4);

“renewable sources” has the meaning given by section 48(8);

“Scottish Committee on Climate Change” has the meaning given by section 20(2);

“Scottish emissions” has the meaning given by section 15(1);

“Scottish removals” has the meaning given by section 15(1);

“SEPA” has the meaning given by section 53(5);

“target year” means a year for which an annual target has been set;

“target-setting criteria” means the matters mentioned in section 4(4)(a) to (h);

“the 1990 Act” means the Environmental Protection Act 1990 (c.43);

“the 2008 Act” means the Climate Change Act 2008 (c.27);

“the 2050 target” has the meaning given by section 1(2);

“UK Committee on Climate Change” has the meaning given by section 5(6);
“waste” has the meaning given by section 52(4).

66 Minor and consequential modifications

Schedule 2 makes minor modifications and modifications consequential on the provisions of this Act.

57 Short title and commencement

(1) This Act may be cited as the Climate Change (Scotland) Act 2009.

(2) This Act (other than this section and sections 22 to 27, 45C, 51A and 64) comes into force on such day (in the case of sections 36 to 44, being not later than 18 months after the day on which the Bill for this Act receives Royal Assent) as the Scottish Ministers may, by order, appoint.

(3) Sections 22 to 27 and 45C come into force in accordance with section 21.

(3A) Section 51A comes into force on the day after the Bill for this Act receives Royal Assent.

(4) Different days may, under subsection (2), be appointed for different purposes.
SCHEDULE 1
(introduced by section 20)

THE SCOTTISH COMMITTEE ON CLIMATE CHANGE

Status

1 (1) The Committee is a body corporate.
(2) The Committee is not to be regarded as a servant or agent of the Crown, nor is it to be regarded as having any status, privilege or immunity of the Crown.
(3) The Committee’s members and employees are not to be regarded as civil servants.
(4) The Committee’s property is not to be regarded as property of, or held on behalf of, the Crown.

Membership of the Committee

2 (1) The Committee is to consist of the following members—
(a) a person to chair the Committee (“the Chair”); and
(b) not fewer than five and not more than eight other members.
(2) The Scottish Ministers may, by order, modify sub-paragraph (1)(b) so as to alter the number of other members of the Committee.
(3) Members of the Committee are appointed by the Scottish Ministers.
(4) In appointing members to the Committee, the Scottish Ministers must have regard to the desirability of the Committee (taken as a whole) having expertise or experience in the following—
(a) business competitiveness;
(b) climate change policy at Scottish, UK and international level (in particular the social impact of such policy);
(c) climate science and other branches of environmental science;
(d) economic analysis and forecasting;
(e) emissions trading;
(f) energy production and supply;
(g) financial investment;
(h) technology development and diffusion.

Period, and conditions, of appointment of members

3 (1) Each member of the Committee is to be appointed for a period not exceeding five years.
(2) A member holds and vacates office in accordance with the terms and conditions of appointment.
(3) A member may resign office as a member of the Committee by giving written notice to the Scottish Ministers.
(4) On ceasing to be a member, a person is eligible to be reappointed for one further period.
Persons not eligible for appointment

4 No person may be appointed as a member of the Committee if that person is, or has at any time during the previous year been, a member of—

(a) the House of Commons;
(b) the Scottish Parliament;
(c) the European Parliament.

Removal of members of Committee

5 (1) Subject to sub-paragraph (3), the Chair may, by giving written notice, remove a member from office if the Chair is satisfied that one of the situations set out in sub-paragraph (2) exists.

(2) Those situations are—

(a) that the member is insolvent;
(b) that the member has been convicted of a criminal offence;
(c) that the member has been absent from meetings of the Committee for a period longer than six months without the permission of the Chair;
(d) that the member is otherwise unable or unfit to discharge the functions of a member or is unsuitable to continue as a member.

(3) The Chair may only remove a member from office with the agreement of the Scottish Ministers.

(4) The Scottish Ministers may, by giving written notice, remove the Chair from office if the Scottish Ministers are satisfied that one of the situations set out in sub-paragraph (2) exists.

