

### **SPICe Briefing**

# RPP2 and Scotland's Climate Change Targets

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The Scottish Government published "Low Carbon Scotland: Meeting our Emissions Reduction Targets 2013-2027: The Draft Second Report on Proposals and Policies" on 29 January 2013. The document is often referred to as RPP2. This SPICe Briefing considers some key questions raised by the report, including how it responds to statutory requirements under the Climate Change (Scotland) Act 2009.



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### INTRODUCTION

The Climate Change (Scotland) Act 2009 set statutory targets for emissions reductions in Scotland, from baselines of 1990 or 1995 levels for key greenhouse gases. These targets are

- 42% reduction by 2020;
- 80% reduction by 2050.

According to the Scottish Government (2013a) the 2020 target now equates to a 43.66% reduction in emissions, due to changes and improvements in how the baseline figures were calculated.

The 2009 Act further requires the Scottish Government to periodically produce a plan outlining how it will hit the climate change emissions reduction targets. Such plans are required after the Parliament has approved batches of annual targets, and should contribute to meeting the overarching 2020 and 2050 targets.

The first version of this plan, "Low Carbon Scotland: Meeting the Emissions Reduction Targets 2010-2022: The Report on Proposals and Policies" (Scottish Government 2011), often known as RPP1 was published in 2011, after scrutiny of a draft by the Scottish Parliament Transport, Infrastructure and Climate Change, and Economy, Energy and Tourism Committees (Scottish Parliament 2010).

The second iteration of the plan, known as RPP2 was published in draft form on 29 January 2013. Its long title is "Low Carbon Scotland: Meeting our Emissions Reduction Targets 2013-2027: The Draft Second Report on Proposals and Policies" (Scottish Government 2013a), and it was published together with a Technical Annex (Scottish Government 2013b). The same day the Scottish Government announced a related new target to "decarbonise" the power (electricity) sector (Scottish Government 2013c). On 29 January, the Scottish Government also published an "Outline for a draft heat vision" (Scottish Government 2013d). RPP3 is due in 2016 and will follow Parliamentary approval of targets for 2028-2032.

"Decarbonisation" is a term often used in relation to the electricity sector to describe the use of lower greenhouse gas emitting electricity sources. RPP2 uses it with regard to many other sectors, and the term is used throughout.

The Climate Change (Scotland) Act 2009 explicitly sets out what is expected from all reports on proposals and policies. It states that such reports must in particular, set out:

- the Scottish Ministers' proposals and policies for meeting the annual targets;
- how those proposals and policies are expected to contribute towards the achievement of the interim target, the 2050 target and, in each target year, the domestic effort target;
- the timescales over which those proposals and policies are expected to take effect.

The reports must also set out the Scottish Ministers' proposals and policies regarding the respective contributions towards meeting the annual targets that should be made by: energy efficiency; energy generation; land use; and transport. The report must also explain how the proposals and policies set out in the report are expected to affect different sectors of the Scottish economy.

Crucially, the second and each subsequent report (and so the RPP2):

- must<sup>1</sup> contain an assessment of the progress towards implementing proposals and policies set out in earlier reports;
- may make such adjustments to those proposals and policies as the Scottish Ministers consider appropriate.

RPP2 is therefore required to set out a clear framework for hitting Scotland's annual emissions reduction targets from 2013 to 2027. According to the <u>most recent figures</u> (Scottish Government 2012a):

"Since 1990, emissions from transport (excluding international aviation and shipping) have increased by 0.2 MtCO2e (2 per cent). Residential emissions also saw an increase of 0.2 MtCO2e, a 3 per cent increase since 1990. The largest absolute reduction was for the business and industrial process sector at 5.3 MtCO2e, a 40 per cent reduction, mainly as a result of the closure, in 1992, of Ravenscraig iron and steel plant and the relocation, in 1995, of a site manufacturing nitric acid from Leith to Ireland.

In terms of overall trends, according to Audit Scotland (2011):

"Scottish emissions have reduced by more than a quarter since 1990. They must continue to fall at a similar rate between 2009 and 2020 to meet statutory targets".

The Parliament has 60 days from the laying of the document to undertake scrutiny. Four committees are taking written and oral evidence on RPP2 – all will produce individual reports. More on this can be found in a Parliament press release (Scottish Parliament 2013).

The continued scientific context for this is continued evidence of climate change. For example, The World Bank (2012) recently warned that the world is on track to a "4°C world" marked by extreme heat-waves and life-threatening sea level rise.

### **KEY QUESTIONS ARISING FROM RPP2**

This section of the briefing considers some key questions arising from RPP2.

### WHAT IS THE DIFFERENCE BETWEEN POLICIES AND PROPOSALS?

The RPP2 defines a **policy** as a course of action which has been wholly or largely decided upon. In many cases finances will have been committed and/or legislation and timescales will have been established. A **proposal** is a suggested course of action. Some proposals are set to become firm policies once development work is completed or financial resources allow. The document also includes **supporting** or **enabling measures**.

RPP2 is not always clear on which proposals are anticipated to become firm policies. Perhaps more understandably, many of the proposed actions from 2023-2027 are vague in their wording. Critically, the document, as presented, makes it a challenge to assess what changes have been made between RPP1 and RPP2, for example in terms of which proposals have become policies (and vice versa), which have been modified, and which are entirely new.

