



The Scottish Parliament  
Pàrlamaid na h-Alba

## Official Report

# RURAL AFFAIRS, CLIMATE CHANGE AND ENVIRONMENT COMMITTEE

Wednesday 1 October 2014



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**RURAL AFFAIRS, CLIMATE CHANGE AND ENVIRONMENT COMMITTEE**  
**24<sup>th</sup> Meeting 2014, Session 4**

**CONVENER**

\*Rob Gibson (Caithness, Sutherland and Ross) (SNP)

**DEPUTY CONVENER**

\*Graeme Dey (Angus South) (SNP)

**COMMITTEE MEMBERS**

\*Claudia Beamish (South Scotland) (Lab)  
\*Nigel Don (Angus North and Mearns) (SNP)  
\*Alex Fergusson (Galloway and West Dumfries) (Con)  
\*Cara Hilton (Dunfermline) (Lab)  
\*Jim Hume (South Scotland) (LD)  
\*Angus MacDonald (Falkirk East) (SNP)  
\*Dave Thompson (Skye, Lochaber and Badenoch) (SNP)

\*attended

**THE FOLLOWING ALSO PARTICIPATED:**

George Burgess (Scottish Government)  
Paula Charleson (Scottish Environment Protection Agency)  
Dr Ute Collier (Committee on Climate Change)  
Jim Densham (Stop Climate Chaos Scotland)  
Gina Hanrahan (World Wildlife Foundation Scotland)  
Rob Morris (Scottish Government)  
Paul Wheelhouse (Minister for Environment and Climate Change)  
Chris Wood-Gee (Sustainable Scotland Network)

**CLERK TO THE COMMITTEE**

Lynn Tullis

**LOCATION**

The Adam Smith Room (CR5)



## Scottish Parliament

### Rural Affairs, Climate Change and Environment Committee

*Wednesday 1 October 2014*

*[The Convener opened the meeting at 10:00]*

### Decision on Taking Business in Private

**The Convener (Rob Gibson):** Good morning, everybody, and welcome to the 24th meeting this year of the Rural Affairs, Climate Change and Environment Committee. I remind everyone present to switch off their mobile phones and so on, as they can affect the broadcasting system. You may notice some committee members using tablets, but that is because they provide meeting papers.

Agenda item 1 is a decision on taking business in private. The committee is to decide whether consideration of its work programme, under agenda item 5, should be taken in private. Are we agreed?

**Members** *indicated agreement.*

**The Convener:** That being so, we will take that agenda item in private.

## Subordinate Legislation

### Pollution Prevention and Control (Scotland) Amendment Regulations 2014 [Draft]

10:00

**The Convener:** Agenda item 2 is subordinate legislation. Members will take evidence from the Minister for Environment and Climate Change on the draft Pollution Prevention and Control (Scotland) Amendment Regulations 2014. The instrument has been laid under the affirmative procedure, which means that Parliament must approve it before its provisions may come into force. Following this evidence session, the committee will be invited, under agenda item 3, to consider the motion to approve the instrument.

I welcome the minister, Paul Wheelhouse, and two of his Scottish Government officials: George Burgess, deputy director for environmental quality; and Rob Morris, Scottish Environment Protection Agency sponsorship and pollution reduction team leader. Good morning, gentlemen. Minister, would you like to speak to the regulations?

**Paul Wheelhouse (Minister for Environment and Climate Change):** I would, convener, thank you.

Good morning, everyone, and thank you for this opportunity to provide an opening statement on the draft Pollution Prevention and Control (Scotland) Amendment Regulations 2014. Along with other parts of the United Kingdom, Scotland is required to transpose article 14, paragraphs 5 to 8, of the energy efficiency directive by 5 June 2014. The directive establishes a common framework and lays down rules to promote improvements in energy efficiency.

The specific requirements of article 14, paragraphs 5 to 8, relate to a cost benefit analysis being carried out when a new or refurbished thermal electricity generation, industrial or energy production installation is planned. Exemption thresholds and exclusions are set out in draft regulations.

Scotland will be consistent with the other parts of the UK on those aspects of the directive. For example, where there is too little waste heat available, where no demand for heat exists or where the distances are too great for a viable connection to be made, there is no need to carry out a cost benefit analysis. Furthermore, certain peak-load and back-up electricity-generating installations, nuclear power stations and carbon capture and storage installations are exempt. The draft regulations make that clear, and that clarity will be of benefit to business. When a cost benefit

analysis is required, that will ensure that high-efficiency co-generation, the recovery of waste heat and connection to a district heating and cooling network are identified. Where the cost benefit analysis shows that it is beneficial, SEPA will issue a permit, with conditions to ensure that the measures are implemented.

We are late in transposing because we wanted to be consistent with our UK counterparts on the technical detail and to be able to fully consider the responses to the consultation earlier this year. The timetable for transposition was tight, in that just seven months was available from the publication of the European Commission's guidance on article 14. That guidance was important, as it clarified aspects of the directive's meaning and, therefore, what the draft regulations needed to cover.

One other Administration in the UK, Northern Ireland, has laid its draft regulations—I understand that it did so last night. England and Wales will follow in October. The route chosen for transposition in Scotland is via amendment of the Pollution Prevention and Control (Scotland) Regulations 2012—the PPC regulations—which provide a ready-made framework for implementation and are familiar to the vast majority of operators who are affected. That is because their installations already require a permit under the PPC regulations. Operators are also familiar with SEPA as the regulator.

Although we believe that Scotland will be the first in the UK to transpose the requirements—we may be overtaken by Northern Ireland, given its move last night—we have made provision for the delay in transposition by issuing directions to SEPA.

I propose to the committee that the draft regulations provide the right mechanism for transposing the requirements of the directive, and I ask for your support in agreeing to them.

Finally, the committee should be aware that the draft regulations make a number of minor corrections to errors in the PPC regulations. Those corrections introduce no new regulatory burdens.

**The Convener:** Thank you, minister. Do members have any questions?

**Dave Thompson (Skye, Lochaber and Badenoch) (SNP):** Good morning, minister, and welcome to the committee. I have a general question. Is there a mechanism to ensure that the criteria are the same in Scotland, England, Northern Ireland and Wales, or is it a matter of the first country deciding and the rest falling into line? Are there discussions to agree a common approach? How does it work in practice?

**Paul Wheelhouse:** My understanding is that it is usually the latter. When a new directive comes

out, there is good engagement between officials in the four Administrations. We sit down and discuss what we need to do to make sure that we all comply individually and how we can co-ordinate collectively and learn from what is being done across the four Administrations. There is good collaboration between officials in our Administration and those in Northern Ireland, Wales and England to ensure that there is a common understanding of what the regulations mean. That is why it is so important to wait for guidance from the Commission so that we know what its intent is and how to interpret the directive.

In this case, we have a good example of how that collaboration works. Although I might have made light of it, it is not a competitive situation between the Administrations; we just happen to have been keen to comply as soon as possible, to be good progressive partners in Europe and to demonstrate that we are taking the directive seriously. Other Administrations similarly are trying to do their best to comply with the deadlines, and there has been good collaboration between officials.

George Burgess or Rob Morris might want to discuss the detail of how that collaboration works in practice, but there has certainly been positive engagement between departments.

**George Burgess (Scottish Government):** I do not think that there is much to add to the minister's comments. A lot of email exchanges and meetings take place between the various Administrations around the United Kingdom to ensure that the technical parts of the regulations are as consistent as we can make them.

**Alex Fergusson (Galloway and West Dumfries) (Con):** In the notes that accompany this bit of subordinate legislation, there is the phrase

"In order to benefit business by having as much uniformity between Scots, English and Northern Ireland law as possible",

which suggests that there might be examples of where that level of uniformity is not possible. Is that just a useful phrase, or are you aware of any examples of where we cannot have the desired level of uniformity? If there are such examples, how might that affect the legislation in the future?

**Paul Wheelhouse:** I will invite George Burgess to comment on your second point in a moment.

The intent is not to create unnecessary differences when that can be avoided. We have a European directive that, in theory, applies to the whole of Europe; I hope that it is being applied by all Governments in Europe. We work to make sure that there is a common understanding and there are not different interpretations of the requirements between different Administrations

that might lead to different legal outcomes in the application of the regulations. To avoid that unnecessary cliff edge between one Administration and another, such understanding is essential.

George Burgess might want to comment on the legal parameters and whether there are any legal differences between England and Scotland in that respect.

**George Burgess:** As far as we are aware, there are no differences of substance. For example, the search distances that are set out in the table on page 6 of the regulations will be consistent across the UK.

