

Monthly Report on Research and Policy Developments - Energy and Climate Change

February 2017

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 [ClimateXChange](#) Secretariat and is intended to keep Scottish policymakers informed of issues relevant to the Scottish Government's Energy and Climate Change policy portfolio.

International Climate and Energy Research and Policy

Russia's National Climate Change Adaptation Strategy

Russia has started working on a [national climate change adaptation strategy](#), with ministries and regional officials asked to assess the risks of adverse impacts and possible adaptation measures. The strategy is due mid-2018. The Russian Government has also adjusted its 2020 climate change action plan, outlining extra risk assessment and adaptation needs for permafrost degradation, sea level rise, increased rainfall and extreme weather events. Russia has yet to ratify the Paris Agreement.

A Stress Test for Coal in Europe under the Paris Agreement

A [report](#) released by Climate Analytics explores the increasing disparity between EU member states in their approach towards the future role of coal. While some have significantly decreased their power production from coal in recent years and announced phasing out of coal completely, others are building or planning to build new coal-fired power plants. The report states that should existing coal-fired power plants continue their operation as planned, Paris Agreement-compatible carbon budgets will be exceeded by 85% by 2050.

Europe Set for Surge in Electric Vehicles

Yale Environment 360 have [reported in the Guardian](#) that with ambitious emissions-reduction targets, and support from government and the car industry, electromobility is on the verge of major expansion in Europe. The report explores Norway's electric vehicles (EV) initiative which began in the 1990s as an effort to cut pollution, congestion, and noise in urban areas. Now, the primary rationale is combating climate change. The report says that experts believe a new era in electromobility is dawning and that the Norwegian model is a sign of where European electromobility is heading. ClimateXChange has commissioned a case study on electric vehicle policy in Norway which will be published soon.

IEA Review of France's Energy Policies

The IEA, in its [latest country review of energy policies](#), has praised France for setting in motion significant reforms towards more secure, affordable and sustainable energy supplies and the green growth of its economy. France plans to reduce the share of nuclear to 50% in the electricity mix by

2025, as well as planning to support the growth of electric vehicles and variable renewable electricity.

IPCC Special Report on 1.5°C

The IPCC has [selected](#) the [team of experts](#) who will prepare the Special Report on *Global Warming of 1.5C: an IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty (SR1.5)*. The report is due to be finalised in September 2018, in time for the facilitative dialogue under the Paris Agreement taking place later that year. The authors are [meeting for the first time](#) in Brazil on 6-10 March 2017.

Reform of the EU ETS

EU member states have agreed to [reform](#) the emissions trading system (ETS) after almost two years of discussions, and two weeks after the European Parliament [voted in favour of a new directive](#). The purpose of the reform is to address loopholes in current legislation and concerns that emissions were not being sufficiently capped due to an oversupply of ‘allowances’ on the carbon market.

[Sandbag writes](#) that the Environment Council has endorsed more ambitious policy changes to the EU ETS than those agreed by the European Parliament. The ETS cap in 2030 will still be out of line with the commitments the EU signed under the Paris Agreement, but Sandbag welcome the introduction of limiting the Market Stability Reserve volume to the total number of allowances auctioned during the previous year; meaning a cancellation of potentially 3 billion tonnes – equal to almost two years of ETS emissions.

Energy and Climate Change in the Trump Administration

The US will [send delegates to the next round of international climate change talks](#) in Bonn in May, despite fears that President Trump will withdraw the US from the Paris Agreement. However, on a recent visit to the US, UNFCCC Executive Secretary Patricia Espinosa [has been unable to secure a meeting with the US state department](#) to discuss the commitment of the new administration to international climate targets. In an interview with [Carbon Brief](#), Ms Espinosa gave her views on what would happen if the US backslides on current commitments and pulls out of the Paris Agreement.

A group of prominent Republicans and business leaders from the Climate Leadership Council have released a [carbon tax proposal](#) entitled [The Conservative Case for Carbon Dividends](#). The group said they would meet with senior White House officials to present their proposal. The plan calls for a \$40 per ton carbon tax that rises over time, in which revenues are returned to Americans, via dividends, administered by Social Security. The plan would also call for rollback of the Obama Administration’s climate initiatives, including the Clean Power Plan, and border carbon adjustments.

The [Yale Program on Climate Change Communication](#) has used data from its most recent *Climate Change in the American Mind* survey to assess Trump voters’ views on climate change. They found that approx. half of Trump voters think global warming is happening and support a range of climate and clean energy policies, including: support for renewables; further research into clean energy; and, taxation.

UK Climate and Energy Research and Policy

House of Lords Energy Report

The House of Lords Select Committee on Economic Affairs has released its report [The Price of Power: Reforming the Electricity Market](#) stating that constant intervention by successive governments in the electricity sector has led to an opaque, complicated, and uncompetitive market that fails to deliver low cost and secure electricity.

