

# Committee on Climate Change

## Reducing Emissions in Scotland - 2015 Progress Report

Summary Briefing: April 2015

### Foreword

This summary has been produced by the Sustainable Scotland Network staff team at Keep Scotland Beautiful in order to provide a briefing on the report to SSN members, partners and colleagues. The Scottish Government funds Keep Scotland Beautiful to deliver the Sustainable Scotland Network, which supports public sector action on climate change and sustainable development. The Sustainable Scotland Network gave evidence to the Committee on Climate Change in January 2015. This was presented by SSN steering group Vice-Chair Chris Wood-Gee on behalf of the network.

### Background

The Committee on Climate Change (CCC) is an independent, statutory body established under the Climate Change Act 2008 that advises the UK Government and Devolved Administrations on emissions targets and report to Parliament on progress made in reducing greenhouse gas emissions and preparing for climate change.

The CCC produces an annual report on progress towards Climate Change goals. An important conclusion, for Scotland, in the current report is that there has continued to be good progress towards meeting ambitious greenhouse gas reduction targets, but that the Scottish Government will need to strengthen key policies to meet future targets.

### The CCC's Key messages:

- 1) The report confirms that the annual targets were missed (for the third time) and that emissions rose by 0.5% in 2012 from the previous year. This is largely attributed to increased heating demand and increased use of coal (UK/England via the grid).
- 2) Inventory changes have made legislated targets hard to reach (ie re-base-lining). The report states that targets probably would have been met otherwise.
- 3) It is recommended that the Scottish Government address the issue of inventory changes in relation to missing targets. (Further information about inventory changes can be found on page 3.)
- 4) Scotland continues to perform better than the UK as a whole.

- 5) Good progress has been made, and Scotland is leading the UK in a number of areas, particularly renewable electricity capacity, community and locally owned energy, and energy efficiency.
- 6) More action is needed, particularly on transport, renewable heat, agriculture, forestry and waste.

### Key Messages for the Sustainable Scotland Network:

- 1) Some specific key areas that seem to be lacking progress include:
  - a. Active travel - there has been no measured increase in active travel since 1990; the baseline year. Changes in active travel levels either need to be monitored better or changes are not occurring.
  - b. Reducing car use - the observed emission reductions made in the transport sector have largely been attributed to improved fuel efficiency in cars and the transition to electric vehicles (EV). There has been no real emission reductions observed as a result of decrease car use.
  - c. Energy efficiency - schemes have helped reduce energy demand and have had exceptionally quick uptake, however available funding and support runs dry very quickly and more resource needs to be put into these programmes.
  - d. Heating - progress in low-carbon heat is significantly lagging and pace on this needs to be picked up. There is an opportunity for Local Authorities and the public sector to lead progress in this area.
  - e. Waste regulations - although there is progress on reducing waste arising, compliance with 2012 regulations seems to be inconsistent (particularly among Local Authorities).
- 2) The CCC recognises that behaviour change needs to be a long term strategy. Short term funding for short term projects do not adequately address long term challenges and changes that need to take place. Longer term strategies need to be developed to ensure behaviour change goals are achieved.
- 3) Good progress towards climate change goals has been made and Scotland is leading the UK in a number of areas, particularly renewable electricity capacity, community and locally owned energy, and energy efficiency; however, scaling up of action is needed to meet future targets.

### CCC Recommendations for the Scottish Government:

- 1) Low-carbon heat
  - a. Review and address barriers within the public sector to ensure that opportunities for low-carbon heat are maximised (including access to finance, awareness, capacity and lack of knowledge and skills building).
  - b. Work with Local Authorities and community groups to promote and support low-carbon heat in households (such as the domestic Renewable

Heat Incentive, the Warm Homes Fund and Home Energy Scotland Renewables Loan).

- c. Further action to facilitate heat networks and consideration of district heating in new developments (specifically consider obliging local authorities to connect to existing heat networks where technically possible to provide anchor loads).

## 2) Energy Efficiency

- a. Evaluate current programmes to determine best for further development.
- b. New developments encouraged by CCC include: an effective scheme for multi-tenant properties; minimum efficiency in owner occupied and privately rented property; and making funding available for longer timescale to ensure complex energy efficiency projects can be undertaken.
- c. Policies need to target electrifying heat and low-carbon heat incentives.

## 3) Public Sector

- a. Extend Public Bodies Duties to include specific CO<sub>2</sub> reduction targets for Scottish Government owned buildings and consider the same for other public bodies.

