

**Monthly Report on Policy Developments - Energy and Climate Change
 End March 2015**

Purpose: This document provides a summary of recent key developments in policy and research relating to energy and climate change. It has been prepared by the ClimateXChange¹ Secretariat and is intended to keep Scottish Policymakers informed of issues relevant to the Scottish Government's Energy and Climate Change policy portfolio.

Climate Policy

1. Global CO² emissions 'stalled in 2014'

Data from the [International Energy Agency \(IEA\)](#) indicate that global emissions of carbon dioxide from the energy sector stalled in 2014, marking the first time in 40 years in which emissions stopped rising without an economic downturn. This led the IEA to suggest that global efforts to mitigate climate change may be having a more pronounced effect on emissions than had previously been thought.

The IEA attributed this 'halt' in emissions to changing energy generation and consumption patterns in China and the OECD.

2. Research challenges UK Government's measurement of carbon emissions cuts

[Research by the University of Leeds](#) challenged the methods used by the UK Government to calculate national greenhouse gas emissions. The research highlights the significance of 'consumption based' emissions associated with imported goods, which are not included in Defra's current calculations. It found that emission cuts of 194 tonnes CO²e between 1990 and 2012 were outweighed by a rise of 280m tonnes created abroad through the manufacture of goods imported to Britain. The authors recommended that Defra report both domestic and consumption based emissions in the future.

3. Nicholas Stern-led report finds climate summit commitments won't achieve 2°C target

A [report](#) by the Grantham Research Institute on Climate Change concluded that the pledges likely to be made by nations at the Paris Conference of Parties this year will not be enough to minimise global temperature increases to 2°C. The research assessed the indicative pledges made by nations ahead of the conference and found that, even if pledges are met, global emissions in 2030 will total 55-56bn tonnes. This is well above the estimated median value of 26bn tonnes required to limit global warming to 2°C.

¹ [ClimateXChange](#) is Scotland's Centre of Expertise on Climate Change, supporting the Scottish Government's policy development on climate change mitigation, adaptation and the transition to a low carbon economy. The centre delivers objective, independent, integrated and authoritative evidence in response to clearly specified policy questions.

1. Science and Technology Committee urges UK Government to invest in long-term solutions to electricity resilience

The House of Lords Science and Technology Committee released the [findings of its inquiry](#) into the resilience of Great Britain's electricity system. It identified that consecutive governments have failed to adequately address a narrowing margin between electricity supply and demand. A subsequent need to procure additional capacity at short notice in 2014/15 came at considerable cost, and in a way which conflicts with the decarbonisation agenda.

The Committee recommended that the Government undertake the following actions to improve the resilience of the electricity system:

- Take a more rigorous approach to long-term planning, nurturing a range of technologies, including electricity storage, interconnection and Demand Side Response (DSR).
- Reassess whether it is procuring the right amount of capacity through the Capacity Market to offer an optimal cost-benefit balance to consumers.
- Increase the capacity of DSR through improved energy efficiency, the role-out of smart meters and adjusting Capacity Market conditions to ensure that DSR is not disadvantaged.
- Review the contribution that interconnection and industrial backup generation could make to capacity margins.
- Invest in R&D in electricity storage and improve the market framework to stimulate investment in electricity storage.

2. Carbon capture and storage essential for achieving emissions targets: Green Alliance

The think tank, Green Alliance, has claimed that carbon capture and storage (CCS) is the only technology available to decarbonise heavy industry to the extent needed to meet the UK's carbon targets. Drawing on [its own analysis](#), Green Alliance recommended three important steps that the UK Government should take to ensure an economically viable future for CCS:

1. 'Piggy back' industrial CCS clusters on existing CCS demonstration plants
2. Foster competition between different CCS technologies to bring the price down
3. Create a new funding mechanism for CCS

3. Study finds electric vehicles could reduce vehicle ownership costs by £8bn

A [study by Cambridge Econometrics](#) identified the financial and environmental benefits of switching to low carbon vehicles. The study found that decarbonisation of the UK's vehicle fleet by 2030 could result in:

- An £8bn reduction in overall vehicle ownership costs;
- Reduced exposure of the economy to volatile fuel prices; and
- A halving of emissions from passenger cars.

4. University of Leeds identifies opportunities for local electricity market

A [report by the University of Leeds](#) urged Government to support the development of the local electricity supply market. The report identifies the benefits of localised electricity supply to the electricity sector and consumers, and suggests that Government should act now to overcome existing market barriers. It finds that local electricity market services, provided through a range of business models, offer opportunities that national utilities are unable to capture. These include:

- Better routes to market for small scale and community electricity generators;
- Greater uptake of demand side management measures;
- Greater uptake of energy efficiency measures; and
- Re-localisation of energy value

The report proposes a set of short, medium and long term strategic activities that could be carried out at the national scale to foster this sector and help to realise as yet untapped opportunities in the energy market.

5. Cost of offshore wind energy fell by more than 10% since 2011

The cost of offshore wind energy fell by 11% over the past four years, according to the latest annual report published by the Offshore Wind Programme Board.

The board brings together representatives of the offshore wind industry, government and stakeholders such as the Crown Estate. It is tasked with delivering on the five priorities of the Offshore Wind Industry Council, set up as part of the government's wider industrial strategy.

[See report by Scottish Energy News for more details](#)

Environmental Audit – Assessment of UK Progress on Climate Change Adaptation

The House of Commons Environmental Audit Committee reported the findings of its enquiry into the progress being made under the UK Government's [National Adaptation Programme \(NAP\)](#).

The Committee recommended that:

- The next NAP (due in 2018) should provide more top-down strategic direction, with a spatial focus, measurable targets, more proactive adaptation policies and coordinated action.
- The UK Government should make a clear commitment to allow the Environment Agency to allocate flood defence funds according to objective cost-benefit model considerations, without 'reactive' political interference.
- The UK Government should require the Environment Agency to provide flood risk advice on all sizes of development, including small developments currently exempted. [Note: this is already the case for SEPA advice in Scotland.]
- The UK Government should support further research into critical network 'pinch-points' and interdependencies.
- The UK Government should consider making adaptation reporting a mandatory requirement for organisations managing critical infrastructure and services.

[See the full report here.](#)

ClimateXChange commentary:

The NAP covers England and reserved matters.

The Scottish Parliament's Rural Affairs, Climate Change and Environment Committee scrutinised the draft Scottish Climate Change Adaptation Programme (SCCAP) in November 2013. The final SCCAP was published in 2014 and the Scottish Government's first annual report to the Scottish Parliament is due in May 2015. Further scrutiny of Scotland's progress on adaptation will be provided in an independent assessment by the Committee on Climate Change's Adaptation Sub Committee in September 2016.