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<sup>&</sup>lt;sup>1</sup> SPICe bold

### WHAT PUBLIC CONSULTATION WAS THERE ON DEVELOPMENT OF RPP2?

#### RPP2 states that:

"We will consult, we will listen, and we will continue to learn from households, communities, non-government organisations, public sector partners, and business and industry as we adapt to new ways of doing things".

The RPP2 draft appears to have been developed following two formal stakeholder workshops with no public consultation. It is unclear how else interested parties have been involved in development of the document. However the Scottish Government is allowing public comment during the 60 day period available for Parliamentary scrutiny. The document itself, however, makes no reference to this opportunity to comment.

### AS STATUTORILY REQUIRED, DOES RPP2 ADEQUATELY REPORT ON PROGRESS SINCE RPP1?

Both RPP1 and RPP2 seek to do the same thing – plan short, medium and long term actions and potential actions to hit Scotland's emissions targets. It therefore seems reasonable to seek to read across from one document to the other.

The Climate Change (Scotland) Act 2009 states that RPP2:

"must contain an assessment of the progress towards implementing proposals and policies set out in earlier reports"

It is open to interpretation whether the document adequately meets these requirements – certainly RPP1 included tables which allowed the reader, at a glance, to assess what was being discussed, whether it was a policy or proposal, abatement potential, and, in some cases, cost. RPP2 includes, information of this type for some sectors in the Technical Annex, but the document is not laid out as consistently as RPP1.

It is not particularly easy to assess progress against RPP1 – however this says something about presentation of the document as well as the information on policies and proposals contained therein. It should be noted that the Technical Annex does contain more detail for some subject areas, but not all. The publication of related documents on the same day as RPP2 makes assessment and scrutiny of the document more complicated – this is similar to what happened the day of the publication of RPP1.

SPICe has analysed progress between RPP1 and RPP2 in relation to housing and energy efficiency as this is one policy area where some more detailed information has been made available. This is not the case for many other policy areas, and having examined the documentation, SPICe conclude that we could not provide any detailed breakdowns for some critical sectors, most notably transport.

The analysis for housing can be found at Appendix A of this SPICe briefing – such detail for all policy areas would make RPP2 easier to digest and interpret. The SPICe analysis includes:

- Table 1: Policies to reduce emissions from Homes and Communities;
- Table 2: Proposals for reducing emissions from Homes and Communities:
- Table 3: Supporting and enabling measures for reducing emissions from Homes and Communities;
- Table 4: Measures being replaced in 2013;

• Table 5: Measures present in RPP1 not referenced in RPP2.

Appendix B shows abatement curves for policies and Appendix C shows abatement curves for proposals in Homes and Communities. Tables of this type in RPP2 could have helped understanding of the impact of policies and proposals.

### ARE THE PRINCIPLES OF SUSTAINABLE DEVELOPMENT EMBEDDED IN RPP2?

Whilst the environmental imperative to deal with climate change has long been recognised by the Scottish Government, the Ministerial foreword to RPP2 states that in addition:

"[...] it is vital to address the very real economic and social impacts of climate change on present and future generations

RPP2 makes reference to sustainable development principles in general terms, however it is harder to assert how these are actually integrated across policies and proposals. It is not reported how the principles have been applied as policies or proposals have been developed within the Scottish Government. It is equally unclear as to what structures and mechanisms the Scottish Government have put in place to ensure that these principles are adhered to as the policies and proposals are implemented.

### HOW DOES RPP2 LINK TO THE GOVERNMENT'S ECONOMIC STRATEGY?

RPP2 refers back to the Scottish Government's September 2011 Economic Strategy, but also specifically references the earlier Low Carbon Economic Strategy for Scotland (Scottish Government 2010). This seems to indicate that the earlier document remains live. RPP2 states "there is a sound economic basis for our actions" and that support for the low carbon economy is "provided through five channels". In fact the document then references six:

- Long term legal and institutional certainty;
- Expanding renewable energy production;
- Improvements in energy and resource efficiency in households and industry;
- Transition of transport to a lower carbon basis;
- Expansion of renewable sources of heat;
- Sustainable land use.

## HOW DOES THE DOCUMENT INCORPORATE THE STATUTORY REQUIREMENT TO REPORT ON HOW THE SCOTTISH GOVERNMENT WILL RESPOND TO THE MISSED 2010 ANNUAL TARGET?

The Climate Change (Scotland) Act 2009 requires that, where an annual emissions target is missed, the Scottish Government must report to the Parliament setting out proposals and policies to compensate in future years for the excess emissions.

Rather than publish a separate document for this purpose, the Scottish Government uses RPP2 to seek to fulfil this function. The document includes five paragraphs on the missed target, indicating that missing the target was disappointing, but that the long term trend remained down. This section of the document gives no detail on what policies or proposals have changed to respond to the missed target. Instead the report suggests considering the document in the round and that "the collective emissions abatement potential of the package of proposals and

policies in this report is such that the additional emissions in 2010 will be recovered over the period of RPP2".

It is therefore difficult to assess what new specific policies or proposals, or change to policies or proposals, have resulted from the 2010 missed target.