(5) For the purposes of sub-paragraph (2)(a), a member is insolvent when—

(a) a voluntary arrangement proposed by the member is approved;
(b) the member is adjudged bankrupt;
(c) the member’s estate is sequestrated;
(d) the member enters into a debt arrangement programme under Part 1 of the Debt Arrangement and Attachment (Scotland) Act 2002 (asp 17) as the debtor;
(e) the member grants a trust deed for creditors.

Remuneration, allowances and pensions of members

6 (1) The Committee must pay its members such remuneration and allowances as the Scottish Ministers may in each case determine.

(2) The Committee may, with the agreement of the Scottish Ministers—

(a) pay (or make arrangements for the payment);
(b) make payments towards the provision;
(c) provide and maintain schemes (whether contributory or not) for the payment,
of such pensions, allowances or gratuities to or in respect of any person who is or has ceased to be a member of the Committee, as the Committee may determine.

(3) The reference in sub-paragraph (2) to pensions, allowances and gratuities includes pensions, allowances and gratuities paid by way of compensation for loss of office.

Chief executive and other employees

7 (1) The Committee is to employ a chief executive.

(2) The chief executive is to be appointed by the Committee on such terms and conditions as the Committee may determine.

(3) The appointment of the chief executive and the terms and conditions of that appointment are subject to the agreement of the Scottish Ministers.

(4) The Committee may appoint other employees on such terms and conditions as the Committee may determine.

(5) The Scottish Ministers may give directions to the Committee as regards the appointment of employees under sub-paragraph (4), which may relate in particular to—

(a) the number of appointments;

(b) the terms and conditions of employment.

(6) The Committee must comply with directions given under sub-paragraph (5).

(7) The Committee may, with the agreement of the Scottish Ministers—

(a) pay (or make arrangements for the payment of);

(b) make payments towards the provision of;

(c) provide and maintain schemes (whether contributory or not) for the payment of, such pensions, allowances or gratuities to or in respect of any person who is or has ceased to be an employee of it, as the Committee may determine.

(8) The reference in sub-paragraph (7) to pensions, allowances and gratuities includes pensions, allowances and gratuities paid by way of compensation for loss of office.

Accounts

8 (1) The Committee must—

(a) keep proper accounts and accounting records;

(b) prepare in respect of each financial year a statement of accounts;

(c) send the statement of accounts to the Scottish Ministers.

(2) The Committee must comply with any directions which the Scottish Ministers gives it in relation to the matters mentioned in sub-paragraph (1).

(3) The Scottish Ministers must, as soon as reasonably practicable after receiving the statement of accounts from the Committee—

(a) send the statement of accounts to the Auditor General for Scotland for auditing;

(b) lay the audited statement before the Scottish Parliament.

(4) The Committee must make its audited statement of accounts and its accounting records available so that they may be inspected by any person.
(5) Those documents are to be made available—
(a) at any reasonable time; and
(b) without charge.

(6) In this paragraph and paragraph 9, “financial year” means—
(a) the period beginning with the day the Committee is established and ending with 31 March in the following calendar year;
(b) each subsequent period of 12 months ending with 31 March.

Reports
9 (1) As soon as practicable after the end of each financial year, the Committee must prepare a report on—
(a) the discharge of the Committee’s functions during that year;
(b) the actions that the Committee proposes to take during the following year in pursuance of its functions.

(2) The Committee must—
(a) send a copy of the report to the Scottish Ministers; and
(b) publish the report.

(3) The Committee must prepare and publish the report in accordance with any directions which the Scottish Ministers may give.

(4) The Scottish Ministers must as soon as reasonably practicable after receiving the report from the Committee, lay a copy of it before the Scottish Parliament.

(5) The Committee may publish such other reports on matters relevant to its functions as it considers appropriate.

Sub-committees
10 (1) The Committee may establish sub-committees for any purposes relating to its functions.

(2) A sub-committee must comply with any directions given to it by the Committee.

Proceedings
11 (1) Subject to the remaining provisions of this paragraph, the Committee may regulate—
(a) its own procedure (including any quorum);
(b) the procedure of any sub-committee (including any quorum).

(2) The Chair must, if present, chair meetings of the Committee or any sub-committee of the Committee.

(3) If the Chair is not available to be present at a meeting of the Committee (or any sub-committee of the Committee), the Chair is to appoint another member to chair the meeting.

