

Monthly report on research and policy developments
Energy and climate change

May 2023

Purpose: This document provides a summary of key developments in policy and research related to energy and climate change during May 2023. It has been prepared by [ClimateXChange](#) and is intended to keep policymakers informed of issues relevant to the Scottish Government's energy and climate change policy portfolio.

International climate and energy research and policy

Solar power investment to overtake oil in 2023

25 May

Global investment in solar power is forecast to be more than investment in oil for the first time, according to World Energy Investment 2023, the annual report by the International Energy Agency. Global spending on clean energy overall is on course to exceed US\$1.7 trillion in 2023, compared with US\$1 trillion investment in fossil fuels. Annual investment in renewable energy has increased by nearly a quarter since 2021, compared to a 15% increase for fossil fuels, according to Reuters.

Sources: [IEA Report](#); [Reuters](#)

UN advises against offsets for carbon removal technologies

25 May

In a briefing note, the United Nations climate body, the UNFCCC, has advised against the use of technologies that aim to remove carbon pollution from the atmosphere, with concerns they are unproven and potentially risky, according to Climate Home News. Representatives from the carbon removal industry have challenged the document, saying that engineered carbon dioxide removal activities, including direct air capture, have been mischaracterised in the briefing note, according to Reuters.

Sources: [Climate Home News](#); [Reuters](#)

US and EU lawmakers request withdrawal of COP28 head

24 May

More than 130 lawmakers from the EU and USA urged the EU, US and UN to secure the removal of the president-designate of this year's UN COP28, according to Euronews. They cite concerns that as chief executive of one of the world's largest oil and gas companies, Sultan al-Jaber could undermine negotiations. The UK government has defended the appointment by the United Arab Emirates, stating that Jaber has been cleaning up the state oil company's operations and reducing emissions, according to the BBC.

Sources: [Euronews](#); [BBC](#)

G7 group call on all countries to reach net zero by 2050

22 May

The leaders of the G7 group of rich nations called on all governments to commit to reaching net zero by 2050 at the latest. They also urged countries to set targets to limit global

warming by 1.5C, according to Climate Home News. None of the G7 countries currently have policies compatible with the 1.5C target, according to Climate Action Tracker.

Source: [Climate Home News](#)

India considers ending coal-fired power plants

5 May

India is planning to cease building new coal-fired power plants, apart from those already underway, according to Climate Home News. With current and planned projects, coal is still expected to be the main electricity generation fuel in India for several decades. If the plans are approved by the Indian government, China would be the only major economy allowing new coal-fired projects.

Source: [Climate Home News](#)

US proposes to cut power plant carbon emissions

11 May

The Biden administration announced plans to reduce greenhouse gas emissions from the US power industry, proposing standards that will push companies to install carbon capture equipment or use low-emission hydrogen as a fuel. The proposal is one of the biggest steps the US has taken to decarbonise the economy and fight climate change, according to Reuters.

Source: [Reuters](#)

Japan's wind industry aims to provide a third of power by 2050

26 May

Japan's wind power body plans to increase capacity from the current 5GW to 140GW by 2050, meeting a third of the country's electricity demand and contributing to reaching Japan's 2050 carbon neutral target.

Source: [Reuters](#)

Australia announces new US\$1.4 billion hydrogen programme

10 May

The Australian Government's Hydrogen Headstart programme aims to accelerate the domestic production and export of hydrogen. The plans to scale up the development of the Australia's renewable hydrogen industry come in response to investment competition from around the world, including the US Inflation Reduction Act, according to Reuters.

Source: [Reuters](#)

New green technology tax credits in France

17 May

The French government is planning an annual budget of €0.5 million for a new tax credit to support environmentally friendly investments in the industrial sector, such as wind and solar power, heat pumps and batteries. It will be funded by a tax rise on carbon-intensive fuels, according to Climate Home News.

Source: [Climate Home News](#)

French ban on domestic flights to cut carbon emissions

23 May

France has banned domestic flights where the same journey can be made by train in under two and half hours. Some groups are calling for the journey time to be increased to four hours by train, according to the BBC.

Source: [BBC](#)

Germany pledges €2 billion to UN climate fund

3 May

The pledge to the global Green Climate Fund, for projects cutting emissions and adapting to climate change around the world, sets expectations for other large donors yet to make their latest pledges, such as the UK, France and Japan, according to Climate Home News.

