

SEPA

WRITTEN SUBMISSION

Low Carbon Scotland: Meeting our Emissions Reduction Targets 2013 - 2027

In our response, which is attached as Annex 1, we provide some broad comments on RPP2 overall (we have made these points to all four committees scrutinising RPP2) and then more specific comments relating to the detailed policies and proposals in the areas being scrutinised by the committee.

Generally, we welcome publication of the second RPP and recognise its importance in providing a roadmap for implementing the ambitious climate change targets. We are, however, concerned that there is more that needs to be done in order to make the RPP fit for the purpose of delivering world leading climate legislation. There is a need in our view, for a step change in the ambition of RPP2, particularly in the light of the first annual target having been missed. We also believe that there needs to be greater resilience built into RPP2 to ensure that if some policy areas do not deliver to their full capacity that there is sufficient headroom to ensure that this does not prejudice meeting the challenging targets set. It may be worth remembering that Scotland has a 2050 target and many “no-regret” actions can be taken sooner that will contribute to the achievement of that more distant target.

In 2006 Stern suggested that climate change mitigation would cost 1% of Global GDP per year. More recently as a consequence of inaction he revised this to 2% per year. Currently the Scottish Government is spending around 0.3% of GVA*¹.

There is a need in our view, therefore, for a step change in the ambition, resilience and monitoring of the RPP in order to make it a fully credible plan for implementing actions that achieve the targets.

Specifically to the remit of this committee, we consider that RPP2 needs to consider the role of reducing emissions from housing, reducing the complexity of current schemes through a ‘single-door’ approach’. Enhanced ‘smart metering’ also has a contribution to make. In transport dependency on new technologies and supporting EU legislation, and the road building programme pose risks to the programme. Modal shift has potential to reduce emissions, car use and to provide other economic and social benefits. Rail electrification will also bring related air quality benefits. Procurement, for example for food, has potential to yield a range of co-benefits. On Scottish Water, there can be environmental and emissions benefits through improved technologies and information.

¹ Source: Scottish Government Draft ‘Budget 2013-14 Details of funding for climate change mitigation measures: SNAP (Scottish National Accounts Project). Note: GVA is GDP at basic prices.

Appendix – Written Evidence from SEPA

1. Introduction and General view of RPP2

- 1.1 SEPA welcomes the publication of the draft second report on policies and proposals (RPP2) and the opportunity provided to us to submit our views on it as part of its 60 day scrutiny period. RPP2 is vitally important in helping to set Scotland on a path to meet the ambitious targets set in the Climate Change (Scotland) Act 2009.
- 1.2 We are, however, concerned that there is more that needs to be done in order to make the RPP fit for the purpose of delivering world leading climate legislation. There is a need, in our view, to (a) increase the scale of ambition, (b) enhance the resilience of RPP2 (c) provide more robust monitoring arrangements to help understand how policies and proposals are delivering in order to make it a credible plan for implementing actions that achieve the targets:
- 1.3 *Scale of Ambition* – RPP2 makes clear the scale of the challenge ahead and also makes it clear that the challenge is one to which the government is determined to rise. For the ambitious targets to be reached, however, a step change is needed and unless that step change is made early, then the scale of the challenge is likely only to increase. While many parts of RPP2 are welcome, we are concerned whether it will facilitate that fundamental shift of gear that is required. This involves beginning debate on some of the more uncomfortable decisions that will be required to meet the long term targets set and also setting out very clear, substantive, robust and deliverable policies. The section on transport, for example, appears to contain little new policy effort and much reliance is placed on reductions beyond 2020, whilst no mention is made of the potential impacts on the delivery of transport policies and proposals arising from the road-building programme that runs parallel to the RPP2 timescales.
- 1.4 *Building Resilience* – We are concerned whether there is enough “headroom” in the RPP so that if things do not go to plan then there may not be scope to meet the targets. This could arise from policies and proposals not delivering to the extent assumed, from the lack of an EU agreement to increase the target to 30% or where emissions increase due to unforeseen circumstances. We are already behind schedule due to the missed 2010 target, meaning that the policies and proposals set out must deliver to their full potential if we are to meet the targets set. Our own experience from internal target setting on greenhouse gas emission reductions is that it is very difficult to recover from a poor start and that later remedial actions to bring you back on track are often more dramatic. Accordingly, we feel that RPP2 needs to plan with more resilience in mind to face changing circumstances and emerging challenges such as the potential for large scale unconventional oil and gas exploitation, decisions on which have the potential to lock us into a higher carbon future through the life of RPP2.