There are differences of form. We are using the pollution prevention and control regulations, and Northern Ireland has very similar regulations to ours. Some years ago, England and Wales moved on to a different set of regulations, the environmental permitting regulations. Their regulations will therefore look different from those in Scotland and Northern Ireland, but there is no difference in what they require operators and the regulator to do. Operators who might be operating across the UK will be able to use similar guidance and mechanisms for carrying out the cost benefit analysis.

**Alex Fergusson:** Thank you. That is fine.

**Claudia Beamish (South Scotland) (Lab):** Good morning. Can you explain to me the connections between the planning system and the requirement for a cost benefit analysis in certain circumstances? I would be encouraged if there was guidance to enable developments for the saving of energy and the use of combined heat and power to happen in places that are close to communities. Is there a cross-departmental view on that?

**Paul Wheelhouse:** I am certainly aware of how the regulations would be applied. A plant could be anything from a distillery to a power plant that needs to generate a significant amount of heat and therefore uses fuel to do that. Obviously, the town and country planning system would take that into account and work from the point of view of existing structural plans and local district heating strategies and plans that are available at the local authority level. It would take into account in the first scanning or filtering exercise whether a cost benefit analysis is needed. It might say that, in the area where the plant is proposed, the local authority has plans to develop a district heating network and that therefore there is likely to be demand for district heat in that area. That would perhaps imply that there was not a failure of the test of whether there was a market. It might be that, although there is no current market, there could be one and therefore it might be necessary

to deliver a cost benefit analysis to prove one way or another whether district heating is a viable proposition for the plant to take on board.

Rob Morris or George Burgess might want to add to that, but it is my understanding that there is a linkage between the town and country planning system and local district heating mapping and strategies. I agree that it is important that the processes talk to each other. Rob or George might want to comment on the technicalities.

**George Burgess:** As the minister said, there will be communication between the town and country planning system and SEPA's permit system. They are separate systems, so the majority of installations will require planning permission and a permit from SEPA. The operator can seek those in parallel or one after the other. The benefit of setting out as clearly as we can in the regulations when a cost benefit analysis is required is that the operator will know that from the outset; it will be sensible for them to have that in mind when they begin to design their installation and plan accordingly. SEPA always encourages operators to discuss matters with it well in advance of submitting an application, and they can be dealt with well at that stage of the process.

**Paul Wheelhouse:** What is implicit in what George Burgess said is that a business presenting a good business case for investment to its board or to other stakeholders or shareholders will look to maximise the financial return from the investment. It would therefore be remiss of a business not to take the opportunity to sell waste heat to a local market, because doing that would improve a developer's yield. There are other drivers, but the process that George described will ensure transparency and clarity about what developers will be required to do. Hopefully, that will allow them to design it in from the start.

**Rob Morris (Scottish Government):** SEPA is producing guidance on how the regulations will work in practice, with flow charts and information that it is necessary for operators to take on board on all the regimes that apply. That will be useful in the kind of situations that were described earlier.

**Nigel Don (Angus North and Mearns) (SNP):** I wonder whether I can carry on to where this is leading. I understand that the regulations will require a business to undertake a cost benefit analysis of combined heat and power, or whatever it is. This takes me back 30 years and what I will say follows directly from my experience of 30 years ago. You can demonstrate that thermodynamically combined heat and power is a perfectly sensible thing to do and you can demonstrate—I did—that there would be a cost benefit in doing it, but a business can still turn round and say, "Well, actually this gives me some complexity and uncertainty I don't want, so never

mind your cost benefit analysis, I'm not going to do it." Is what follows from the regulations that the licensing authority—SEPA or whoever—will require a business to do combined heat and power, or will a business still be able to say, "Never mind the rest of you, I don't want to do it. It's too complicated"?

10:15

**Paul Wheelhouse:** The short answer is that there would be a requirement on the business. If the cost benefit analysis demonstrated a sound case, and if it was decided that the proposed scheme would not destroy the business or the project—in other words, if a reasonable person would say that there was a case for a district heating network to use that heat, thereby improving the energy efficiency of the plant and the whole project—SEPA would be able to require the operator to progress the scheme.

As for the mechanics, the company would to some degree have to decide how it would proceed. SEPA would not direct a company in that respect, but it would require the business to make use of the heat. George Burgess may want to tell me that I am wrong on that, but that is my understanding of the regulations.

**The Convener:** I am interested in the evidence that we have from another source about the increasing emissions from public sector buildings. Has any area of the public sector planned a pilot to seek and use waste heat from nearby businesses? You probably cannot give a particular example just now, but it would be interesting to know whether we can set an example by showing how such a scheme would work.

**Paul Wheelhouse:** I believe—I may be incorrect, as you may have local knowledge on this, convener—that Wick general hospital is looking at how waste heat can be used. There are also a number of projects involving distillers and other operators. In Glasgow, a social housing development and a college campus are combined. There are precedents in the form of existing collaborations, so we are not starting with a blank sheet.

The idea is better developed on the continent, so there are international comparators in which public sector and social operators use waste heat from commercial operations to make them more energy efficient. We can certainly come back to the committee with some examples if that would be helpful for your further deliberations on energy efficiency measures.

**The Convener:** It would be very helpful indeed. The Caithness general hospital project is one that I am aware of, but it would be good to get some examples out there so that people can see that we

are taking the scheme seriously in the Government and in the public sector in general.

**Paul Wheelhouse:** Absolutely. The point about the public estate is well made. SEPA is a good example, as it is constantly seeking to improve its emissions figures. Although we can seek perfection, it is difficult to deliver in practice, but SEPA and other agencies of Government are working extremely hard to try to bring down their emissions. The issue will no doubt be discussed, as I am sure Claudia Beamish is well aware, in the public sector climate leaders forum. The question of how we can deliver on specific issues such as this one will be subject to further discussion.

**The Convener:** Thank you. If there are no other questions, we move to agenda item 3, which is to consider motion S4M-10972, which asks the committee to recommend approval of the draft Pollution Prevention and Control (Scotland) Amendment Regulations 2014. There is room for a formal debate of up to 90 minutes on the motion if that is needed.

*Motion moved,*

That the Rural Affairs, Climate Change and Environment Committee recommends that the Pollution Prevention and Control (Scotland) Amendment Regulations 2014 [draft] be approved.—[*Paul Wheelhouse.*]

**The Convener:** I invite members to make any comments they wish.

**Nigel Don:** I will not take up 90 seconds, never mind 90 minutes. In view of what the minister has just said about the degree of compulsion, the regulations are very welcome. However, I note, wearing a previous professional hat, that the situation is likely to be complicated simply because different bits of the heat input and output may well be in different hands, and getting people to co-ordinate may be commercially difficult. The spirit might be very willing, but it might be quite difficult to make it work. I do not envy SEPA that part of its job, any more than I envy it much else that it has to do.

**The Convener:** Does the minister wish to sum up?

**Paul Wheelhouse:** I thank Mr Don for his comments. We recognise the complexity, which would be taken into account in the cost benefit analysis. I am sure that the deliverability and the cost and complexity therein would be considered. I have confidence that the regulations will be proportionally applied, but I thank Mr Don for his comments about SEPA. I know that its staff work very hard, and I appreciate his remarks.

*Motion agreed to,*

That the Rural Affairs, Climate Change and Environment Committee recommends that the Pollution Prevention and



Control (Scotland) Amendment Regulations 2014 [draft] be approved.

**The Convener:** I thank the minister and his officials. We will take a little break just now for the change of witnesses.

10:20

*Meeting suspended.*

10:23

*On resuming—*

## Climate Change Targets

**The Convener:** We turn to agenda item 4, under which the committee will take evidence from stakeholders on Scotland's climate change targets. The Rural Affairs, Climate Change and Environment Committee was one of four committees to look at "Low Carbon Scotland: Meeting our Emissions Reduction Targets 2013-2027—The Second Report on Proposals and Policies", which is also known as RPP2.

The committee will now take a broader view of RPP2 and the climate change targets in the light of three successive years of not meeting the targets. Next week, the committee will hold an evidence session with the Minister for Environment and Climate Change on Scotland's climate change targets.

Today, I welcome our witnesses: Dr Ute Collier, team leader for devolved Administrations in the Committee on Climate Change; Chris Wood-Gee, vice chair of the sustainable Scotland network; Gina Hanrahan, climate and energy policy officer with the World Wildlife Foundation Scotland; Jim Densham of Stop Climate Chaos Scotland; and Paula Charleson, head of environmental strategy at SEPA. I refer members to the submissions that have been received.

I will open the questioning by asking panel members about their views on Scotland's progress to date in cutting climate emissions. What are the pluses and minuses? How do you think we are doing? Do you wish to start, Ute?