(4) The Chair has a casting vote and any person appointed by the Chair under sub-paragraph (3) has a casting vote for the purposes of that appointment.
(5) The validity of any proceedings of the Committee (or any of its sub-committees) is not affected by a vacancy in membership nor by any defect in the appointment of a member.

**Delegation of functions**

12 (1) The Committee may, subject to sub-paragraph (2), authorise—

(a) any of its members;
(b) any of its sub-committees;
(c) its chief executive;
(d) any other employee,

to exercise such of its functions (and to such extent) as it may determine.

(2) The Committee may not authorise the exercise of the following functions under sub-paragraph (1)—

(a) the approval of annual reports and accounts;
(b) the approval of any budget or other financial plan.

(3) Sub-paragraph (1) does not affect the responsibility of the Committee for the exercise of its functions.

**General powers**

13 (1) The Committee may do anything which appears to it—

(a) to be necessary or expedient for the purpose of, or in connection with, the exercise of its functions;
(b) to be conducive to the exercise of its functions.

(2) In particular, the Committee may—

(a) enter into contracts;
(b) with the agreement of the Scottish Ministers, borrow money;
(c) with the agreement of the Scottish Ministers, acquire and dispose of land;
(d) obtain advice and assistance from any person who, in the Committee’s opinion, is qualified to give it.

(3) The Committee may pay to any person from whom advice or assistance is obtained such fees, remuneration and allowances as the Committee may, with the agreement of the Scottish Ministers, determine.

**SCHEDULE 2**

(introduced by section 66)

**MINOR AND CONSEQUENTIAL MODIFICATIONS**

_Hill Farming Act 1946 (c.73)_

1 In section 23(1) of the Hill Farming Act 1946 (prohibition of muirburn at certain times), after “section” insert “and to section 23A,”.
Environment Act 1995 (c.25)

2 In section 41(1) of the Environment Act 1995 (power to make schemes imposing charges), after paragraph (e), insert—

“(f) as a means of recovering costs incurred by it in performing functions conferred by regulations under section 53 of the Climate Change (Scotland) Act 2009 (asp 00), SEPA may require the payment to it of such charges as may from time to time be prescribed;”.

Ethical Standards in Public Life etc. (Scotland) Act 2000 (asp 7)

3 In the Ethical Standards in Public Life etc. (Scotland) Act 2000, in schedule 3 (devolved public bodies) at the appropriate place, insert—

“The Scottish Committee on Climate Change”.

Scottish Public Services Ombudsman Act 2002 (asp 11)

4 In the Scottish Public Services Ombudsman Act 2002, in Part 2 of schedule 2 (listed authorities) at the appropriate place, insert—

“The Scottish Committee on Climate Change”.

Freedom of Information (Scotland) Act 2002 (asp 13)

5 In the Freedom of Information (Scotland) Act 2002, in Part 7 of schedule 1 (Scottish public authorities) at the appropriate place, insert—

“The Scottish Committee on Climate Change”.

Public Appointments and Public Bodies etc. (Scotland) Act 2003 (asp 4)

6 In the Public Appointments and Public Bodies etc. (Scotland) Act 2003, in schedule 2 (specified authorities) at the appropriate place in the list of advisory bodies, insert—

“The Scottish Committee on Climate Change”.

Housing (Scotland) Act 2006 (asp 1)

7 In the Housing (Scotland) Act 2006, section 179 (duty of Scottish Ministers to prepare strategy for improving energy efficiency of living accommodation) is repealed.
Climate Change (Scotland) Bill
[AS PASSED]

An Act of the Scottish Parliament to set a target for the year 2050, an interim target for the year 2020, and to provide for annual targets, for the reduction of greenhouse gas emissions; to provide about the giving of advice to the Scottish Ministers relating to climate change; to confer power on Ministers to impose climate change duties on public bodies; to make further provision about mitigation of and adaptation to climate change; to make provision about energy efficiency, including provision enabling council tax discounts; to make provision about the reduction and recycling of waste; and for connected purposes.

Introduced by: John Swinney
On: 4 December 2008
Supported by: Stewart Stevenson
Bill type: Executive Bill