### DOES THE SCOTTISH GOVERNMENT CONSIDER RPP2 WILL DELIVER?

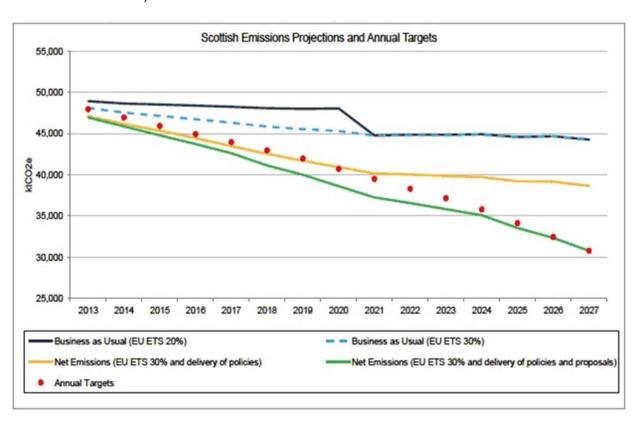
RPP2 states that recent figures and projections make "the targets set under the Climate Change (Scotland) Act 2009 more difficult to achieve", however the document says:

"The package of proposals and policies set out in this draft RPP2 has the potential to deliver emissions abatement that would meet all of the annual targets set to 2027 in circumstances where the EU strengthens its Emissions Trading System in line with an EU-wide emissions reduction target of 30% for 2020".

A key word in the statement above is "potential", and it is important to note the reliance on political agreement at EU level for a 30% emissions reductions target – the current target is 20%.

The graphical representation in chart 2.2, reproduced below, maps how emissions would reduce based on a 30% EU reduction against delivery of policies, and against delivery of policies and proposals. This shows that full implementation of all policies and proposals, under a 30% EU emissions target, will see Scotland's targets hit in 2027. Implementation of policies alone will see the 2027 target missed.

Figure 1 - Projected emissions and annual targets with EU 30% Emissions Cap (Scottish Government 2013a)



This chart from RPP2 does not include representation of the situation if the EU target remains at its current level of 20% emissions reductions by 2020. It is unclear why this information is not included as the figures are available in Annex B – these show that the 2027 targets would be hit by the same margin under a 20% EU target as under a 30% reduction – whilst this might seem confusing, the difference is that the trajectory of emissions varies between the 2 scenarios – that is there are more savings in the years up to 2019 under the 30% EU emissions target.

The Scottish Government seems confident that with the 20% EU target it could reach its commitments after 2027, but the picture is a lot less clear up to 2020. Under every scenario in Annex B of RPP2, except a 30% EU target and full implementation of all RPP2 policies and proposals, the interim target in 2020 appears to be missed.

RPP2 states that, with a lower European Union target:

"our proposals and policies could still meet all of the targets after 2020 as the energy generation sector decarbonises".

In addition, RPP2 states that the 2020 target now equates to a 43.66% reduction in emissions, due to changes and improvements in how the baseline figures are calculated. This is significant as it suggests that the level of effort will have to be further increased. This issue requires more exploration.

More generally, RPP2 seems to build in flexibility:

"we are developing policies and proposals in an adaptive way, one which sets a clear direction and yet is sensitive to the fast changing operating context in which we compete. This draft RPP2 attempts to balance the need for a long term credible plan to meet our emission targets with the need to remain flexible to change".

### WHAT ARE THE 20% AND 30% EUROPEAN UNION TARGETS REFERRED TO IN RPP2?

At the moment, the European Union is committed to reducing emissions by 20% by 2020 – this is in line with international commitments under the Kyoto Protocol – and these are on target to be met. The European Union has set out its stall as a leader on the international stage with regard to leading negotiations on a global deal on reducing emissions. Many Members States (as well as the Scottish Government) are calling for the European Union to set itself a target of reducing emissions by 30% by 2020. The European Commission is expected to set out emerging direction on this later in 2013, but more generally this is important as the cap set for the traded sector (see below) under the European Union Emissions Trading System (EU ETS) is linked to how ambitious overall EU targets are.

### WHAT ARE THE "TRADED" AND "NON-TRADED" SECTORS?

The EU ETS is designed to try and ensure emissions are reduced, across the most polluting installations, where it is cheapest for this to happen. This system involves the use of a decreasing amount of available credits, directly linked to the amount of emissions allowed across the EU (for those installations involved). The amount of credits can be related to overall EU emissions targets.

The "traded sector" therefore, relates to those sectors involved in the EU ETS (for example fossil fuel electricity generating stations, or energy intensive industrial plants). All other activities

are described as being in the "non-traded" sector (examples include residential, transport, agriculture).

As an EU-wide scheme, the Scottish Government has less control over where emissions can be reduced in the traded sector, but the way in which emissions from Scotland are calculated does reflect this. More detail on this can be found in Section 2.7 of RPP2.

The price for credits (often known as the carbon price) is less than had been hoped, and this has led to less of an incentive for high emitters to act. This situation is recognised as a fundamental issue, and RPP2 states that Scottish Government officials are working with the UK Government to engage with the European Commission to achieving reforms to make the carbon price more effective.

### HOW DOES THE DOCUMENT CONSIDER CONSUMPTION BASED EMISSIONS?

The core data in RPP2 relates to production based emissions (i.e. those produced in Scotland). Consumption based emissions are those emissions attributable to goods and services consumed in Scotland – so, for example, a television produced in China but imported and purchased here will have emissions associated with it that occurred in China, even though it is consumed in Scotland. The theory behind considering consumption is that developed countries should take some responsibility for the emissions produced elsewhere to provide goods and services consumed – this was recognised in, and reporting on it is required under, the Climate Change (Scotland) Act 2009.