The report, which states that successive governments have mistakenly prioritised carbon and emissions cuts over keeping costs down and ensuring energy security, has been met with significant criticism. A [blog](#) by Robert Gross, Director of the Centre for Energy Policy and Technology at Imperial College, disputes some of the key statements widely reported in the press from the report, and considers the evidence that was used by the Lords to develop their report.

Brexit and Energy Policy

BEIS has [published](#) evidence submitted to its inquiry, *Leaving the EU: negotiation priorities for energy and climate change policy*. The scope of this inquiry is to examine the implications of the UK's departure from the EU on the energy sector and the UK's national climate change commitments and determine which policy areas should be prioritised for continued cooperation during the exit negotiation process.

Imperial College London will host a discussion on [What has a decade of EU Emissions Trading Scheme delivered, and should post-Brexit UK remain a part?](#) on the 21 March 2017. Speakers include; Ian Duncan MEP; Adam Whitmore, Sandbag; and researchers from the Grantham Institute.

Researchers at the London School of Economics have [written](#) on the need for the UK to pursue a free trade agreement in low-carbon equipment with the European Union. The Government's White Paper states that the UK will not seek membership of the Single Market after it leaves the EU. It has said however that it will pursue 'an ambitious and comprehensive Free Trade Agreement'. The analysis by LSE shows how heavily the UK relies on low-carbon equipment from the EU and that without a free trade agreement post-Brexit, the cost of climate change mitigation in the UK will increase.

The Director of E3G, Jonathan Gaventa, has written in the Green Alliance blog on [How to keep up UK leadership on clean energy and climate after Brexit](#). The piece reflects on progress made by the UK in the development of clean energy and emissions reductions in recent years. Brexit raises questions around how this progress will be continued and the article explores how trade, investment, influence and accountability need to be ironed out in the negotiations.

UK Emissions Fell 6% in 2016

[Analysis by Carbon Brief](#) shows that the UK's CO₂ emissions fell 5.8% in 2016 after a record 52% drop in coal use. The 2016 reduction leaves UK CO₂ emissions 36% below 1990 levels, at 381 million tonnes in 2016; the lowest since the 1920s. The analysis is based on BEIS's energy use figures. BEIS will publish its own CO₂ estimates on 30 March 2017.

New Inquiry into Carbon Capture and Storage

The Public Accounts Committee has announced a [new inquiry](#) into Carbon Capture and Storage. The inquiry will explore previous attempts by the government to develop and deploy CCS in a session on the 22 March 2017.

UK Awards Contract for CO₂ Transport and Storage

BEIS has awarded a contract to [Pale Blue Dot Energy \(PBD\)](#) to review a range of ways to transport and store CO₂. PBD will review a variety of business models that have either been used successfully overseas or proposed for the UK.

UKERC Report on The Costs and Impacts of Intermittency

UKERC researchers have published an [update](#) to the 2006 systematic review of the costs and impacts of adding 'intermittent' electricity, such as wind and solar, into the electricity system. The 2016 report warns of the need to build much greater flexibility into the power system, if energy security is to be ensured, and spirally energy costs avoided.

UK Phase-Out of Coal

The government's [consultation](#) on the phase-out of coal by 2025 closed on 8 February 2017. Thirteen NGOs have signed a [statement](#) welcoming BEIS's proposal to place the coal phase-out into UK law and calling for the government to: bring forward the deadline for the coal phase-out to October 2023; change the capacity market to help transition from coal to clean energy; and, keep carbon price support in place until at least the last coal plant closes. The outcome of the public feedback on the government's consultation has not yet been published.

Climate Science, Impacts and Adaptation

European Perceptions of Climate Change Study

Two new reports have been published as part of the [European Perceptions of Climate Change Project: Survey Finding and Recommendations for public engagement](#). This project is led by Cardiff University in collaboration with academic teams from the UK, Germany, France and Norway, and Climate Outreach. The survey found that clear majorities in the four European countries involved in the study support using public money to prepare now for the impacts of climate change, to help developing nations cope with extreme weather, and to subsidise renewable energy sources.

Engaging the Centre-Right on Climate Change

Researchers at Cardiff University and [Climate Outreach](#) have published a [study](#) revealing that language around British low-carbon energy technologies, 'Great British Energy' and avoiding waste resonates strongly with people of right-of-centre political views.

Climate Outreach, along with the Climate Coalition, has also published a practical guide, [Public engagement with climate change post-Brexit: a centre-right perspective](#). The guide offers key recommendations for language to use and avoid when speaking with people of centre-right values

on climate change.

Biomass Subsidies Not Fit for Purpose

A [report by Chatham House](#) states that current biomass policy frameworks are not fit for purpose and require substantial changes to ensure they contribute to mitigating climate change rather than exacerbating it. The analysis outlines how policies intended to boost the use of biomass can inadvertently increase emissions by failing to account for emissions from burning wood in power stations and changes in forest carbon stocks.

Art School Climate Project

Researchers from Glasgow University and Glasgow School of Art are looking to work with local authorities to inform the development of a visualization toolkit to help councils engage with citizens on climate change. The [project](#) is planned to start in March 2017.