## 4) Transport

- a. Encourage Electric Vehicle use by addressing non-financial barriers.
- b. Extend Smarter Choices Smarter Places.
- c. Consider further emissions reduction incentives (ie congestion charges; speed limits; air passenger duty) – pending devolution of power from the United Kingdom for the Scottish Parliament.

## 5) Agriculture

- a. Evaluate and expand working measures (ie Farming for a Better Climate)
- b. Develop nitrogen efficiency schemes to reduce fertiliser use and associated emissions.

## 6) Peatland

- a. Further action on peatland restoration and commitment to peatland restoration projects and policies

## 7) Forestry

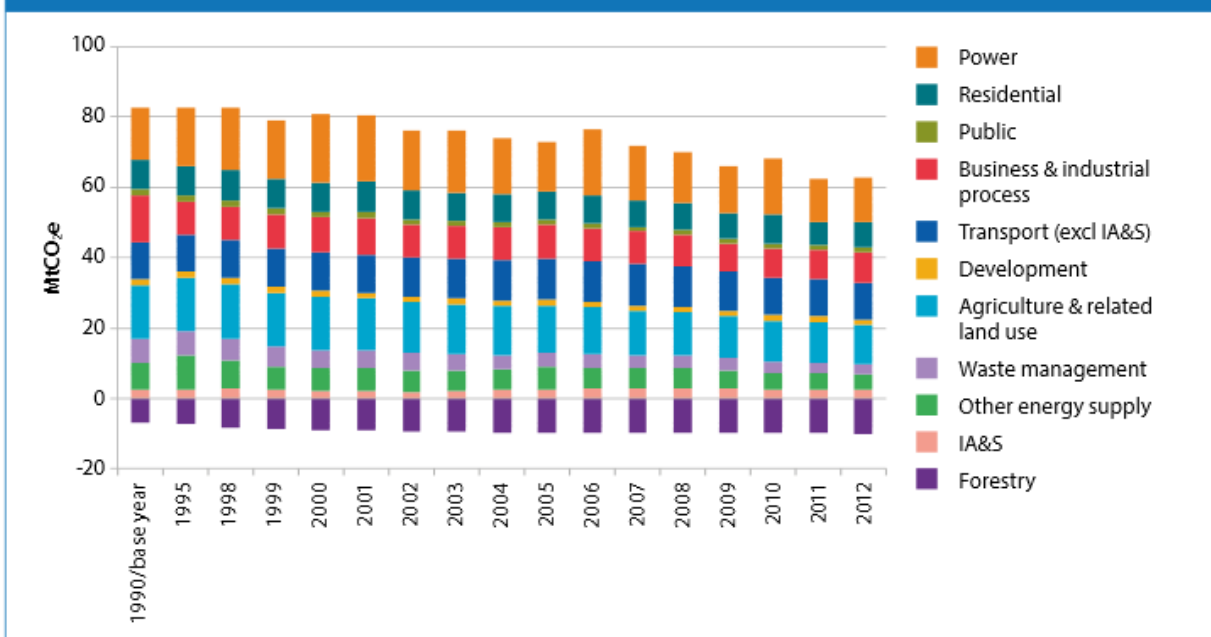
- a. Afforestation efforts should be increased.

## Emissions: target and trends

In 2012 emissions in Scotland rose in the residential sector, by the largest amount, and in the energy sector due to a small increase in coal use. Other small emission increases were also observed in transport, development, business and industry. These rises were partially balanced with emission reductions in international aviation, shipping, waste, agriculture and land use.

In 2011, inventory changes to reflect improvements in methodology for estimating greenhouse gas emission resulted in the 1990 baseline data being increased. Updates to baseline data account for a greater proportion of observed emission increases (and missed targets) in 2012 than emission increases themselves. CCC outlines two solutions for address inventory updates, either adjust targets or adapt to changes and find more opportunities for reductions.

**Figure 1.2: Scottish GHG emissions by sector (1990-2012)**



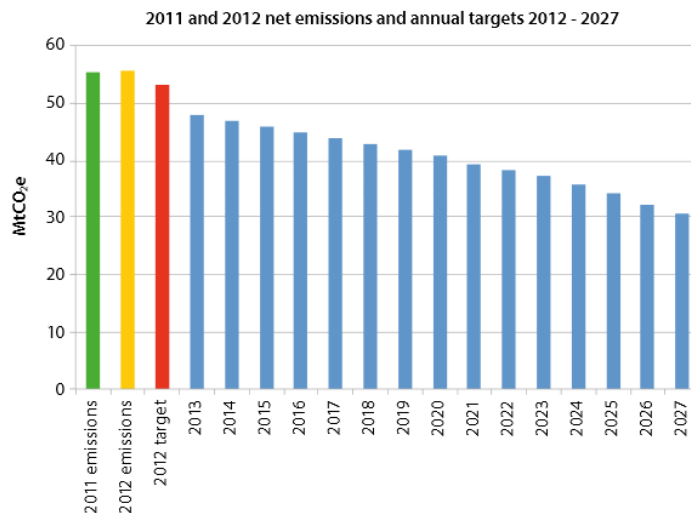
**Source:** NAEI and Scottish Government (2014)