- 1.5 *Behavioural Change* – SEPA agrees that behavioural change is key to delivery of the policies and proposals in RPP2 and we welcome the strategic approach to behavioural change that will be set out in the forthcoming Low Carbon Scotland: Behaviours Framework. It is our view that it is essential that climate change is expressed as a national interest issue rather than a government issue, a sectoral issue or a policy issue if a step change in behaviour is to occur. For RPP2, we consider that behaviour change should find expression in all sections of the report and should not stand alone as change is needed across all sectors of the economy and society. This requires collaborative working across the public and private sector that crosses party political boundaries, and requires extensive engagement with Scotland’s people about both the need for climate action and the benefits it will bring. RPP2 could also play a stronger role in enabling behavioural change through, for example, reconciliation and co-ordination of potentially conflicting policies and messages on climate change or through the identification and removal of perverse incentives that impact detrimentally on emissions.
- 1.6 *Monitoring* - There is a considerable reliance on assumptions about how the policies and proposals will perform. Without detailed monitoring of each of the specific policies and proposals however, it will be very difficult to tell whether these assumptions are accurate in the face of changing circumstances and whether revised assumptions and associated actions need to be identified. We believe therefore that there is scope to improve the use of more specific indicators, particularly leading indicators that let us know how we are progressing against a particular target beyond the overall monitoring of progress towards emissions reductions. Without this, it is difficult to understand risk and to understand which policy areas are working, and which could be accelerated, and which are not and therefore may need to change.
- 1.7 *Delivering Multiple Benefits* - RPP2 indicates that the costs of the policies and proposals is £1.6 billion and outweighs their direct benefits of £1.2 billion, but this completely ignores the wider benefits of climate actions and sends out the message that climate action is disproportionately costly and also risks these benefits not being given due regard in decision making. There are very many examples where concerted action would have multiple benefits not just for climate, but for improving the health and wellbeing of citizens and making Scotland’s towns, cities and villages nicer places to live and work - yet these are not clearly articulated or costed. For example, taking actions to reduce emissions from transport can lead to a wide range of economic, social and environmental benefits, including improved urban air quality, less congestion and improved safety which in turn can lead to improvements in people’s health, promote more active lifestyles and can make our towns and cities nicer places to be and which attract economic investment. There is an opportunity for RPP2 to show the wider benefits

of these actions to help to secure the behavioural change that is needed, and to show wider financial savings.

2. Housing – energy efficiency

- 2.1 Scotland's residential sector is a growing source of emissions at 15% (+2% from 1990-2010). As a result a full programme of measures is needed to ensure the sector contributes to the Scottish Government's reduction targets. The delivery of such programmes also has the potential to develop new skills and create employment, as well as improving health and well-being of households. SEPA therefore welcomes the extent of the overall commitment to improve home energy efficiency.
- 2.2 The sector poses a particular challenge in that emissions are the result of a huge number of individual decisions on how energy is used by Scotland's 2.37 million households.
- 2.3 The RPP2 highlights however that there are a number of schemes on offer with a range of criteria, a mix of loans and grants, targeted at different parts of the housing sector from different administrations. This complexity could serve to reduce the schemes' overall effectiveness. A 'single-door' approach operating like the Energy Assistance Package should be considered to overcome these complexities and secure emissions reductions.
- 2.4 A second challenge is that many schemes are now mature and have already 'picked the low hanging fruit'. Lessons from the waste reduction programme suggest that securing further reductions in emissions is therefore likely to be progressively more challenging and potentially more expensive.

3. Smart Meters

- 3.1 The roll-out by energy suppliers of smart meters is required by end-2019. New generation smart meters are available right now and which can help achieve further emissions reductions by enabling greater control and providing information on efficient energy use. This has been confirmed by trials of meters with 'In Home Displays' (IHDs). There is an opportunity therefore to require the newest technology smart meters to be installed that maximise the efficiency savings that could be realised.
- 3.2 The Scottish Government should consider supporting financially the up-rating of the requirement in Scotland - for example all new-build housing should install new generation smart meters. This would yield co-benefits in terms of reducing energy costs and helping to address fuel poverty as well as enabling emissions reductions.

4. Transport

- 4.1 SEPA welcomes the intention to decarbonise and electrify transport since this sector represents one of only two where emissions have increased.

- 4.2 The measures to support the use of electric vehicles (e.g. by installing a network of vehicle charging points) and to support the use of hybrid buses are welcome. There is however a high level of dependency on new vehicle technologies and supporting EU legislation. Policies and proposals in RPP2 for transport are calculated to provide a significant 14.58% of the total emissions reductions in 2027 (see Table 2 below), yet great reliance is placed on the emergence of new vehicle technologies which may or may not deliver effectively. Compensatory measures should be available in the event of slower take-up or availability of these technologies. In addition there is no reference to road building schemes (the second Forth Crossing, dualling the A9 and the Aberdeen Western Bypass Route), where such investment is likely to result in increased traffic and emissions and therefore pose a risk to the programme. The impacts of these should be taken into account when considering the overall emissions reductions.
- 4.3 In terms of modal shift, rail investment has the potential to reduce car use and to provide other economic and social benefits. This will also bring related air quality benefits. Rail electrification can offer increasing emission reductions as the grid is decarbonised. High-speed rail to England has further potential to reduce emissions by reducing short-haul flights.
- 4.4 The role of transport is closely connected with land-use planning. Land-use planning is a key enabling mechanism; land use decisions influence the GHG emissions from a number of sectors. In our evidence to the Local Government and Regeneration Committee we argue that the land-use planning system should be placed on a stronger footing to support and deliver actions to achieve the Climate Change targets.