**Dr Ute Collier (Committee on Climate Change):** Yes. I provided some additional evidence to the committee because, although we did a progress report for the Scottish Government in March, the new emissions data for 2012 came out in June. I have provided some excerpts from the chapter of the UK progress report relating to the devolved Administrations.

The data shows that, as you all know, Scotland has missed its target for the third year running—the convener is right about that. We outlined some of the issues around inventory changes in particular; that aspect has been problematic for some years, but it is now getting more difficult to meet the targets as they were set.

We gave an overview of what is happening in different sectors. In our UK report we looked at the UK as a whole, and we had to give our assessment of the first carbon budget at UK level, which operated from 2008 to 2012. The UK met its

first carbon budget targets, and our conclusion on Scotland specifically was that it made an appropriate contribution to that and did particularly well in some areas such as renewable energy capacity and waste targets. We said that Scotland is actually leading in those areas, and is certainly doing better than England and the other devolved Administrations.

Overall, it is very challenging for Scotland to meet future annual targets. I am happy to go into more detail on any of those aspects.

**The Convener:** Indeed—I am sure that our questioning will lead there. Does anyone else wish to speak up just now?

**Gina Hanrahan (World Wildlife Foundation Scotland):** WWF Scotland was of course disappointed that the first three targets were missed. What counts in scientific terms is the cumulative amount of emissions in the atmosphere, not our annual percentage reduction. In scientific terms, Scotland has to deliver on its annual targets as much as on the percentage reductions.

We acknowledge, as Ute Collier said, that the inventory changes have made it increasingly challenging to deliver on the targets. We know that, as we move through 2014, 2015 and beyond, the targets are getting increasingly challenging to meet. We need the Government to intensify policy effort, and we very much welcomed the package of new policy measures that were announced in conjunction with the third missed target in June. That progress was welcome, and we were pleased that it was cross-sectoral.

We have seen variable progress across different sectors of the Scottish economy. There has been excellent progress on renewable electricity in particular, but we need to redouble efforts in other policy areas—energy efficiency, transport and renewable heat, for example—if we are going to hit those challenging future targets.

**The Convener:** Does anyone else wish to comment?

**Jim Densham (Stop Climate Chaos Scotland):** I reiterate much of what Gina Hanrahan has said. If we look back at the position in 1990, we see that Scotland has made good progress with a downward trend in emissions, but we are of course very disappointed to have missed those three recent targets. We are hoping for the best for the next target that will be reported on.

As Gina Hanrahan said, we are pleased that the Scottish Government has introduced a package of measures to address the issue, to continue the work on ensuring that things are taken forward

and are possible and to help to achieve further reductions.

10:30

**The Convener:** We understand that.

**Paula Charleson (Scottish Environment Protection Agency):** I have nothing in particular to add that has not been said, except that SEPA thinks that the report on proposals and policies is detailed and should be applauded for the analysis that was undertaken to determine the road map. It is disappointing that we have failed to meet the targets. That must be down to how Scotland—not just the Scottish Government—delivers the measures. There is something to be said for spreading the responsibility across other parts of Scotland—across the public, private and other sectors. A concerted effort could be made on that to achieve delivery.

**Chris Wood-Gee (Sustainable Scotland Network):** The sustainable Scotland network agrees with all the comments that have been made. The situation is disappointing—it is a bit like school reports that say, “Could do better.”

We are focusing on improving the quality of reporting. We work across the whole Scottish public sector, so we have worked with local authorities and the wider public sector on what we can do to have the best quality of reporting, so that when the information feeds into and aligns with the RPP, we can deliver good-quality data that helps us, politicians and managers to understand the issues fully.

**The Convener:** That raises the question whether you are getting accurate information.

**Chris Wood-Gee:** The information is improving. We have done work nationally to understand better what the data means. An awful lot of data is out there, and we need a decent understanding of how it has developed and what it means.

Department of Energy and Climate Change statistics show that, in Dumfries and Galloway Council's area, we are on about a third of a tonne per person, but we have a lot of agriculture down there and we do not have a lot of industry. We still have a long way to go on our housing stock—we have major challenges there. We need better-quality data, which is coming. We are developing that, as are a range of organisations.

I guess that the national stats will catch up with what is happening locally. Within our organisation, we know what we do to the last kilowatt; that is probably standard across local authorities, whether or not that is driven by the carbon reduction commitment. The national stats are improving slowly and we will catch up.

**The Convener:** We formulated and agreed the targets in 2009. It is interesting that the change in the measurements because of our better understanding has made a big difference to whether we can hit the targets. Can we put the missed targets into perspective? People mention all the time the fact that the targets have been missed. It is important for us to have annual targets to gee people up. However, when we seek and give answers, can we ensure that we look at the bits of the equation that are falling down and not doing as well as they should? To take the point that Paula Charleson made, can we focus our answers on how to improve delivery in the missing areas rather than just look at the targets?

**Gina Hanrahan:** I absolutely agree. It is important to recognise the missed targets and understand the accounting that is behind them, but it is crucial to have economy-wide momentum, across the board, so that we have a linear reduction from transport, from energy efficiency in our built environment and from electricity, although those reductions need not necessarily be at the same pace. We must concentrate on implementation and not be distracted from delivery by obsessing about the minutiae of individual targets. However, it is still critical to meet the targets in scientific and political terms for the global process as much as the domestic position.

**Claudia Beamish:** I want to follow up on Chris Wood-Gee's point about data. Does he or any other panel member know about any work that is being done on the compatibility of data across the public sector and beyond so that figures can be pulled in? Obviously, it is difficult—or, to correct myself, less possible—to make sensible and coherent remarks on progress if the data is not inputted in a similar way.

**Chris Wood-Gee:** The SSN has been working with a company called Aether to get a better understanding of the top-line data. All 32 Scottish local authorities return an annual report under the climate change declaration. That has been going on for about five years and the reports have gradually evolved over the past few years so that they now reflect the RPP. This year's reports, which are due in November, will be the first that have been properly in line with the RPP. That should start to give us a much more consistent approach to reporting from our local authorities. The wider public sector has a similar mechanism.

We are starting to get a consistent and level playing field for reporting information. That approach involves things such as CRC reports and takes into account what is happening in the wider community. Some authorities are doing a lot of work on that and others are doing less. The approach will need to change a little to reflect priorities in different authorities and organisations,

but the aim is to have a much more consistent approach. It has taken a few years to get there, but we are starting to get there. As the RPP develops, we will probably evolve further so that we have a standard that all bodies are required to meet in reporting but one that recognises the differences in approach in authorities and agencies.

**The Convener:** I want to develop some of those points through other questions, but Jim Densham can come in.

**Jim Densham:** SCCS has asked for compatibility, and I know that the committee has said that we need good read-across between the figures in RPP2 and the budget. It is not always easy to read across and to know whether the budget will achieve what is needed to meet the RPP2 commitments. As I work for RSPB Scotland, I focus particularly on the land-use sector for our partners in SCCS. When the budget comes out, it is difficult to see that read-across and to know whether the money is in place to achieve what RPP2 says we need in the rural land-use sector.

**The Convener:** We will ask the minister about those things, as you would expect.

**Graeme Dey (Angus South) (SNP):** It is accepted that hitting the initial targets was the easy bit and that, as we proceed, it will become increasingly difficult to maintain that. Therefore, how realistic is it to believe that we will hit future targets? In light of the baseline review, is there a justification for adjusting the targets? Alternatively, as Paula Charleson suggested, should we simply redouble our efforts, demand an appropriate contribution to the process from all parts of the public and private sectors and pursue the wider behavioural change that we all want?

**Dr Collier:** I have been thinking about that and I did some back-of-an-envelope calculations this morning. We will have a major problem next year. When we gave the advice for the targets, we had to make an assumption about the European Union emission trading scheme and Scotland's share of the cap. At the time, there was an accepted methodology that DECC had developed, but we did not really know anything. A new phase will start in 2030, and we did not know how that would work out—actually, we still do not know exactly how it will work out. However, it looks as though the cap for Scotland will end up being quite different from the one on which we based our targets. We will probably lose another 1 million tonnes or something like that—that is the ballpark figure—in addition to all the inventory changes.

Assuming that we are 1 million tonnes short next year, and taking energy efficiency as a nice compensatory measure, I think that we might have to insulate all of Scotland's solid-wall homes and

all the outstanding cavity-wall homes to get 1 million tonnes of savings, which would cost £5 billion to £10 billion. Obviously, that kind of thing cannot be done in one year. I accept that that is just one measure and that there could be other measures, but there is a really difficult challenge.

