



LOCAL ENERGY NEWS

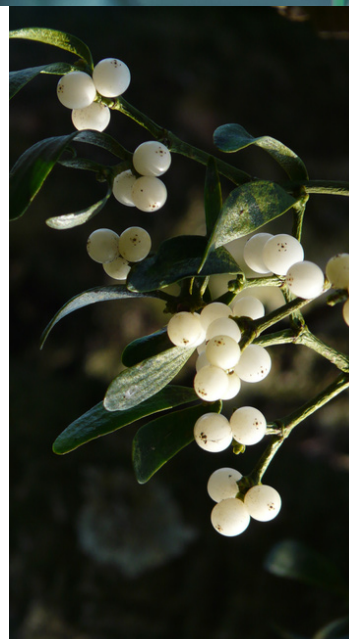
VOL. 1 ISSUE 8 • DECEMBER 2020

Welcome to the Local Climate and Energy newsletter. Today the Prime Minister announced that the UK will aim to cut its carbon emissions by at least 68% of what they were in 1990 by 2030. This brings the UK in line with the CCC's National Determined Contribution and means we all have a lot of work to do!

Fortunately, there's a lot going on:

- Yesterday, the MacKay Carbon Calculator was launched to show pathways to net zero across whole systems.
- Together for Our Planet takes over from Year of Climate Action to keep momentum up for COP26 in November.
- The government is looking for local communities across the UK to put forward proposals to house the Spherical Tokamak for Energy Production – the UK's ambitious programme to design and build a prototype fusion plant.

All this and lots of local energy events coming up in December. Wishing you all the best for this unusual festive period.



TOGETHER FOR OUR PLANET

To mark one year to COP26 in Glasgow, BEIS has launched Together For Our Planet; an initiative working closely with businesses, civil society groups, schools and people across the UK as part of our conversation on tackling climate change. We're inviting businesses from every corner of the UK to join us in the #RaceToZero. Race To Zero is a global initiative, backed by science-based targets, to commit businesses, cities, regions, investors and universities to achieve net zero emissions by 2050 at the very latest. Make your action count and inspire others to do their bit by sharing what you are doing using #TogetherForOurPlanet on all social media platforms and joining others through the Count Us In campaign. So far 1101 businesses, 452 cities and 549 universities are participating in Race to Zero. This represents the largest ever alliance committed to achieving net zero, representing nearly 25% global CO2 emissions and over 50% GDP. [Sign up to the newsletter](#) to hear about events or get in touch with your climate actions at TogetherForOurPlanet@cabinetoffice.gov.uk.

**WANT TO
CONTRIBUTE TO
LOCAL ENERGY
NEWS?**

Do you have a
local energy
project you
want to share?

Email
[localenergy@
beis.gov.uk](mailto:localenergy@beis.gov.uk) to
contribute
articles and
ideas!

RURAL COMMUNITY ENERGY FUND WORKSHOPS

Last week BEIS's Local Climate and Energy team and the Midland's Energy Hub ran the first of three Rural Community Energy Fund (RCEF) workshops. RCEF is a £10 million programme delivered by the five Local Energy Hubs in the North East, North West, Midlands, South West and South East. It supports rural communities across England to develop renewable energy projects, which provide economic and social benefits to their area. These lunchtime workshops bring together case studies from community projects in power, heat and transport and allow time for questions to RCEF project officers, community groups who've been through the process and policy leads. Please find links to the meetings below.

Heat: 1pm-2pm, 8th December

Transport: 1pm-2pm, 15th December



NEW MAPS REVEAL HEAT STORED IN BRITAIN'S ABANDONED COAL MINES

The British Geological Survey (BGS) and Coal Authority have released maps that reveal for the first time the extent to which heat is stored in Britain's abandoned coal mines. According to the Coal Authority, one quarter of the UK's population live above abandoned coal mines. The mines are warmed by natural geothermal processes and where the mines are flooded, these are now being developed as a source of low carbon energy to heat homes and businesses. To understand its potential more effectively, BGS and the Coal Authority have released an interactive map showing where the mines are and the extent by which temperatures increase with depth. The new mapping tool is freely available to use by developers, planners and researchers to identify opportunities to investigate the use of mine water as a sustainable heat source.

BGS geoscientist, Gareth Farr, who led the project said: "This has been a very exciting piece of work. It's the first time we have been able to visualise the temperature of Britain's coalfields. We have found records of heat temperatures going back over 100 years and compared them to temperatures in the mines now, and found them to be quite similar. This is a clear indication that geothermal processes that create this heat will be here for a long time to come. "Combined with other layers of data, the maps provide an important groundwork for developers, local authorities and scientists to explore new mine water heating schemes, and we are hopeful they will be of value to inform policy decision making." The maps can be viewed online [here](#).



MCKAY CARBON CALCULATOR

This week BEIS launched the MacKay Carbon Calculator; an on-line interactive tool for creating pathways to decarbonisation of the UK energy system. The calculator is a successor to the 'original' UK 2050 Calculator and was named in honour of the late Sir David Mackay, a former DECC CSA, who pioneered its development.