#### RPP2 states:

"We have avoided developing policies or proposals that would result in a transfer of emissions to other countries rather than a genuine reduction. For example, decreasing the numbers of Scottish livestock would be unlikely to affect the amount of meat consumed in Scotland, and would therefore result in meat being imported with emissions overseas".

RPP2 does not document how such calculations have been made in relation to specific policies or proposals. The Scottish Government is required to publish detailed reports on consumption based emissions for every year from 2010-2050, and it may be that such a document, expected reasonably soon, will contain such information.

### **HOW DOES RPP2 CONSIDER BEHAVIOUR CHANGE?**

Section 3.5 of RPP2 recognises and discusses the importance of understanding and influencing behaviour as one of five cross-cutting "themes of transformation". The document gives a useful analysis of the issue, including case studies from Scotland and abroad, but does not outline any policies or proposals. It could be presumed that some policies and proposals elsewhere in the document relate to this theme, but that is not obvious from reading this 10 page section of the document. Furthermore, RPP2 states that the Scottish Government will publish a Low Carbon Scotland: Behaviours Framework "while this draft is being considered by the Scottish Parliament". The Technical Annex states that "some of the policies and proposals are very much dependent on changes in consumer behaviour, which is a particular source of uncertainty", so the upcoming document should be useful in exploring this further, though it is unclear when during the process of Parliamentary scrutiny this will be published.

### DOES RPP2 INCLUDE INTERNATIONAL AVIATION AND SHIPPING?

There appear to be no proposals or policies for international shipping. On aviation, the European Union Emissions Trading System is referred to, correctly, as a key policy lever.

### HOW DOES STRATEGIC ENVIRONMENTAL ASSESSMENT LINK INTO RPP2?

Strategic Environment Assessment (SEA) is required in Scotland for all public plans, policies and strategies that could have a significant effect on the environment. The Scottish Government determined, in consultation with SEPA, Scottish Natural Heritage and Historic Scotland that the policies and proposals set out in RPP2 are likely to have significant environmental effects. They have prepared an <a href="Environmental Report">Environmental Report</a> (Scottish Government 2013e), which sets out the potential effects on, among others, biodiversity, air quality, soil, and human health. As required by the Environmental Assessment (Scotland) Act 2005, the draft RPP2 and the Environmental Report are open to public consultation. This is being undertaken in parallel with the 60-day period for Parliamentary consideration.

The SEA concluded that on the whole the policies and proposals set out in RPP2 are likely to have positive effects on the environment. The assessment concluded that as well as helping Scotland meet its climate change targets, it would benefit air quality, human health, water resources and biodiversity, as well as having potential to have positive effects on physical and mental wellbeing as a result of an improved environment. However, it highlighted potential adverse effects, largely as a result of infrastructure development, on biodiversity, water and landscapes. The Environmental Report noted that these would likely be mitigated at project level as policies are taken forward.

It is not clear from the Environmental Report how the SEA has been used to inform the development of the policies and proposals and what, if any, changes have been made as a result of the environment assessment.

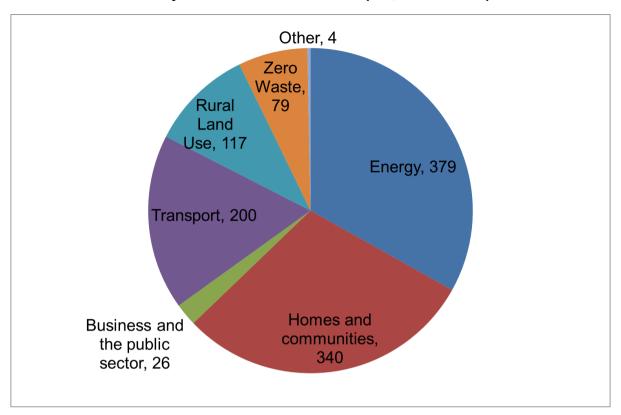
### ARE EQUALITIES ISSUES CONSIDERED IN RPP2?

No equalities impact assessment appears to have been published with RPP2 – certainly none is available on the main Low Carbon Scotland section of the Scottish Government website.

### THE FINANCIAL COSTS OF RPP2

The Government provides two sources of data on costs. Within the main document (Annex A), total costs for all areas of society (government, business and individuals) are projected through to 2027. The Government also provided an additional document "Details of funding for climate change mitigation measures" (Scottish Government 2012b) summarising the principal lines within the Scottish Government's budget and spending plans "which support the delivery of measures to reduce greenhouse gas emissions". The headline figures from this document are set out in Figure 2 below.

Figure 2: Summary of Scottish Government funding of climate change mitigation measures over three years 2012-13 to 2014-15 (£m, cash terms)



RPP2 includes estimates of the total financial costs to society of climate change mitigation measures, with an estimate of average costs of £1.6 billion per annum (though this does not include all costs). However the Government also estimates average benefits (such as from energy efficiency measures) of £1.2 billion per annum. The Government also cites the Stern Report which suggested that the economic costs of doing nothing about climate change would be a reduction in GDP of between 5% and 20%. For comparative purposes Scottish GDP at current market prices in 2011 (Scottish Government 2012a) was estimated at approximately £124 billion, 5% of GDP equating to £6 billion, and 20% equating to approximately £25 billion.