The Committee on Climate Change would be happy to consider the issue in more detail and to provide the Scottish Government with independent advice on what should be done about the targets. We do not have a firm position. In our previous progress report, we said that the Government might need to look at the issue. We know that, as well as the EU ETS issue, more inventory changes are coming. At the moment, we are chasing a moving target, so we need to consider what is possible. I am concerned that it would be very difficult to make up such a huge shortfall.

**Jim Densham:** Gina Hanrahan alluded to the fact that we must remember that we are trying to achieve a world in which there are safe levels of climate change, with only a 2°C rise or, we hope, less than that. That is about the absolute amount of carbon dioxide or equivalent that is in the atmosphere. Our targets are all about the fixed amount that Scotland can emit year by year; they are not about how much we reduce in percentage terms—the really important thing is what is actually in the atmosphere. It is vital that we try to keep to those fixed targets. If we do that, we are saying to the world that we have fixed the most ambitious targets for exactly how much we want to emit into the atmosphere and we are going to try to stick to them, rather than changing things as the accounting changes. After all, as Ute Collier says, the inventory is likely to change again and again in future years. Are we going to keep changing things as the baseline level changes? If the figures rightly show that there was a different amount of carbon in the atmosphere in 1990, are we going to change our targets now? I think that it is totally right to leave things as they are and to have a real concerted effort. After all, more than 2,000 people marched in Edinburgh just the other week to say that we really need climate action—not changed targets but real action to achieve those targets.

**Graeme Dey:** Although I sympathise with that, given the comments that we have just heard from Dr Collier, I return to the point about how realistic it is to achieve those targets, living in the real world. We can and should aspire to do much better but, in reality, can we hit the targets? Given what we have just heard, the answer is probably no.

**Jim Densham:** It will be very difficult, although we know that taking action now makes it easier to achieve target reductions than if we do it in 10, 20 or 30 years' time, as we approach 2050, when it will be much harder and more costly to do. Therefore, if we can achieve more now, we should

do it now. In June, the Government came up with new measures to try to achieve more, but those have not yet been factored into RPP2, and there are other things that can be done. We would like to help the Government to introduce new policies and to move the proposals in RPP2 into policies as soon as possible. We need to make that happen at the earliest possible point and to try to close the gap. It is important. Before we start thinking about changing the targets and asking whether we can meet them because doing so is difficult, we should review RPP2 to consider what we can achieve with what we have.

**Dave Thompson:** I have a broader point about taking the public with us. An awful lot of the public out there will not understand the intricacies of this very complex subject. If we just stick to the targets knowing that it is virtually impossible to meet them, we will create a situation in which a lot of expenditure is needed to move forward. The public will see money being spent on the issue at the same time as money is perhaps being cut from local government services and various other things, yet the headlines every year will be, "Government misses target again." That is all very negative.

Is there not a danger that there might be a backlash from the general public, who might think, "You're spending all these millions to meet the targets, but you're not succeeding, so you're obviously not getting it right. Something is really wrong here"? If the targets were made more realistic to take account of what has happened and, as a result, we met them or got very close to meeting them, we would encourage people to believe that what we are doing is worth while. If we do not change the targets, is there not a great danger that we will alienate many members of the public, who will decide that they would rather have the money spent on schools, hospitals and so on than on activity that is patently not working?

10:45

**Jim Densham:** I think that you got it right at the beginning—the public do not really understand the subject. I do not think that the public notice when a target is missed. I am sure that most people just skimmed past the page on the website or the little article in the newspaper that said that we had missed our targets for the past three years. The issue does not get the press coverage that it should, and that is partly the fault of all of us.

We all need to agree to work together. As Paula Charleson said, the whole of Scotland needs to come together to recognise that the targets are achievable and that everyone needs to chip in. Instead of just looking across budgets and departments and saying that we think we can do particular things, we need to make a much bigger,

more concerted effort. We need to say, “This is where we’ve got to get to. How can we do that in a cost-effective way?” If we do that but still miss the next target—that is a possibility; you never know—we need to be positive about it.

In June, when it was announced that the most recent target had been missed, SCCS was positive and tried to focus on the measures that the Government had proposed rather than saying that it was terrible that we had missed another target. We said that although the target had been missed, the Government had striven to come up with a new package of measures. That is the right way to proceed. We should not keep saying that not enough is being done and that performance is poor; instead we should say that we all need to work together to make it happen.

**Paula Charleson:** The question was about how realistic it is that we will reach the targets. I do not think that we should beat ourselves up too much. We were not far off the targets. There were two good reasons why we failed to meet them. One of them was the resetting of the baseline using new data; the other was to do with the fact that our performance is weather dependent. We know that it will continue to be weather dependent, and that is a challenge for Scotland, given that we have annual targets.

The important thing is the direction of travel—where we are trying to get to. We are trying to achieve an 80 per cent reduction in emissions by 2050. There are good reasons for that: we are trying to control the global increase in temperature. Although the effort that we are making is small, it is still important.

Jim Densham is right that many people are not that bothered. We could do more to raise awareness. We could also report on the issue in a different way. SEPA is a microcosm of what is happening more widely. We are an organisation that tries to show leadership, but we find it very hard to reduce our emissions, for all sorts of reasons—our role has increased, we have information technology requirements and we need to store data. There are all sorts of things that compound the task of reducing emissions.

The way in which we tell the story is very important. When we say that we have just failed to meet a target, we should give the reasons why. If our EU ETS contribution changes, we can explain that, but we still have to make a concerted effort to achieve the targets. If we look at all the policies and proposals in RPP2, it looks as if there is a way forward. It is necessary to do the number crunching, and there are costs associated with that. We need to do more to look at what benefits we can get by bringing forward particular policies and proposals. Doing that means that we will get the benefits for longer. For example, if we bring

forward the peatland restoration policy, we will get the benefit for the next 10, 20 or 30 years. I think that we need to have a good, hard look at what we can bring forward and not get hung up on just missing targets. If we change the targets, we will not get to the place that we aspire to get to.

**Gina Hanrahan:** I fully support what Paula Charleson and Jim Densham have said. The importance of a positive narrative cannot be overstated. This is all about society, Government and Opposition working together to achieve a common cross-party and societal goal.

To address Dave Thompson’s point, I say that people care about how climate change impacts their lives. They are not obsessing about targets or any of the details that we obsess about here. They are looking at how policies are impacting on the worth of their homes, their healthcare costs and things like that.

It is important that we acknowledge that climate action should not necessarily be a burden on society; it is very much about achieving win-wins, as much as possible. WWF recently launched a report that looked at the impact of implementing the fourth carbon budget at UK level. It looked at the overall macroeconomic effects and showed that, in essence, strong climate action leads to more gross domestic product growth than a business-as-usual approach, more money in our pockets and higher household income, and reduced pressure on the national health service. That is leaving aside cleaner air and all the benefits other than emissions reduction that climate action leads to. Climate action is a win-win in terms of all the agendas that we care about: welfare, healthcare and everything else.

I support very much what Jim Densham says about changing targets, but there are a number of other reasons not to change targets. A lot of that relates to the external perception that changing targets would lead to. First, it is very bad timing for Scotland to change its course on climate action. We are at a critical moment in the moves towards a 2015 global deal in Paris. We have just had the United Nations climate summit—I know that there is a debate on that in Parliament today. All the global leaders are talking about climate: it is firmly back on the agenda. Scotland is rightly lauded as being head of the posse and acting as the best in class. Stop Climate Chaos recently released a film that promotes the Scottish example abroad. Anything that would be perceived as weakening Scotland’s ambition at this point would be problematic.

Secondly, the Committee on Climate Change recently conducted the fourth carbon budget review for the UK Government, which looked at the politics and economics of climate change and whether things had changed enough to justify

altering the fourth carbon budget. At UK level, it found that there was no reason to do so. I am not saying that it would say exactly the same thing at the Scottish level, but that process created a lot of investor uncertainty in the green economy. There was a sense that things were unstable and people did not know where to put their money. If anything, we should provide a very strong, clear trajectory for our green economy in Scotland, which is thriving, so that we can deliver all the benefits that climate action entails and not just worry about the downsides.

**Dr Collier:** I agree with Gina Hanrahan. We would not want to change targets just now, in the run up to 2015. However, I remind you that we will advise the Scottish Government by the end of December next year on the 2027-32 targets—my God; that is so far in the future—which the Scottish Government will have to legislate on in 2016, when we will do RPP3 and all that.