The tool tries to capture the complexity of the whole energy system into a single easy-to-use interactive tool. This helps users to understand what combinations of decarbonisation measures can be used to meet our Paris commitments, which resulted in the Climate Change Act target for the UK to be net zero by 2050.

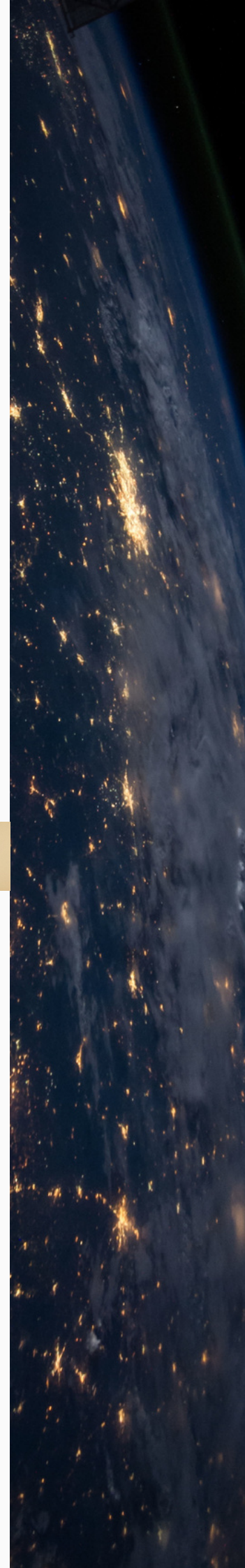
To use the calculator, choose your 'level of ambition' for the 'levers' of decarbonisation on the left of the screen (click the lever headings to see the levers and set your ambition from 1 to 4 in the boxes). See what impact your choice has on UK greenhouse gas emissions in the CO₂e meter on the right hand side. The 'levers' represent key ways that the energy system can be decarbonised, such as reducing energy demand (by using heat pumps for heating buildings) or decarbonising the energy supply (such as wind power). The 'levels of ambition' are on a scale of 1 to 4, where 1 is 'minimal effort' and 4 is 'the maximum plausible effort'. In many cases, high effort also means high cost, so relying on Level 4 to achieve net zero is not a good idea! The 'levels of ambition' were proposed by a group of expert energy stakeholders to reflect what is possible. Also launched this week, the My 2050 tool is a simplified version of the MacKay Calculator to help educate the general public on whole systems energy options. Link to Mackay Calculator [here](#) and My 2050 [here](#).

HOME SOUGHT FOR UK'S GROUND-BREAKING PROTOTYPE FUSION POWER PLANT

The Prime Minister's ten-point-plan for a green industrial revolution included the ambition for the UK to be the first country in the world to commercialise fusion energy technology. Fusion offers a virtually limitless source of clean electricity by copying the processes that power the sun.

The UK government is calling on local communities across the country to put forward proposals to become the home of STEP - the Spherical Tokamak for Energy Production – the UK's ambitious programme to design and build a prototype fusion plant. £222 million has been allocated to begin the STEP design work; the successful bidder could be first in line for thousands of new local highly-skilled jobs, putting them at the heart of the government's green industrial revolution.

Communities will have until the end of March 2021 to submit their nominations and will need to demonstrate that their local area has just the right mix of social, commercial and technical conditions to host the new plant – such as adequate land conditions, grid connection and water supply. The successful site will be home to the construction of the plant, targeted for completion by 2040, and will become a global hub for fusion energy and associated industries. View the application portal at <https://step.ukaea.uk/>





Funding and Events

OFFSHORE WIND MANUFACTURING INVESTMENT SUPPORT SCHEME

This scheme provides support for the development of major portside hubs, strengthening UK offshore wind manufacturing and creating employment and investment in coastal communities and the supply chain. Further details can be found [here](#), deadline 8th January.



INNOVATION LAB WEBINAR SERIES: OPEN LV 8TH DECEMBER 2020

As a partnership between Next Generation and Community Energy England, the Innovation Lab webinar series features innovative business models currently being explored within the energy sector.

UK100 LAUNCH EVENT: THE LOCAL PATHWAY TO COP26: 10TH DECEMBER

The webinar will launch a year of activity that supports the ambition and commitment of local authorities to reach Net Zero emissions as soon as possible in a way that benefits their communities.

LOCAL AUTHORITY WEBINAR SERIES | USING TECHNOLOGY TO DRIVE CLIMATE ACTION: 16TH DECEMBER

This webinar will explore ways of driving the green recovery through technology such as data, artificial intelligence and the internet of things. We will also hear from representatives of a UK local authority on how they have leveraged technology in their net-zero ambitions.

HEAT NETWORK SERIES | HEAT NETWORKS MARKET FRAMEWORK; A CUSTOMERS PERSPECTIVE: 17TH DECEMBER

Cornwall Insight and the Heat Trust work through how the introduction of statutory regulation will impact the sector and the experience of customers.