RPP2 identifies a number of possible sources of capital funding beyond 'traditional' direct government funding, including a variety of financing models, and a role for organisations such as the Green Investment Bank, the Scottish Futures Trust and the Scottish Investment Bank.

### **EFFICIENCY OF ABATEMENTS**

Annex A of RPP2 provides annual figures for total anticipated abatement of  $CO_2e$  and the anticipated total costs to society. Figure 3 below combines these two data sets (i.e. total abatement from policies & proposals divided by total costs of policies and proposals) and shows the amount of CO2e abated per £million for policies and proposals in each year.

18.0 
14.0 
12.0 
12.0 
Rural Land Use

Business, Industry & Public Sector

8.0 
Waste and Resource Efficiency

Figure 3: Value for money of Abatements

Figure 3 indicates that over time the amount of  $CO_2e$  abated for each million pounds of forecast spending is expected to increase (i.e. the cost is expected to decrease for each ktCO2e abated). There is also significant variation across the different sectors in the returns from anticipated expenditure

Homes and Communitie

2026

TOTAL

However, costs incurred in any individual year may be expected to accrue benefits in future years. If the on-going benefits from earlier investment could be stripped out, it might be that there is little or no change in the level of abatement per £1m. Investment in different policies and proposals will have differing rates of return in terms of CO<sub>2</sub> abatement, and this may go some way to explain the differences between sectors of the abatement per £1m. This could be an area for committees to pursue further.

### WHO PAYS?

4.0

2.0

0.0

RPP2 does not quantify the distribution of anticipated costs between groups such as government, business and individuals. However an impression of the level of government contribution can perhaps be gleaned by comparing the £411m the Government has budgeted for climate mitigation measures in 2013-14, with the £873m total costs of policies and proposals for 2013 in RPP2.

The Technical Annex describes in very broad terms who might be expected to meet the bill for several policies and proposals. For example:

• Fabric improvement and heating efficiency measures - assumes that the total costs of these measures will fall on government, consumers and energy suppliers

- Smart meter rollout costs expected to fall on consumers through higher energy bills from their energy supplier
- New building standards majority of additional costs expected to be borne by those funding the housing development – businesses and consumers. Scottish Government may face higher costs through social housing
- Carbon Reduction Commitment (CRC) Energy Efficiency Scheme organisations
  within the scheme facing administrative costs to comply, and having to 'pay for emissions
  where previously they did not'
- **Green Deal (non domestic buildings)** installation and financing costs to fall largely on those organisations 'benefitting from energy efficiency measures'. Administration costs to energy companies, expected to be passed on to consumers
- Improvements in Conventional Vehicles and Fuel Efficiency costs from meeting tighter standards expected to be borne by firms initially through additional R&D and product development spending, though expected that at least some of these costs will be passed on to consumers through vehicle purchase price
- Travel Planning costs of this programme expected to fall entirely on public sector
- **Zero Waste Plan** costs will mainly fall to the bodies that deal with waste as it comes through the system, the local authorities and/or their contractors who deal with household waste, and the commercial waste producers themselves
- Rural land use policies private costs (i.e. to farmers) relate to changes in input costs (fertiliser, labour, machinery) and changes in yields. Administration costs to government and the provision of direct support.

### APPENDIX A - ENERGY EFFICIENT HOUSING - COMPARISON TABLES RPP1 / RPP2

The tables below set out progress from RPP1 to RPP2. Direct comparison, although attempted, is not always possible as in many cases policies or proposals present in RPP1 have been updated or superseded in RPP2. Information is sourced from the Scottish Government RPP documents or website. Further information sourced from DECC or Energy Savings Trust.

Table 1: Policies to reduce emissions from Homes and Communities

Policy package and description	EU, UK or Scottish policy?	RPP1 Expected abatement (ktCO <sub>2</sub> e) in 2020	RPP2 Expected abatement (ktCO <sub>2</sub> e) in 2020	RPP2 Expected abatement (ktCO <sub>2</sub> e) in 2027	Progress since RPP1	Further information available from
Smart Metering and Better Billing 'Smart' meters are to be installed in every home by 2020 to encourage better household energy management.	UK	75	88	95	The roll out across the UK by energy suppliers will take place 2014 – 2019. Suppliers estimate that 5million meters will have been installed prior to official go live date.	Climate Change website:
Allows occupants and housing providers to install energy efficient measures without upfront costs. Payment will be recouped over time through energy bills. Green Deal will remain with a property if occupants move. Golden rule – estimated savings should always equal or exceed cost of improvements.  Green Homes Cashback  Aimed at increasing the activity around installations of energy	UK	No figures available	104 (aggregate with ECO)	132 (aggregate with ECO)	Introduced in January 2013. Complementary to ECO (below)  Cashback - SG offering up to £500 towards measures recommended in Energy Performance Certificate (EPC) or Green Deal assessment.  Can also claim up to £100 towards the cost of an EPC or Green Deal assessment One voucher per property.	Green Deal Initiative  http://www.greendealinitiativ e.co.uk/  Green deal Cashback  http://www.energysavingtrus t.org.uk/scotland/Take- action/Find-a-grant/Green- Homes-Cashback-Scheme