There will be an opportunity then to look again at the short-term targets. We would not necessarily say that the long-term targets would change. At UK level we say that the fourth carbon budget should stay the same. We are lucky that at UK level we have no problem with the current carbon budgets and we will meet them, but it might be worth looking again at the trajectory to 2027 and, in the future, 2032.

The Scottish Government has an opportunity in 2016 when it looks at that period to see whether, based on our advice, there might be a reason for changing the short-term ambition. The long-term ambition should stay the same. It may even need to be more ambitious because, as some of you might know, the Intergovernmental Panel on Climate Change recently looked at a cumulative global budget and, depending on how you feel about historical responsibility, countries such as the UK may have to be more ambitious.

**Cara Hilton (Dunfermline) (Lab):** I want to build on what Jim Densham and Paula Charleson said. Should additional policies and proposals beyond those set out in RPP2 be introduced to compensate for the Government's failure to meet its emissions targets over the past three years and to support the delivery of achieving targets in future? To what extent is there sufficient coherence across the range of Government policy? Would more coherence better enable the Government to meet its targets?

**Paula Charleson:** I have not thought in detail about additional policies and proposals other than those that are in RPP2, although we could certainly bring some of them forward and possibly implement them—let us say—more vigorously.

One example is the restoration of peatland. There is good evidence to suggest that we

understand how much carbon saving and how much of a carbon sink we can get from restoring peatland. Money is available—£16.5 million—but not all of it has been taken up, which is disappointing. More concerted effort to get that money taken up and that peatland restoration carried out would be valuable.

We could also think about applying the requirement for peatland restoration further. I have raised the example of wind farm developments before in a committee meeting, and I believe that there could be offset peatland restoration associated with wind farm or other developments that might impact on peatland.

We can do more with what we have. Another example is agriculture, although that would not account for a huge percentage of emissions savings. We have farming for a better climate, which is a voluntary scheme. I know that Government has thought about bringing in more regulatory rules, and we could work harder to do that. RPP2 is 92 per cent dependent on farmers taking up the recommendations and guidance in farming for a better climate. SEPA has experience in and works on priority catchments. We are walking the catchments and talking to thousands of farmers. We will not see the uptake that we might in some areas unless the Government continues to give them advice and guidance. We need to follow that up, so a more concerted effort could be made there, too.

There is a potentially huge saving in energy efficiency. The committee has heard about a small change to the Pollution Prevention and Control (Scotland) Amendment Regulations 2014 to implement the energy efficiency directive. That is a small example in which organisations such as SEPA could be seen to be promoting the issues far more. We are here to apply regulation, but we want to be seen as leaders in addressing climate change as well. We could do more if we had a little more of a push behind us.

Those are just some examples of what could be done.

**Dr Collier:** A couple of the big areas for abatement savings, such as domestic energy efficiency and renewable heat, depend very much on Great Britain-level policies such as the energy companies obligation renewable heat incentive. As we have shown in our reports, there are big issues with those policies not delivering as much as they could. We said that the energy companies obligation should be more ambitious.

In the current situation in which more devolution is being discussed with Westminster, you could look at those areas. If you really want to deliver in Scotland, you might need to push for more control over those issues; otherwise, it is very difficult

because you cannot do much about the energy companies obligation. I know that the Scottish Government has tried to influence DECC, but it is not delivering.

11:00

**Jim Densham:** Stop Climate Chaos Scotland is keen to see more policies on demand management in the transport sector. If you asked our partners in Transform Scotland to sit here in my place, they would be keen to talk to you about that.

In transport, the issue is not just about increasing active travel budgets and money for other budgets; it is about policies that reduce car use. Demand management is an important part of the policy mix if we are to make those transport emissions savings.

I would reiterate what Paula Charleson said about peatland restoration. That needs to be brought forward. The Government and Scottish Natural Heritage have provided money and good support, and there has been a groundswell of support for peatland restoration among farmers. We are pleased to be part of that and to move that forward, and we support Government and SNH in that. However, we want to ensure that the next stage happens as soon as possible.

The budget that has been put in place for this year and the next year is £15 million. We want the peatland plan to turn very quickly into an action plan that sees the money spent and to act as a guide to the spending of other pots of money from the private sector, Scottish Water, the Scotland rural development programme and, perhaps, landowners. We want all that money to come together so that it achieves a common goal rather than just being concerned with bits of peatland restoration here and there. That work is very important; we are supportive of it and want to ensure that it is driven forward in the right way.

Again, the fertiliser efficiency measures are important. We must build on farming for a better climate, and farmers must do their bit. With regard to the proposal that is in RPP2 for fertiliser efficiency measures, even though no date is set in the narrative and in the tables at the back, the emission savings from the proposal are supposed to come in 2018. We would like that to be the latest date for them to come in, and we would prefer to see them sooner. That would encourage farmers to take up as many measures as possible. Because of greening measures, grassland farmers are required to produce nutrient management plans. That is not necessarily the same as producing a measure, but we want the planning to lead to measures. We hope that, through RPP2's turning of the proposal into a policy, farmers will

think more clearly about the need for action after those plans are developed.

Coastal habitats have been considered by the committee before and are in RPP2. Around the globe, salt marshes, kelp beds and sea grass are excellent at sequestering and storing carbon. We have lost a lot of our coastal habitats and salt marshes through the years due to development and agriculture reclamation. As the climate changes, it is inevitable that we will need those habitats back as a cost-effective buffer against flooding and sea-level rises. If we start to do the work now to understand the carbon savings from those habitats, how much of them we need, where they are best placed and how they can provide multiple benefits, we will be in a good place to plan long-term investments around our coasts.

**Gina Hanrahan:** Emissions are still around 1990 levels in the transport sector. At present, in RPP2, there is only one formal policy on transport emissions that falls into EU competence, which is around emission standards for vehicles.

Some things are happening in the transport sector in Scotland—things such as the smarter choices, smarter places initiative, funding for walking and cycling infrastructure and so on. We would like those things to become formalised in RPP2, so that there is clarity about exactly how much is going to be rolled out on an annual basis and how much abatement that will deliver. We would like travel planning to be rolled out as extensively as possible across Scotland. The 2009 Atkins report identified that as a very cost-effective abatement measure in transport, so we would like smarter choices, smarter places and all the supporting policies that go alongside it rolled out as widely as possible.

Things are also happening in relation to intelligent transport systems, for instance, and speed reductions on trunk roads. Speed reduction is being trialled on certain roads in Scotland—including the A9, I think. I was going up and down to Dunkeld recently, and I could see the speed cameras being put in place on the sides of the roads. That is a very effective emissions abatement opportunity. We need to think about how we can roll that out more widely. That option delivers safety wins as well as emissions wins.

Also, of course, as Jim Densham said, we need to start having a conversation about demand management. We cannot simply rest on our laurels and think that transport is somehow going to be covered. We need to do more on it. We perhaps need to start having conversations about workplace parking levies, increased parking charges and road user charging. Those have all been potentially politically difficult topics over the past years, but a huge chunk of emissions post-2020 in RPP2 is described as additional technical

abatement potential. We do not really know exactly what that means, but we need to start having the conversations about it now so that we can build public support for what might be potentially politically challenging options.

**The Convener:** There is a lot of food for thought in there, and we will take forward those points.

A small point was raised with me by a friend from France who could not charge his electric car because the charging mechanism is different in Britain, France and the Netherlands—at least. Have you come across that issue before? A lot of visitors come here and we have charging points 50 miles apart right up to the north coast. It seems likely that the EU will have to sort out the charging mechanism for cars.

**Paula Charleson:** A giant adaptor is needed.

**Gina Hanrahan:** As it has done for mobile phones, the EU is moving towards an integrated approach.

**The Convener:** How can it possibly be that, across Europe, we have different methods of hooking up to charging points? I will take that up somewhere else.

**Paula Charleson:** With Transport Scotland.

**The Convener:** Indeed.

**Jim Hume (South Scotland) (LD):** I was glad to see a car plugged into a charger in the Parliament car park this morning. It is good that at least one person in the Parliament seems to be using an electric car. The car was plugged directly into a three-pin plug—I hope that is safe enough.

**The Convener:** Apparently the Parliament is paying for the electricity for somebody's car to be recharged.

**Jim Hume:** We had better stop there, then—but it wisnae me.

To follow on from what Gina Hanrahan said earlier, the Scottish Parliament information centre briefing shows that some sectors have already made some good progress since 1990. The three highlighted sectors were: waste management, which reduced emissions by 58.6 per cent between 1990 and 2012; business and industrial processes, which reduced emissions by 37 per cent; and agriculture and related land use—which Jim Densham mentioned—which has already reduced emissions by 26.7 per cent.

