

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

October 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 [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

IPCC report on 1.5°C calls for net zero CO₂ emissions by mid-century

The UN Intergovernmental Panel on Climate Change published its report on limiting global temperature increases to 1.5°C and 2°C above the pre-industrial era and examined the likely impacts of such levels of warming. The report considers what pathways countries can take to help meet the 1.5°C target and the extent to which the world is on track with existing commitments. [You can find the full report here](#) and a [summary for policy makers here](#).

Following the report's publication the Scottish Government, alongside the UK and Welsh Governments, [wrote to the UK Committee on Climate Change to request updated advice](#).

ClimateXChange Policy Director Professor Andy Kerr wrote about the report and what it could mean for Scotland. [Read his blog here](#). Carbon Brief produced [a useful Q&A](#) on all the key details from the report and [an interactive website](#) which highlights the key likely impacts of warming at 1.5°C and 2°C on people, wildlife and ecosystems.

Pension funds failing to identify climate risks

Research from the Asset Owners Disclosure Project (AODP) shows that, of the world's top 100 insurance companies, 90 of them are failing to align their policies and practices with the Paris Agreement. The AODP also found that climate-related risks are largely unidentified and unassessed by global pension funds. [See their report here](#).

Carbon Capture and Storage "progress not achieved" says European Court of Auditors

A report from the European Court of Auditors criticises a lack of progress in realising commercial scale Carbon Capture and Storage (CCS) across Europe. The special report examines how €3.7bn was spent over a ten year period, including through the European Energy Programme for Recovery (EEPR) and the New Entrants' Reserve (NER300). The report found that just one project is in operation as a result of the EEPR but it is not of a commercial size. [Read the report and its recommendations for future programmes here](#).

Energy efficiency alone could see emissions peak and fall says IEA

The International Energy Agency's latest report claims that a concerted global effort to roll out energy efficiency policies could singlehandedly lead to greenhouse gas emissions peaking quickly and then

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falling even as the global economy doubles between now and 2040. The report sets out a vision for 2040 with 60% more building space and 20% more people, and double global GDP, while using only marginally more energy than today and cutting greenhouse gas emissions by 12%. [Read the report here.](#)

MEPs vote for European Commission to pursue 2050 net zero strategy

The European Parliament voted for a resolution on 25th October calling for EU countries to pursue a greenhouse gas reduction target of at least 55 per cent by 2030, ahead of net zero emissions by the middle of the century. The resolution calls on all parties, including the EU, to update their NDCs by 2020 in order to close the remaining gap towards the higher ambition goal of 1.5C in the Paris Agreement. [Read the full resolution here.](#)

Changing climate expanding boundaries of tropics by 30 miles a decade

As the world's climate changes, the location of natural features and phenomena from "Tornado Alley" to the size of the Sahara desert are changing too, according to research collated in Yale University's Environment 360 website. The article cites a range of research publications showing that, for example, the tropics are expanding at a rate of 30 miles a decade, and that the permafrost line has moved 80 miles north in 50 years in parts of Canada. [Read the article here.](#)

Denmark announces 2030 petrol and diesel vehicle phase out

The Danish Prime Minister Lars Løkke Rasmussen announced this month that his Government will ban the sale of new cars with internal combustion engines by 2030 and hopes to have one million electric and hybrid cars on the roads by then. [Read more here.](#)

UK Climate and Energy Research and Policy

Low carbon heat information sharing network launched

The UK Energy Research Council (UKERC) has teamed up with campaign group 10:10 Climate Action to develop 'The Heat Network'. The project is designed to "support the UK's heat decarbonisation efforts through the development of a successful, inclusive and enduring network of people and organisations helping to decarbonise heat." The project is starting with a survey to better understand the state of heat decarbonisation research and development in the UK. Find more information on the project and [fill in the survey here.](#)

Energy giant using satellite data to identify target areas for energy efficiency measures

Big Six energy company E.ON announced this month that it is collaborating with the European Space Agency and Astrosat to use satellite imaging data to accurately identify areas across the UK where energy efficiency measures are most needed. [Find out more about how the pilot project will work here.](#)

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Over-65s most likely to take up smart meters

New research carried out for Smart Energy GB has found that people over the age of 65 are the most likely age group to own a smart meter - with almost a quarter of those surveyed owning the new devices. The 10,000 person survey showed a similar level of uptake of smart meters amongst people using prepay, with nearly a quarter saying they had already upgraded to the new technology. Two thirds (67 per cent) of those who have already had smart meters installed in their home claim they are more conscious of their energy use. [See the report here.](#)

UK Green Building Council launch initiative for net zero buildings

A new initiative launched this month will see the UK construction and property industry come together to agree a definition of “net zero buildings” and to draw up plans to strengthen building standards across the UK. The Advancing Net Zero programme aims to eliminate emissions from buildings and is the UK arm of a global Net Zero Carbon Commitment campaign from the World Green Building Council, to encourage building and property firms to cut emissions to net zero by mid-century. [Read more about the programme here.](#)

Climate Science, Impacts and Adaptation

Plant-based diet essential for mitigating climate change

New analysis published in the journal Nature suggests that GHG emissions cannot be sufficiently mitigated without dietary changes towards more plant-based diets. The research found that in Western countries beef consumption needs to fall by 90% and be replaced by five times more beans and pulses in order to avoid worsening the impact of the global food industry on climate change. [Read the research here.](#)

Keeping warming to 1.5° could become economically unjustifiable unless action taken now

A new paper from Imperial College London, LSE and the University of East Anglia warns that, unless global climate action is taken in the short term, the target of limiting global warming to 1.5° above pre-industrial levels could soon become too economically expensive to justify. [Read the report here.](#)

New study sheds light on links between mental health and climate change

A study published in the Proceedings of the National Academy of Sciences suggests that there are strong empirical links between changes to the climate and mental health. The study finds that 1°C of 5-year warming associates with a 2% point increase in the prevalence of mental health issues. [Read the paper here.](#)

Research shows strong consumer support for resource efficiency strategies

New research published in the journal Nature Climate Change shows that the UK public is receptive to strategies that aim to extend the lifetime of products and make them more efficient. Acceptance of such strategies was dependent on meeting other important conditions, such as trustworthiness, responsibility, fairness, affordability, convenience, safety and hygiene. [Read the paper here.](#)

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