efficiency measures and creating confidence in the Green Deal Assessors market. £20m programme delivered during 2012 – 2013. Scheme run by Energy Savings Trust.						
Energy Company Obligation (ECO) I  Two elements - the Carbon Savings Obligation which saves carbon in hard to treat homes in low income / rural areas. Also the home heating cost obligation which requires energy companies to reduce heating costs for vulnerable consumers. Designed to provide financial support and complement Green Deal.	UK	No figures available	104 (aggregate with Green Deal)	132 (aggregate with ECO)		UK Govt.  https://www.gov.uk/governm ent/uploads/system/uploads/ attachment_data/file/65608/ 6968-energy-company- obligation-carbon-saving- community.pdf
National Retrofit Programme  Will refurbish or refit Scotland's older homes to make them more energy efficient. Save fuel bills, reduce emissions and create work opportunities. Area based – fuel poor areas identified by LA. £65m per annum from SG and power to leverage energy companies.  Includes	Scottish	No figures available	207	207	From April 2013 replaces the Energy Assistance Package, Universal Home Insulation Scheme and the Boiler Scrappage Scheme	Scottish Government website  http://www.scotland.gov.uk/Topics/Built- Environment/Housing/sustainable/Strategygroup/papers 4thmeeting/shsgnationalretrofitprog
Private Sector Landlord Cash Back Will contribute to the replacement of inefficient alliances and boilers. Scheme run by Energy Savings Trust.						

Warm Homes Fund Grants and loans to install renewable energy measures eg. Biomass, solar. Social Housing providers expected to use any income to improve condition of existing stock.	Scottish	No figures available	23	22	New fund launched late 2012. £50m budget.	Energy Savings Trust  http://www.energysavingtrus t.org.uk/scotland/Take- action/Get-business- funding/Warm-Homes-Fund
District Heating Loan Fund  Loans to support both low carbon and renewable technology solutions to a range of infrastructure issues.  Open to social landlords, SMEs and energy service companies.	Scottish	No figures available	36	36	2012/13 saw 3 demonstration projects. £5m allocated to scheme. District heating experts provided recommendations. SG to publish formal response in Spring.	http://www.energysavingtrus t.org.uk/scotland/Take- action/Get-business- funding/District-heating-loan- fund2
New-build domestic energy standards for 2010  Homes built to 2010 standards will have emissions 30% lower than those built to 2007 standards.	Scottish	132	76	142	See proposal for 2014 standard	Scottish Government website: http://www.scotland.gov.uk/T opics/ Built- Environment/Building/Buildin g-standards
Renewable Heat Incentive UK policy offering payments to those who install and obtain heat from renewable sources.	UK	318	78	80	Scotland developed a range of supporting action to increase deployment.	Department of Energy and Climate Change website:  http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/renewable/policy/renewable_heat/incentive/incentive.aspx

RPP1 TOTAL ABATEMENT FROM 685

\*Figures sourced from RPP1 p65 and RPP2 p163. Direct comparison is not possible as many policies have been updated or superseded between the two documents. An overall trend in terms of the full package of measures may be considered. However, it should also be taken into account that the trends in

HOMES AND COMMUNITIES POLICIES IN 2020\*(see caveat)

RPP2 TOTAL ABATEMENT FROM 612 HOMES AND COMMUNITIES POLICIES IN 2020\*(see caveat)

Table 2: Proposals for reducing emissions from Homes and Communities

Policy package and description	EU, UK or Scottish policy?	RPP1 Expected abatement (ktCO <sub>2</sub> e) in 2020	RPP2 Expected abatement (ktCO <sub>2</sub> e) in 2020	RPP2 Expected abatement (ktCO <sub>2</sub> e) in 2027		Further information available from
New-build domestic energy standards for 2014  Domestic building standards will be reviewed again for 2014, with the intention of improving them further to achieve a 45% reduction in emissions compared to 2007.	Scottish	92	22	55	Timetable slipped from 2013 and target reduction in emissions reduced from 60% to 45%  Policy would be implemented through the existing system of building regulations.  Likely to result in increased development cost for new homes.	Scottish Government  http://www.scotland.go v.uk/Topics/Built- Environment/Building/B uilding-standards
Regulation of energy efficiency in existing housing  The Climate Change (Scotland) Act introduced wide ranging enabling powers to introduce requirements to assess the energy performance of houses and to require action to be taken based on these assessments. Such regulation may be required to underpin emissions savings from proposals for fuel poverty and insulation programmes.	Scottish	No figure available	63	152	views on how and when to set minimum standards of energy efficiency for private housing. This will inform stakeholder working group to develop draft regs. Assumes a minimum standard for all private housing by 2018. (Ministers stated they will	

					Efficiency Standard for Social Housing that goes beyond the Scottish Housing Quality Standard. Consultation closed 28 Sept 2012. Scheduled for publication in the first half of 2013.	
National Retrofit Programme: Insulation and Heating Programme	Scottish	No figure available	33	167	Hope to roll out the NRP across all of Scotland.	Scottish Government website http://www.scotland.gov.u k/Topics/Built- Environment/Housing/sus tainable/Strategygroup/p apers4thmeeting/shsgnat ionalretrofitprog
Low Carbon Heat (Domestic)	UK	No figure available	99	609	N/A	Available from DECC  https://www.gov.uk/gov ernment/uploads/syste m/uploads/attachment data/file/48574/4805- future-heating- strategic-framework.pdf
Additional technical potential in fabric and energy efficiency  New techniques and technologies for example passive energy techniques and master planning	Scottish	No figure available	210	650	N/A	Detailed proposal in RPP3 on how to realise this
RPP1 TOTAL ABATEMENT FROM	413	+F.			DD2 n163 Direct	