We have already heard about the transport sector, which has not reduced emissions much at all—by 1.2 per cent, which is next to nothing. Which sectors do you think offer the greatest opportunities to reduce our emissions further?

**Jim Densham:** You mentioned the agriculture and related land use emissions reductions of 26.7 per cent. Most of those reductions have come from reduced cattle and sheep numbers across the country—obviously the methane that they produce has gone down as there are fewer animals to produce it—and from reduced fertiliser use, which is happening really because the price of fertiliser has gone up.

Those reductions are not guaranteed to continue in the future. I think that David Reay highlighted some of the issues in his submission, especially the issue around fertiliser use. Obviously, as more food needs to be produced for a growing world population or if, for example, Russia has a bad harvest and more food needs to be produced in other places, that will affect many costs. It will affect the cost of fertiliser, demand and all that sort of thing. The level of fertiliser use could go up or down, and that would seriously affect that 26.7 per cent reduction. Emissions might go up.

I am trying to say that, unfortunately, RPP2 and Government measures have not as yet really made an impact on rural land use or agriculture emissions reductions. If they have, we do not know about that, because, unfortunately, farming for a better climate and other land use or agriculture policies are not really well monitored.

As we have already heard, there are issues to do with monitoring. We do not know which farmers are taking up which measures from farming for a better climate, and we cannot attribute emissions reductions to the measures. The Government must do better on that so that there is better reporting. That is in the interests of both farmers and everyone else because, as we know, if people are taking up measures, that is a great thing and we should applaud and celebrate them.

The monitor farms have done that and shown that they can have good impacts. If they are not showing that and a big take-up is not being shown, farmers might, unfortunately, need to have regulation placed on them. However, they might already be doing things, and there might be regulation that is not really needed. It is always better to have a voluntary approach that is well monitored, well reported and understood by everyone before we go towards a regulatory approach.

**Chris Wood-Gee:** Domestic buildings must be one of the key areas in which we can get a better reduction in emissions. I think that Ute Collier suggested that between £5 billion to £10 billion is required to sort them out. I looked at the numbers for our older properties in Dumfries and Galloway and thought that £200 million was probably not out of the question just for very basic treatment.



There is a need for changes in the specifications. We do not want to externally clad listed buildings. If we start to rip out the insides, we will start to have problems with them. We need to have a more flexible approach to how we treat buildings so that we get the right building breathability and so on.

The other side of the issue is that we are talking about missing our targets. However, that is one of the areas in which there is good public buy-in. One of our local housing associations has put on around 1,200 air-source heat pumps, which are saving a huge amount of money for local people. That is tackling fuel poverty, and it has been really positive.

Undertaking and demonstrating such work is a very good way to get buy-in. People are working really hard to do that, but the numbers that are involved to bring our housing stock to a reasonable standard are pretty scary, to say the least.

**Dr Collier:** I agree with Chris Wood-Gee. There is reduction potential across all sectors. Obviously, we have put a lot of focus on the decarbonisation of the electricity sector. The Scottish Government has the very ambitious 100 per cent renewable electricity target. We know that that can be done, and there is really good potential with wind power, as you all know. We already have hydro power, biomass and various other things.

Of the other sectors, residential buildings—or homes—are mentioned in the SPICe briefing. In theory, the 12 per cent of current emissions can be reduced by 80 per cent if all the insulation and renewable heat issues are dealt with, but that comes at a cost and, obviously, we need to bring people with us. That was my point earlier on: we cannot just say to people, “We need to do all your homes in the next year.” There are times in life when people are more ready to do the work. They might be moving, and if the right incentives are available, they might do it.

I go back to Gina Hanrahan’s point about all the other benefits. We often talk only about how much things cost to do and costs per tonne of carbon, but there are many other benefits. The national health service saves money by people not ending up in hospital, for example. I would like to see much more focus on looking at the other benefits.

**The Convener:** We wondered whether the health budgets might be applied in that direction to some extent, as well. That is why we have a cross-cutting approach in the Parliament, which we are trying to instil in people.

11:15

**Paula Charleson:** There are all sorts of things that we could say. One is that I wonder whether we need stronger sectoral targets. We have targets for some parts—for example, on energy efficiency and on renewables—but I wonder whether stronger sectoral targets might help.

Let us take waste management as an example. We have seen very good progress in that sector, which has targets at a local level. We could do more as we actually missed the target, but I understand that, since that happened, a lot of activity has taken place, particularly in cities, to try to improve the situation. For example, there are green ways of dealing with kitchen waste and so on, given the ban on organic waste going to landfill. I therefore think that sectoral targets can help.

My other point is on decarbonising electricity, which we are doing very well. However, we are of course still part of the UK, so we are still dependent on the rest of the UK to decarbonise as well. We are doing more than our share and we have lots of suitable land for wind farms, for example, but we need to get win-wins. If we decarbonise the grid, we can then bring in electric vehicles. We will get the benefits from them if we are running them on a decarbonised grid. We will have a win-win if we do that. If we decarbonise our grid, we will also have low-carbon electricity and therefore what people do in their homes should be different. For example, if the grid is decarbonised, they should put in not biomass burners but electric heating.

We must put in more effort to decarbonise, and we must encourage it to be done at a UK level in order to achieve our aspiration of decarbonising the electricity supply. We can then get the benefits from other policies.

**The Convener:** Point taken. Alex Fergusson has a question.

**Alex Fergusson:** One of the critical aspects of land use in relation to what we are discussing is forestry, for which there are very ambitious planting targets that we are not meeting. I wonder whether anybody feels able to comment, first, on our not meeting those targets. A subsidiary point is my concern that although it is visually desirable that much of the replanting involves native species, they are not as efficient at carbon capture as the commercial species that we need to keep the forestry industry going. There is an argument for revisiting the percentages of native woodlands and commercial woodlands that we are replanting.

Secondly, when wind farms have been established in afforested areas and thousands of hectares of forestry have been cut down to make way for them, the developers are supposed to

undertake compensatory planting. However, I understand that the figures for that are way below what they should be.

Obviously, I will put those points to the minister at next week's meeting, but I wonder whether any of the witnesses wants to comment on that aspect of land use.

**Jim Densham:** It is disappointing that the forestry target is not being met. I know that there have been plenty of discussions about it. The woodland expansion advisory group—WEAG—was brought together by the Government to look at how the target could be met without having conflicts. That is a good, useful conversation to have and we should have such conversations more often about various land use issues.

I hope that the new SRDP will be a boost for planting targets and give farmers an opportunity to plant more. However, that might not be enough because, as you said, we need a much larger scale of planting. My personal view, and RSPB Scotland's view, is that it is good to have native broadleaf trees being planted rather than just non-native conifer trees, because they provide multiple benefits that have not been costed in the same way as having timber from commercial forestry. We must see that there are other benefits from planting native broadleaves, even if they are not as efficient in sucking carbon out of the atmosphere.

I am not too sure about the compensatory planting in that, as you say—I take your word for it—it is not keeping up with the removal but, in the round, I hope that making space for wind turbines is leading to a good balance of greenhouse gas emissions in the atmosphere. As I think I mentioned in our submission, on areas of peat and deep peat, we should be careful about where we site turbines and wind farms. Also, when trees are removed from deep peat, there should be a requirement not to restock.

There are some issues in relation to how deep peat is. Basically, I am saying that we should have a calculator to understand the carbon balances for all those different activities on peatlands, forestry removal and wind farms so that we can understand what is happening with carbon in the atmosphere.

**Paula Charleson:** I am not sure that I will be able to answer the exact questions. However, there are more opportunities for forestry planting than we are taking up. The woodland expansion advisory group did some good work. There are opportunities through the SRDP to encourage more farmers to plant forestry. There are also multiple benefits from such planting in terms of diffuse pollution and flood risk management, so we could probably do more.

There are conditions associated with some of the planting through the SRDP. There is a minimum depth. We could revisit that to encourage more planting because it becomes quite expensive. Farmers are happy to give up 2m or 3m but, if we ask them to give up 20m or 30m, they are less inclined to do so. Forestry Commission Scotland, SEPA and Forest Research have done some good work on opportunity mapping for planting. I do not know whether they have considered particular species, but I can find out the answer, if the committee wishes. That work is concerned with finding out where is the best place to plant. It might not be on deep peat, if that would mean disturbing the peat. Actually, they have completed that work around the Tay catchment area and already identified places. If we know the best place to plant, it reduces the time that it takes to get it done.

