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

June 2018

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 <u>ClimateXChange</u> 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

Leaked IPCC report shows impact of 2° warming "substantially" more harmful than 1.5°

A leaked draft of a major UN report on climate change targets suggests that the "safe" limit of 2° warming would be substantially more damaging for humanity than limiting warming to 1.5°. The draft IPCC report, which is still subject to change before publication in October, compares the implications of warming at the two temperatures and concludes that the effects on communities, economies and ecosystems would be "substantially" more harmful under 2° of warming.

14 European countries call for stronger EU climate action

A group of European countries known as the 'Green Growth Group' has called on the European Commission to update the EU's pledge at the United Nation's next annual climate meeting in December this year, and chart a pathway consistent with a 1.5°C global warming scenario by 2050. The group includes France, Germany and the United Kingdom.

Renewables investment means half of power demand will be met by green energy by 2050

Analysis from Bloomberg New Energy Finance (BNEF) shows that renewable energy will provide at least half of global power demand by 2050, with the share of demand met by fossil fuels falling to 29% - less than half of today's share.

EU agrees energy efficiency and renewable targets

The European Union has agreed new targets for energy efficiency and renewable energy after months of talks. The new targets aim for a 32.5% energy saving and an increase in the share of renewable energy to 32% by 2030. The agreement has implications for the EU ETS with analysts at Thomson Reuters to cut their carbon price forecast for 2030 by 6 euros to 29 euros a tonne.

Increase of 50% needed in renewable investments to meet 1.5°

A new paper published in Nature shows that investment in renewable energy will need to increase by 50% if global temperature increases are to be kept below 1.5° compared with limiting warming to 2°. The researchers suggest that "actions consistent with an energy transformation would increase the costs of achieving the goals of energy access and food security, but reduce the costs of achieving airquality goals."

June 2018

Energy efficiency action could eliminate need for negative emissions

A new study indicates that limiting global temperature increases to 1.5° may be possible without the use of negative emissions technologies, if energy efficiency savings are maximised around the world. Study lead author <u>Dr Charlie Wilson</u>, a scientist from the <u>Tyndall Centre for Climate Change Research</u> called on policy makers to maximise energy efficiency actions; "Focusing on energy services and the energy required to provide those services is the single most important way of addressing climate change while raising living standards."

UK Climate and Energy Research and Policy

UK Committee on Climate Change progress report calls for stronger action

The UK Government's independent advisors on climate change have warned that strong progress in emissions reduction from the UK's power and waste sectors is masking inaction in transport, buildings, industry and land use. The Committee on Climate Change (CCC) report shows that emissions from industry and buildings rose this year, with CCC chair Lord Deben saying house builders should be "ashamed" of their climate record. Coming just days after MPs voted to approve a third runway at Heathrow, the progress report delivers a clear signal that there is "absolutely no more space" for aviation to emit more than its current carbon budget, and that the budget could be cut further under a net zero target.

The progress report also calls for a reintroduction of support for onshore wind and for an end to the chopping and changing of Government policies such as the feed in tariff, in order to support well-functioning renewables and low carbon markets. See this <u>twitter thread from CCC Chief Executive</u> Chris Stark for the Committee's key messages (complete with infographics).

UK Government faces day in court over lack of progress towards net zero target

A High Court hearing on Wednesday 3rd July will decide whether campaign group Plan B can take a case against the UK Government to a full trial. The case against the Government focuses on what campaigners call the "criminal and scandalous" lack of decision to set a net zero emissions target which Plan B says is essential in order for the Government to meet the terms of the Paris Climate Agreement.

New ClimateXChange research shows how public policy can encourage energy efficiency retrofit

Research by Niall Kerr and Mark Winskell from the University of Edinburgh's School of Social and Political Science considers the question: "How can public policy more effectively encourage private, 'able to pay' households to invest in energy efficient retrofit?". The review, produced for ClimateXChange, finds tensions between policy effectiveness (such as the energy or carbon saved)

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

June 2018

and policy efficiency (value for money) and suggests that a stable, long term policy package with a range of measures is likely to deliver against policy goals and value for money criteria.

Climate Science, Impacts and Adaptation

Free battery storage installation offered in exchange for revenues

Two UK-based companies are offering medium and large businesses the change to have battery storage systems installed at no upfront cost. Thrive Renewables and Aura Power will jointly install and manage batteries for energy users spending £500,000 a year or more on electricity —and will do so free of charge in return for a share of revenues. The companies estimate businesses with a 2MW battery could save more than £1 million over a 15-year contract.

New visualisation of Antarctic sea ice thaw

An international team of 80 researchers have found that the rate of thaw in Antarctica has tripled over the past decade. The study, published in the journal Nature, showed that Antarctica lost a total of 2.71 trillion metric tons of ice between 1992 and 2017. Half of these losses came in the past five years. The website Vox has produced a series of graphics which build on the report's findings and the BBC has in depth coverage of the report's findings here.

Seven photos that show the impact of climate change

Marie Claire has published seven photographs showing the devastating impacts of climate change on communities around the world, from Alaska to Borneo and from Somaliland to China.