\*Figures sourced from RPP1 p66 and RPP2 p163. Direct comparison is not possible as many policies have been updated or superseded between the two documents. An overall trend in terms of the full package of measures may be considered. However, it should also be taken into

**HOMES AND COMMUNITIES** 

PROPOSALS IN 2020\*(see caveat)

RPP2 TOTAL ABATEMENT FROM 428 HOMES AND COMMUNITIES PROPOSALS IN 2020\*(see caveat)

Table 3: Supporting and enabling measures for reducing emissions from Homes and Communities

Policy package and description	EU, UK or Scottish policy?	Policy or proposal?	Progress since RPP1	Further information available from
Energy Saving Scotland Advice Centre (ESSAC) network  Scottish Government currently funds the ESSAC network to provide advice and information to individuals and small businesses on energy efficiency, water efficiency, microgeneration and renewables, and they are also responsible for deliver programmes including HIS and EAP.	Scottish	Policy	Continuing	Energy Saving Trust website:  http://www.energysavingtrust.org.uk/scotland/Scotland-Welcome-page/Help-and-advice/Energy-Saving-Scotland-advice-centres
Energy Performance Certificate  New dwellings and existing dwellings on sale or rental must produce an Energy Performance Certificate (EPC) which assesses their energy performance. EPCs allow comparison of performance between dwellings and offer advice on cost-effective energy efficiency measures.	EU/ UK	Policy	Continuing	Scottish Government website:  http://www.scotland.gov.uk/ Topics/Built- Environment/ Building/Building- standards/profinfo/epcint ro
Scottish Housing Quality Standard  Local authorities have power to make owners in houses below tolerable standards to repair and maintain their properties; requires loft insulation (where possible).	Scottish	Policy	Continuing.  Positive upward trend. However 58% failed in 2011. Those that did failed on the energy criterion	SG Website  http://www.scotland.gov. uk/Topics/Built- Environment/Housing/16 342/shqs

Historic Scotland Climate Change Communications Pilot projects to improve energy efficiency in a selection of historic buildings with intention of providing technical guidance about how properties could be improved.	Scottish	Policy	Continuing. 7 case study papers published	Energy Efficiency Action Plan, section C2:  http://www.scotland.gov.uk/ Topics/Business- Industry/Energy/Action/energy-efficiency- policy/ActionPlan
Climate Challenge Fund  Fund empowering communities to come up with their own projects for reducing emissions.	Scottish	Policy	Continuing	Scottish Government website:  http://www.scotland.gov.uk/ Topics/Environment/climatechange/ ClimateChallengeFund

Table 4: Measures being replaced in 2013

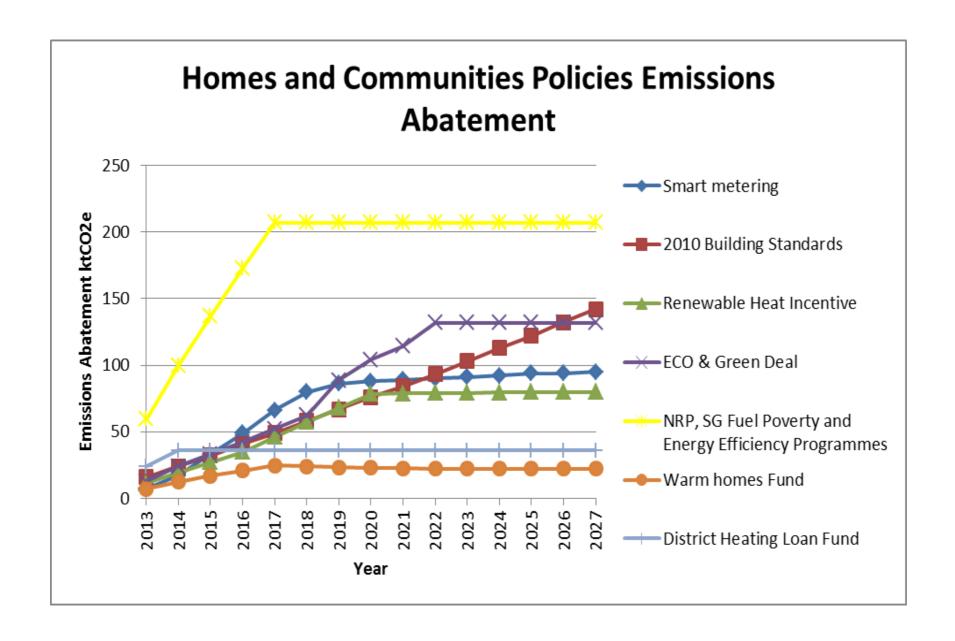
Policy package and description	EU, UK or Scottish policy?	Further information available from
The <b>Carbon Emissions Reduction Target</b> ( CERT) obligates gas and electricity suppliers to achieve emission savings by installing energy saving measures in people's homes, with a focus on low income/'priority group' households.	UK	Energy Saving Trust website:  http://www.energysavingtrust.org.uk/ Easy-ways-to-stop-wasting-energy/ Energy-saving-grants-and-offers/ Carbon-cuts-get-serious-with- CERT
The <b>Community Energy Saving Programme</b> ( CESP) Energy is a UK pilot programme under which suppliers provide a range of energy efficiency measures to domestic consumers in low income areas.	UK	Department of Energy and Climate Change website: <a href="http://www.decc.gov.uk/en/content/cms/what_we_do/consumers/saving_energy/cesp/cesp.aspx">http://www.decc.gov.uk/en/content/cms/what_we_do/consumers/saving_energy/cesp/cesp.aspx</a>
The <b>Energy Assistance Package</b> (EAP) is a four stage package of advice and upgrades for the least energy efficient/most fuel poor homes, supported by Scottish Government investment and accessing funding from CERT.	Scottish	Scottish Government website:  http://www.scotland.gov.uk/Topics/Built- Environment/Housing/warmhomes/eap
The <b>Home Insulation Scheme</b> (HIS) is a Scottish area-based scheme promoting and installing insulation and other energy saving measures, supported by Scottish Government and CERT funding. The Universal Home Insulation Scheme has similar aims is delivered by local councils and provides measures free of charge to households.	Scottish	Scottish Government website:  http://www.scotland.gov.uk/Topics/Built- Environment/Housing/warmhomes/uhis
Boiler Scrappage Scheme  Householders and private landlords can apply for a voucher towards the replacement of an inefficient boiler with an Energy Saving Trust	Scottish	Scottish Government website <a href="http://www.scotland.gov.uk/Topics/Built-Environment/Housing/warmhomes/boilerscrappage">http://www.scotland.gov.uk/Topics/Built-Environment/Housing/warmhomes/boilerscrappage</a>