**Note:** Emissions are presented here before accounting for trading in the EU ETS

**2014 Note:** As part of this release NAEI have revised all figures since the previous publication of data in June 2013, to incorporate methodological improvements and new data. Comparing the 2012 figures with the 2011 figures published a year ago will therefore give a different year-on-year percentage change; one which is incorrect and should not be used.

In 2012 Scotland produced 9.4% of total UK emissions. This is slightly higher than contributions to UK GVA (gross value added) and population, 7.7%. However, Scotland has a larger share of agriculture, 18% compared to 10.5% at a UK level, however does provide 56% of total UK carbon sink through forestation.

Overall, in 2012, Scotland's emission were down 29.9% from the 1990 baseline compared to 23.6% reduction in the UK as a whole.



## 2013 Changes

Scotland's annual target for 2013 is 48 MtCO<sub>2</sub>e. This implies a 14% reduction from 2012. While emission data are available at a UK level, we expect data relating to Scotland to become available in June 2015. CCC is planning to report on 2013 emissions data for Scotland and the other devolved administrations in their June 2015 progress report to the UK government.

Following are short summaries of progress made in preparing for Climate Change and towards emission reduction targets for individual sectors. All the most up to date data in each sector was used to assess progress.

## Energy Supply and Consumption

- Scotland is likely to meet the renewable energy target of 100% gross renewable electricity by 2020, and likely to meet the 50% renewable electricity target for 2015, and is likely to meet the local/community owned renewables targets.
- Progress on district heating has been committed to, but not renewable heating as outlined in the targets, and not enough to meet the targets.
- Grid transmission infrastructure needs to be improved to reduce losses through the grid.
- Some progress has been made on Carbon Capture and Storage (CCS): CCS is a necessity to justify any new coal stations.
- Not enough progress on renewable heat has been made. The 2012 target of 3.5% was missed by 0.5% and the current pipeline of projects shows that Scotland will miss the 2020 targets.
- Reduction of energy demand target is on track and should meet reduction of final energy demand target for 2020 by 2014.

- Energy supply remains the largest single source of emissions in Scotland (27%) and there are sufficient renewable projects in the pipeline to meet the renewable electricity target for 2020.

## Heat

- This aspect of energy is not currently on track.
- Local authorities and public sector need to play a bigger/exemplar role in installing low-carbon heat systems and district heating.
- There is a need to review barriers in the public sector; work with LA and community groups to promote schemes and incentives; facilitate and support further heat networks; and to consider further action like obliging LA's to connect to networks where possible.

## Homes and Communities

- Weather corrected data saw small reduction in domestic consumption. Energy efficiency and insulation support measures have good uptake and show good progress, but non cavity wall insulation still remains very low.
- There will be complications around the current electrical tariff if electrical heat consumption increases. The current tariff carries the costs of low-carbon investments, and a transition to electrical heat without adjustments to the tariff is likely to be more expensive to the consumer, potentially increasing fuel poverty.
- The report suggests that there should be changes in minimum energy standards and an increased focus on multi-tenant properties.

## Business and the Public Sector

- Business emissions are down by 37% and public sector emissions are down by 18% from 1990 (but both rose slightly in 2012).
- There are a range of policies targeting business and the public sector that have been introduced by various levels of government (EU, UK, SCO). Combined, these policies are administratively complex. It is suggested these be better rationalised in the future.
- Public bodies in Scotland are likely to be required to report on compliance with the Climate Change Act. It is hoped that this will improve data quality and ability to assess projects.

## Transport Emissions trends

Transport emissions in 2012 were 1% lower than 1990 and cars continue to be the largest source of emissions. The 11% decrease in emissions from cars since 1990 reflects improvements in efficiency and 'levelling off' of distances but NOT reductions in car use. Emissions from International Aviation and Shipping and Domestic Aviation has decreased but almost every other form of transport has increased.