On compensatory planting, I do not know what the uptake is like but I agree that it should be followed up. SEPA is still involved in giving guidance and we will probably restart the validation process on the carbon balance for wind farms with an improved tool, which takes account of forestry. The carbon balance is calculated, but we do not have a mechanism in place to ensure that people do what is expected, whether it is compensatory planting or peatland restoration. We are missing a trick on that.

**Graeme Dey:** I take Jim Densham's point about a properly monitored and measured voluntary approach being the way to go before we become more prescriptive. The Government has introduced carbon audits for the agriculture sector within the new common agricultural policy, but they are voluntary. Given that time is marching on and there is a need to tackle climate change, is there not an argument for making them mandatory and linking future CAP payments to measured performance over a period of years?

**Jim Densham:** The simple answer is yes, there is. I totally agree. It would be great to have mandatory carbon audits for all farmers to help them to see what they are doing and what difference it makes over a period, such as a year or two.

**Alex Fergusson:** The committee has previously discussed the problems associated with the time lag in data about Scotland's efforts—if I can put it that way—coming to us. We raised the matter when Ute Collier was here previously. Has any progress been made in improving the process?

**Dr Collier:** Unfortunately not. Our committee was very frustrated by that. We tried to do a progress report for Scotland, but there is such a time lag in getting data. We went back to DECC, which is the keeper of all the statistics and which does the breakdown for the devolved

Administrations. DECC said no, it was absolutely not feasible. I think that, unfortunately, we are stuck with the process as it is. There are some problems as regards when some of the sector data comes in and how long things take.

**Alex Fergusson:** Does the same apply on a UK basis? Do those time lags apply across the UK?

**Dr Collier:** No. We already have provisional data for the UK for 2013, but the final data, which is what we submit under the United Nations Framework Convention on Climate Change, only comes out a year later. In March 2014, we got the final data for 2012. It is on the basis of that final data that DECC does the breakdown for the devolved Administrations. That is why we ended up, in June this year, with the 2012 data, whereas we already have the provisional 2013 data for the UK.

DECC does not want to do double the work, in effect. Otherwise, it would have to do the work for the provisional data and for the final data again. We are always a year ahead for the UK as a whole but, unfortunately, we are a year behind for everything else.

**Alex Fergusson:** I understand the point about the increased workload, but that does not make life any easier for us, frankly.

**Dr Collier:** No; exactly.

**Graeme Dey:** I would like some clarity about one point. I hope that I did not misunderstand this. Are you saying that DECC has the provisional data, but it does not want to commit the resource to breaking it down to devolved level—or does DECC just not have the data?

**Dr Collier:** I do not really understand how the statisticians do the breakdown. We would need to check with DECC exactly how it works. I know that there is UK provisional data, but I do not know what it takes to do the breakdown.

**Graeme Dey:** Is it entire-UK or rest-of-UK data that DECC releases?

**Dr Collier:** The provisional data is for the entire UK.

**Graeme Dey:** In other words, DECC has the provisional data, but it does not commit the resource to breaking it down to devolved level. It waits until it has the confirmed data, and it does the breakdown then. Is that where we are at?

**Dr Collier:** I think that that is the case, but I do not want to commit myself to that. The matter needs to be taken up with DECC but, when we checked with DECC, it said that it was not feasible to do the breakdown. Perhaps there are some specific items of data for specific sectors that are not available and that are needed for the final data.

**Gina Hanrahan:** Given that we have that time lag, it seems to be pretty much set in stone, and there is not a whole lot that we can do about it. I wonder—Ute might kill me for saying this—whether there is perhaps an argument for delaying the CCC annual report on Scotland. The CCC inevitably ends up having to be forward looking, because the data is not there yet. I wonder whether it would be possible to slow things up by a couple of months, in which case it would be possible to deal with the data that is verified and that we are confident about. I am just throwing that out as a possibility. I do not know whether there are practical reasons why that cannot be done.

**Dr Collier:** That discussion would need to be had with the Scottish Government—if, say, the committee made that suggestion. There are issues around when we could do that, as well as about when the Scottish Government does its response. It is not something that we have explored. At the moment, the work is done at the end of the year or early the following year.

**The Convener:** Do I take it that the Scottish Government has to pay for the breakdown figures that DECC does?

**Dr Collier:** I do not know how that works—sorry. You can ask the minister next week.

**The Convener:** We will find out. I just thought that you might have a view on that. Claudia, did you want to raise a point at this stage?

**Claudia Beamish:** Not at this stage.

**The Convener:** In that case, we will move to your next question.

11:30

**Claudia Beamish:** We have had quite a wide-ranging discussion about turning proposals into policies in a number of sectors. Could I ask for a bit more about how the process has been working and is likely to work? If we took the peatlands as an example, in the first RPP they were highlighted but the second contains proposals about peatlands that are being turned into policies. How far should the Scottish Government be directing where the policies are going and asking for comment on issues such as peatlands? I understand that that consultation was quite open, rather than being directed from the centre.

I also want to open up the discussion about funding for research into the future transformation of proposals into policies. For example, on marine issues, it is helpful to see a pattern going through the different RPPs, but marine issues in RPP2 seem to parallel what happened with peatlands in RPP1 and they are being implemented. Are there opportunities to take the issues forward in a constructive way?

**The Convener:** Jim Densham; please be brief.

**Jim Densham:** As I have said, we are very pleased with what has been achieved on peatlands so far. For this committee to have lots of sessions on the issue and to push it has been fantastic. We would like to see the proposal that is in RPP2 made into a policy. We want the target that is in that document to be made into a policy and we want Scotland to try to achieve that target.

There was a feeling that the peatland plan would give us some direction on how that target would be achieved so that it could become a policy, and on how the £15 million or any other money that comes in would be spent in an organised and co-ordinated way. Unfortunately, the peatland plan document was not totally directive, although we did not necessarily want that; we wanted some options for SNH to show us how a process could go ahead to make the plan happen in a timeline that would allow us to spend the £15 million in the proposed budget years. Unfortunately, the plan was broader than that. It was a good document and we could not fault what was in it, but it did not really suggest that option A meant doing it in one way while options B and C meant another, and it did not ask which we preferred. It really asked how the money could be spent to make peatland restoration happen and I think that that was a bit of a missed opportunity. We need to move on now and make sure that we get a plan in place very quickly, get the money in the budget spent, and get the target made into a policy as early as possible.

On funding for research, I agree that with blue carbon, marine carbon, salt marsh habitats and other blue carbon habitats, we are at the point at which we need to gather the science in so that we can understand what carbon benefits there are from restoring, protecting and creating new habitats, which can be done, so that we can turn it into a policy as soon as possible. It needs to be a policy that is not just for wildlife or adaptation but one that means that we can definitely say that if we create 10 hectares of salt marsh in the Forth, it will give a certain amount of carbon benefit to our inventory.

**The Convener:** Before we develop any of that, do you understand that the peatland plan was not made into a policy because the science is still trying to establish what the emissions controls should be for different forms of peatland? That is why it is a proposal—we are awaiting the outcome of that science, which we need for clarity. That is why the Government made it a proposal. It is not about having a more detailed plan for implementation; it is about waiting for the figures that show the different emissions from different depths and conditions of peat.

**Jim Densham:** The indications are that peatland restoration is carbon beneficial.

**The Convener:** The indications?

**Jim Densham:** They are very good indications, and the IPCC is clarifying those figures. It also agreed in Durban that the savings that are made from peatland restoration can be backdated. Therefore, the savings from any restoration that is done now—we know that there will be savings now and in the future—with money that is spent through the peatland plan can be backdated. Any activity that was taken now because it was a policy would be beneficial to our inventory. I do not see any problem with making that proposal a policy now, even though we may not understand until next year exactly what carbon benefits will accrue.

**The Convener:** Do you have another point to raise, Claudia?

**Claudia Beamish:** I have a question about the issue of farming and new technology, which has come up in the committee before. There are concerns about what the technology will be beyond 2020 and whether there is research money available to enable us to turn proposals into policies in farming.

**The Convener:** Are you referring to the greencow initiative?

**Claudia Beamish:** RPP2 contains a range of points about new technology that has hardly been invented yet, which goes beyond—or runs parallel to—the greencow initiative.

**Paula Charleson:** On the general point about whether you should ask for advice, I think that the answer is yes. The consultation on the peatland plan was an example of your seeking advice. Although SEPA thinks that it sets a good strategic plan for where you want to go, what we do needs to be directed by RPP2. There are gaps in the research, which you can fill, but that should not be a reason for inaction if we know enough—and there is enough evidence out there to say that peatland restoration works. It probably works better in more degraded than in less degraded peatland. We have some evidence, so the gaps in the research should not be a reason for inaction unless the consequences of action would be detrimental, and I do not think that they would be. Consultation is the right way forward, for sure.