Recommended model.		
Home Renewables Loans	Scottish	Energy Savings Trust
Provide support to individual householders to install renewable technologies. Available through the Energy Savings Trust. EST reports fund closing March 2013. However RPP2 says SG continues to fund.		http://www.energysavingtrust.org.uk/scotland/Take-action/Find-a-grant/Home-renewables-loan-scheme

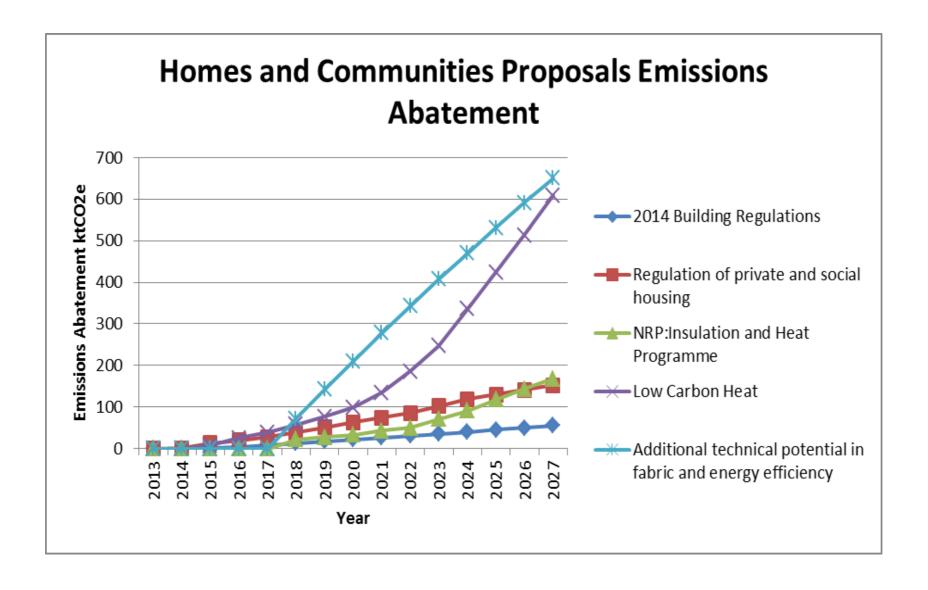
Table 5: Measures present in RPP1 not referenced in RPP2

Policy package and description	EU, UK or Scottish policy?	Policy or proposal?	Further information available from
Loans to landlords Private landlords can access Energy Saving Scotland Small Business loans to install energy efficiency measures.	Scottish	Policy	Energy Saving Trust Scotland website:  http://www.energysavingtrust.org.uk/ scotland/Scotland-Welcome-page/ Business-and-Public-Sector-in-Scotland/ Grants-loans-awards/Small-business- loans
Local Housing Strategies  Scottish Government will produce joint guidance with COSLA on local authority coverage of climate change in Local Housing Strategies.	Scottish	Policy	Energy Efficiency Action Plan, section C2: <a href="http://www.scotland.gov.uk/Topics/Business-Industry/Energy/Action/energy-efficiency-policy/ActionPlan">http://www.scotland.gov.uk/Topics/Business-Industry/Energy/Action/energy-efficiency-policy/ActionPlan</a>
Landlords' Energy Saving Allowance ( LESA)  Allows landlords to claim a tax allowance of up to £1,500 per property for energy efficiency measures fitted.	UK	Policy	Her Majesty's Revenue and Customs website:  http://www.hmrc.gov.uk/manuals/pimmanual/pim2072.htm

### APPENDIX B - ABATEMENT POTENTIAL FOR POLICIES - HOMES AND COMMUNITIES



### APPENDIX C - ABATEMENT POTENTIAL FOR PROPOSALS - HOMES AND COMMUNITIES



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