Transport accounts for 21% of Scottish emissions and 37% of Scotland's non-traded sector emissions and if the Scottish Government is to reach total decarbonisation of the transport sector by 2050, much more work is to be done.

The report also points to the key role of Local Authorities in this, particularly in cycling plans, buses, travel planning, etc.

## Transport

- Development is currently ahead of CO<sub>2</sub> intensity interim targets for cars.
- EV sales have increased 245% in 2014, and development of a charge points network (with 50 mile intervals) is underway. Scotland has the highest use of EV's by Local Authorities in the UK.
- Smarter Choices Smarter Places has had some impact, though hard to measure, and needs longer term funding to ensure longer term behaviour changes.
- Active travel (cycling and walking) uptake remains low and well below targets. Active travel figures do not show much progress; total journeys by bicycle have remained at roughly 1% from 2003 to 2013.
- Low carbon bus initiatives are progressing.
- There is potential for devolved power around speed limits and air passenger duties. The report suggests that opportunities to use these measures to reduce emissions should be taken.
- The Scottish Government is currently developing Low Emissions Strategy, which initially proposes setting of Low Emissions Zones.

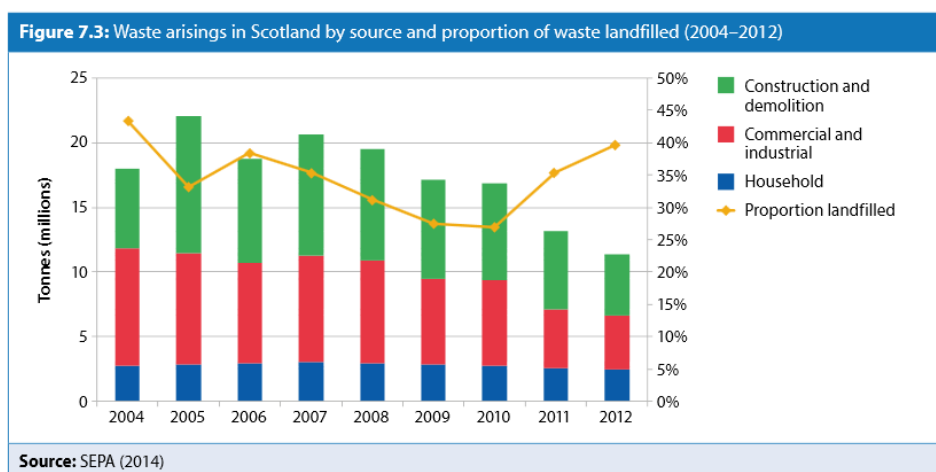
## Agriculture, rural land use and forestry

- Agricultural emissions are difficult to assess as monitoring is inconsistent and challenging.
- Land use emissions are mostly not CO<sub>2</sub>, they are 50% nitrous oxide and 42% methane. Soil emissions are 45% of emissions.
- Scotland is leading on understanding and measuring agricultural emissions but there still needs to be improvements made in data accuracy.
- Methane and nitrous oxide emissions have continued to fall from 1990 levels in 2012; by 17% and 23% respectively.

- Programmes to better manage land and associated emissions exist but monitoring of impact and adoption is poor and inconsistent. In general monitoring agricultural emissions at a national level is poor.
- Further peatland protection schemes and increased investment in peatland restoration and protection are due to come into place in 2015/16. This is in line with IPCC recommendations for wetlands.
- Afforestation is occurring, but it needs to take place at a much faster rate than it currently is to achieve 2020 targets.

## Waste

- In 2013 Scotland's Zero Waste Plan target of 50% reduction in waste was not achieved; 42% of household waste was recycled/ composted or reused.
- Compliance with the 2012 waste regulations is inconsistent. Dumfries & Galloway, Dundee city, Eilean Siar, Glasgow City, Orkney and Shetland all under performed with household recycling rates of below 30%. The household recycling rate in Clackmannanshire was 58.9% in 2013.
- The proportion of waste sent to landfill increased by 5% between 2011 and 2012. However this is balanced by a 3.5% decrease, in terms of total tonnes, sent to landfill.
- Landfill emissions are falling due to decrease in total waste, and work to capture/mitigate emissions.
- Significant reduction in the number of tonnes of waste sent to landfill from construction and demolition as well as from commercial industry has been observed between 2004 and 2012. Proportion of waste from household has remained consistent for the same time period.



For further reading, the full report is available [here](#). If you have any questions, please contact us at [ssn@ksbscotland.org.uk](mailto:ssn@ksbscotland.org.uk)