**The Convener:** I am sure that the minister will have been listening to what you just said.

**Gina Hanrahan:** I agree with Paula Charleson that there are areas in which we need to improve the evidence base and consult people. We know that there are certain political barriers to progress. One of the really great things that we saw in the summer was the establishment of the Cabinet sub-committee on climate change, which we hope

will allow the Government to overcome those political barriers. We saw five new policies across different areas, and in June there was very much a sense of, "Where there's a will, there's a way." It would be worth exploring with the minister, when he comes to the committee next week, how the Cabinet sub-committee will work with the climate change delivery board and across the civil service to understand what the evidence base is, what the barriers are and how we can accelerate the turning of proposals into policies.

**Jim Densham:** Claudia Beamish made a point about agriculture research, which is in RPP2 without a lot of explanation. It could refer to all sorts of things, such as the likely uptake of precision farming, which is being looked at as a way to save on emissions. It would be good to find out from the minister how a future agriculture research budget will match up to achieving the aim.

**The Convener:** Does Chris Wood-Gee have anything to say about the other parts of the public sector that can help?

**Chris Wood-Gee:** The public sector is committed, but the big issue in a lot of situations is that we are turning tankers round, which is a challenge. The technology is developing—for example, a guy in the north of our region is near to going to market with an electrolysis boiler, which in effect burns water.

A lot of technology is out there, but it takes time to get the policies on board for the economic benefit. Ten years ago, a couple of people were sticking up solar panels in Dumfries and Galloway; today, we probably have 12 firms in Dumfries that do that, and most of them have spread into biomass and other technology. We are developing the expertise to deliver the targets that we need, but that takes time.

We have found the same thing in our authority. It takes time to change attitudes and put the policies in place for delivery. There is a catch-up. We will probably see better progress in time, but getting the right support takes an awful long time. We are fortunate to have cross-party support for what we are doing to address climate change, but it still takes a long time to fit that in with financial savings in local government, restructuring and all the other things. We must keep climate change up at the right level on the agenda.

What I have described is the case across the public sector. Technical fixes are coming up. There are exciting technologies to capture wind energy when we do not need it and so on, but it will take time to fit them into the system and for them to become more mainstream.

**The Convener:** If the EU's climate change target remains at 20 per cent, what will be the

wider implications for Scotland in meeting our future annual targets? All our calculations since 2009 have been based on the EU getting to 30 per cent. What could we do if those international circumstances pertained?

**Gina Hanrahan:** The committee has reflected before on the fact that we can hit our targets in only one instance—if the EU moves to 30 per cent and if we implement all proposals and policies as planned. There is a big gap because the 30 per cent target is in effect off the table. The EU debate has moved on to 40 per cent for 2030 and no one is talking about 2020 any more. That is unfortunate, as we would like to see more ambition up to 2030.

We need to do precisely the things that we have talked about—identifying new policy areas and accelerating proposals into policies. We must be aware that RPP2 cannot be a static document that takes just one point in time and involves one plan; it must flex and improve as technological advances happen, as we improve our understanding of climate economics and technological economics and as we get a clearer picture of the scale of the challenge. We would like RPP2 to strengthen and flex over the next couple of years before we move into RPP3, so that RPP2 is a live document.

**Paula Charleson:** Dare I touch on the trading scheme, which is controversial? I ask members not to drill down too deeply with their questions to me, because I do not really understand the scheme's process. Until now, the Government's position has been not to buy certificates. We could buy and destroy certificates. We have not really explored wider offsetting options, either.

**The Convener:** Indeed. All those threats are hanging over our heads if we cannot meet our targets through the agreed means.

**Jim Densham:** It seems that we are not moving to the 30 per cent target. The Committee on Climate Change said some time ago that meeting the shortfall would be down to the non-traded sector, which includes the agriculture and waste sectors. That would be a big stretch. Therefore, the implication for the rest of Scotland is that other sectors must do much more to meet the challenge.

11:45

**Nigel Don:** I am sitting here listening, as everyone else is, to all the things that are being said. I encourage folk not to repeat anything that they have said, although there may be no answer to what I am about to ask you. The onus is on Government and we would all want to spend more money. If we work on the assumptions that the Government is trying to do the right things, which we have discussed, and that we do not yet have a

forest of money trees, so that is not the answer, is there anything else that the committee or the Parliament—although we are the relevant bit of the Parliament—can do to make the progress that we have not talked about?

**The Convener:** I see that everyone is smiling. Fine.

**Nigel Don:** I thought that that would be the answer and that is fine.

**The Convener:** We could turn round the question slightly—

**Graeme Dey:** May I add something, convener? Jim Densham and Gina Hanrahan—I am not having a go at either of them in asking this question—both represent mass membership organisations. At the root of everything that we are trying to achieve is the requirement for behavioural change across society. Given the size of your membership, what are your organisations doing to actively facilitate or encourage behavioural change?

**The Convener:** We will take those two issues together. Who wants to start off?

**Jim Densham:** We need to look for the win-wins. I know that it is easy to say that we need to look for the positives, but we all need to work together and look for those really good things. I understand more about land use in the agricultural sector. The farmer is helped by doing a nutrient plan and then by thinking about efficiency savings. That makes sense for their business, not just for the climate. If we can encourage them or propel them towards doing that, we need to work on that.

We, as organisations—not just the Government—need to be involved in having the conversations and saying, “We support this.” We need to be in partnership with others, including people whom we do not usually have partnerships with, and to say, “Let’s work together; no one is listening to RSPB Scotland, but they will listen to the business sector or to NFU Scotland.” We need to get better at resolving our differences and at working together for a common good.

**Dr Collier:** It is true that there is no money tree. WWF Scotland is signed up to a big campaign on energy efficiency, which is looking at the issue of improving our building stock differently as an infrastructure priority. There is infrastructure money, so if the issue becomes an infrastructure priority it will be easier to raise money at cheaper rates. That is an interesting angle that seems to be gaining traction. I do not know how much that issue has been discussed in Scotland but, UK-wide, some of the parties are signing up to that, so that is an option.

**Gina Hanrahan:** Precisely—it is about getting creative with how we do things and looking at

budget lines that we would not necessarily have looked at before to achieve those win-wins. Therefore, as you say, we could perhaps look at the NHS budget to deal with issues around warmer homes; we could also look at how we invest our capital budget.

Over the coming year, WWF Scotland will look at how we can start to shift from high-carbon infrastructure investment to properly transformational low-carbon infrastructure projects. We will look at identifying what those projects should be; working across the infrastructure lifecycle with everyone from unions to academia, from industry to the Green Investment Bank and from the Institution of Civil Engineers to Government; and bringing together those people to look at what projects Scotland needs in which we can invest billions of pounds.

That is just one example of what we want to happen—we absolutely want to see energy efficiency as a national infrastructure priority. We see the scale of the challenge, which can be tackled only if we approach it from lots of different angles.

**The Convener:** That is an interesting point to finish on, because it takes us back to our wish for the parliamentary committees to have a cross-cutting approach to the budget and so on. There are big questions that the Minister for Environment and Climate Change can ask the other ministers on what they are doing about those matters. Clearly, infrastructure is a very big part of that—that message has come over loud and clear.

**Paula Charleson:** Your committee considered how well the national planning framework and the Scottish planning policy delivered on climate mitigation and adaptation. We can do more on that and it fits into exactly what we have described—it is about creating low-carbon places and creating the opportunities to change behaviours by changing how we move around, work and play in our environments.

**The Convener:** There must be a way of telling the story so that people in different parts of the country understand the issues. Where I come from, there is a huge amount of rural poverty, which is caused by poor insulation, old houses and the need to travel in order to get services; we need a very different solution from those that are needed for the cities, where much more stringent measures can be taken to ensure that transport is very different from what it is now.

We are glad to have heard all those points, and we will ask the minister those questions. The situation is on-going. Graeme Dey’s point about behaviour change is very important. We have highlighted that issue and we want the people in the organisations that talk about our targets and

whether we meet them to think about that and to ask themselves whether their organisations are doing their best to ensure that people's behaviour changes. That is not about a blame culture; rather, we are all in this together.

I thank the panel for its excellent contribution, which has refocused us. We have a debate in the chamber this afternoon on the UN climate summit 2014, which will be an interesting follow-on from our session. If the witnesses are around, they are welcome to come to the gallery.

At its next meeting, on 8 October, the committee will take evidence from the Minister for Environment and Climate Change on Scotland's climate change targets. We will also take our annual evidence from the Crown Estate.

11:53

*Meeting continued in private until 12:34.*





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