Source: [Climate Home News](#)

UK climate and energy research and policy

UK Government urged to support green jobs

24 May

The Climate Change Committee (CCC) has stressed the need for the UK Government to prioritise skills and employment in order to maximise the employment benefit of net zero and manage the risks, in the recent 'A net zero workforce' briefing. New job opportunities in low-carbon sectors range from an estimated 135,000 and 725,000, but these numbers can only be realised with stronger policies to harness the potential and manage the risks, according to the briefing. The CCC warns that the UK risks missing out on opportunities to capture low-carbon market shares if skills that attract investment to the UK are not supported.

Source: [CCC](#)

Labour to ban new North Sea oil and gas projects

28 May

The Labour party announced plans to make the UK a world leader in green energy if they are elected to power. This would include blocking all new domestic oil and gas developments and investing in renewable and nuclear energy.

Source: [The Guardian](#)

British wind power overtakes gas for the first time

10 May

Wind power generated 32.4% of Britain's electricity compared to 31.7% from gas-fired power plants in the first quarter of 2023, according to a report from Imperial College London, as reported by Reuters.

Source: [Reuters](#)

Most homes in Northern Ireland need energy efficiency upgrades

26 May

Around 60% of homes in Northern Ireland need to improve their energy efficiency to meet 2030 net zero targets, according to a Forum for Better Housing Market NI report on the route to low-carbon homes. Northern Ireland has among the least energy efficient housing stock in the UK and Europe, according to the BBC.

Source: [BBC](#)

Thames flood defences required 15 years earlier than expected

17 May

An updated plan by the Environment Agency for tidal flood defences on the Thames says defences must be raised upstream of the Thames Barrier by 2050. The plan is designed to ensure communities in London and the wider Thames Estuary are ready to adapt to the

impact of climate change, protecting more than 1.4 million people and £321 billion of property from tidal floods, according to the BBC.

Source: [BBC](#)

Climate science, impacts and adaptation

Global warming over 1.5C likely in 2023

17 May

There is a 66% chance that global temperatures will exceed 1.5C above preindustrial levels for at least one year between now and 2027, according to a report by the World Meteorological Organisation. The report also finds a 98% chance that temperatures will exceed the warmest year on record, currently 2016, before 2027. Scientists stress the temperature increase, while worrying, is likely to be temporary and is due to the forecast El Niño weather phenomenon alongside emissions from human activities, according to the BBC.

Source: [WMO](#); [BBC](#)

Life in deep ocean zones at risk from climate change

2 May

Climate change could curtail life by up to 40% in the deepest parts of oceans reached by sunlight by 2100. The twilight zone, at a depth of between 200m and 1km, is currently home to more fish than the rest of the ocean put together, according to the BBC.

Source: [BBC](#)

Western-Mediterranean heatwave due to climate change

5 May

Temperatures exceeded 40C in parts of Morocco and Algeria in April, and reached 38.8C in Spain, setting a new April temperature record for all of Europe. The heatwave was up to 3.5C hotter than it would have been without climate change, the World Weather Attribution service has found.

Source: [Carbon Brief](#)

Asia heatwave worse by 2C due to climate change

18 May

Parts of Asia, including India and Thailand, saw record temperatures of 45C in April, causing deaths and casualties. Climate change raised temperatures by at least 2C and made the heatwave 30 times likelier, as reported by the BBC.

Source: [BBC](#)

Fossil fuel firms owe US\$209 billion a year for climate damage

19 May

Climate damages by coal, oil and gas companies have been priced at US\$209 billion a year. This is the compensation for extreme weather and other climate change impacts expected to occur around the world between 2025 and 2050, caused by emissions between 1988 and 2022, a research study has found.

Source: [Climate Home News](#)

Up to 70% of Californian beaches could wash away

27 May

Sea level rise due to carbon emissions could destroy between 25% and 70% of Californian beaches by 2100, according to a study using satellite data alongside models of sea level rise

due to climate change. The researchers recommend management efforts such as restoring natural sand dunes to help maintain the beaches, according to the Guardian.

Source: [The Guardian](#)

Climate change risks water and energy supplies in Asia

25 May

Extreme weather events and glacial melting from climate change are posing risks to the economic development and energy security of 16 Asian countries, according to the China Water Risk think tank, as reported by Reuters. Researchers urge action to protect regional waters in the Hindu Kush-Himalayan water system, which flows to 10 major river basins, in a region that is home to 1.9 billion people. The rivers support almost three-quarters of hydropower and 44% of coal-fired power in the 16 countries.

Source: [Reuters](#)

EU doubles aerial firefighting fleet

31 May

The EU is doubling its aerial firefighting fleet for the summer of 2023. The action aims to respond to challenges such as the increase in forest fires due to the climate crisis, according to Reuters.

Source: [Reuters](#)