Table 2

Transport Abatement (by Emission Saving)

This shows delivery measures by 2027 exceeding 500ktCO₂e annually (from both policies and proposals) by sector extracted from Annex A of RPP2. (Po) denotes policy; (Pr) denotes proposal

Sector	Estimated abatement ktCO ₂ e	Change from 2013 ktCO ₂ e	%age of Target*
Decarbonising Vehicles (Po)	1,727	+1,570	7.69
Decarbonising Vehicles (Pr)	798	+797	3.55
Lower Emission Potential in Transport (Pr)	750	+750	3.34
Transport measures	3,275	3,117	14.58

* Target emissions savings for 2027 are 22,449,000 CO₂e from 2012

5. Procurement

- 5.1 Moving towards sustainable procurement has the potential to yield a range of co-benefits – economic, employment, environmental and community. We would support moves to ensure that public sector procurement effectively evaluates and takes into account the carbon impacts of the products and services being procured. Doing so would not only help to drive down emissions (by making carbon equal to cost as a key feature in whether a tender will be successful or not), but could also lead to positive economic benefits (for the local food and drink sector for example). Public bodies could report on sustainable procurement as part of their required reporting under the Climate Change (Scotland) Act Public Bodies' Duties.

6. Scottish Water

- 6.1 Increasing environmental standards do not necessarily have to be associated with increasing emissions from wastewater treatment works (WwTw). There are a large number of source control projects being implemented by Scottish Water (SW), some with SEPA as partner, which should reduce carbon emissions, pollution and costs:
- Sustainable land management – working with land managers to reduce run-off of priority substances into raw drinking water
 - Study of feasibility of removing lead communication pipes to enable tap orthophosphate dosing (used to reduce plumbosolvency) to be halted (this represents 10% of the phosphorus load entering WwTW)
 - Phosphorus from detergents is estimated to have reduced to 7% of the phosphorus load entering WwTW and is anticipated to reduce to near zero by 2015.
 - In partnership with Scottish Water and others, SEPA is exploring a range of options for addressing both climate change mitigation and adaptation for the water industry.
- 6.2 Information on the carbon benefits, barriers to implementation and risks associated with the above options are now becoming available through the completion of the SR10 climate change studies, all of which will be complete by 2014. It is hoped that implementation of some of these options will provide win-win solutions that both deliver on the targets set in the Climate Change (Scotland) Act 2009 as well as meet the requirements of the Water Environment Water Services Act.
- 6.3 SEPA and SW are also supporting innovation technology where it can help to reduce GHG emissions. These are being pursued through the 'Hydro-nation' agenda at a national level and include investigating the feasibility of developing a water innovation park to test new technologies to aid their market uptake.

SEPA's Actions on Climate Change

We have committed corporately to embed climate change into all that we do. These commitments are identified and delivered annually through our [Annual Operating Plans](#) and are supported by a Climate Change Plan (CCP) and by our new [Corporate Plan](#) which has climate change as one of its four key outcomes².

Our five year CCP provides the framework for delivering on climate change actions across the business. Annual action plans set out the deliverables for each year. A new CCP is currently being prepared and is being designed to deliver actions to support SEPA's climate change vision:

"We will do everything in our power to help Scotland address climate change to ensure Scotland's environment, economy and communities flourish."

Last year, we published our [first report of actions](#) to meet our responsibilities under the Public Bodies' Duties³. We intend to report annually on our actions and progress from now on.

We have set a target to reduce our greenhouse gas emissions by 42% by 2020 from 2006 levels. By [April 2012](#) we had reduced our emissions by 11.7% and by some 19% from their peak in 2007/8.

SEPA
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² SEPA Outcome 3 - "Scotland is preparing for a sustainable future and is taking steps to limit climate change".

³ Part 4 of the Climate Change (Scotland) Act 2009 places duties on public bodies relating to climate change. The duties require that a public body must, in exercising its functions, act:

- in the way best calculated to contribute to delivery of the Act's emissions reduction targets;
- in the way best calculated to deliver any statutory adaptation programme;
- in a way that it considers most sustainable.