

# ENERGY NEWS



The newsletter of the Midlands Energy Hub

Autumn 2021



## ‘COP 26 and the Net Zero Strategy’

Michael Gallagher, Head of Midlands Energy Hub

Welcome to the autumn edition of the Midlands Energy Hub newsletter. It is fantastic to see the amount of positive activity in the lead up to COP26. The recent [Spending Review](#) supports the newly launched [Net Zero Strategy](#), setting out how the UK will kick-start new green industries, create jobs and reach net zero carbon emissions by 2050. The recently published [Heat and Buildings Strategy](#) also provides welcome guidance on the government’s approach to this difficult to decarbonise sector.

It was very positive to see within the strategy the commitment to continue the Local Net Zero Programme, which includes provisions to continue the Local Net Zero Hubs (currently known as the Local Energy Hubs). The Hubs will support all areas of England reach net zero, especially those lacking capacity and capability, or those facing unique challenges. Our work with local authorities in the Midlands has clearly demonstrated the important and essential role local authorities have in driving local climate action across energy, housing, and transport. As the Midlands Energy Hub transitions to the Midlands Net Zero Hub, we look forward to continuing work with our local authority partners and other stakeholders.

The Midlands Energy Hub has been supporting [Regional COP26](#) activity across the Midlands with the Race to Zero Tour, which visited key locations across the Midlands on its way to Glasgow. This edition of the newsletter covers the upcoming Regional COP26 activity across the Midlands, alongside an insightful article on “Navigating the Energy Crisis”. We provide an update on Farms of the Future: Journey to Net Zero, information on a Smart Grid Trainer kit and current funding news that includes the support Midlands Energy Hub are putting in place to enable public bodies to decarbonise their buildings, through building business cases for direct investment, or enabling bids into other funding streams.

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### News

#### Farm of the Future: Journey to Net-Zero

In the lead up to COP26, the Midlands Energy Hub has been working with partners including the [Royal Agricultural Society for England](#) (RASE) and [Innovation for Agriculture](#) (IfA) on a pioneering new study that delivers a vision of how UK farming will respond to climate change. RASE will release a briefing paper (2<sup>nd</sup> Nov) that outlines how the “Farm of the Future” will need to examine its role in the need for urgent decarbonisation. The briefing paper will help set the policy agenda to enable farmers to continue their multi-generational work towards a healthier, more resilient and nature-friendly food supply system.



*Farm of the Future – out soon*

Farming occupies 75% of the UK landmass and has a vital role to play in the transition of our rural and bio-resource economies. The briefing paper is designed to inform policymakers of the options available to farmers and land managers

to deliver rural decarbonisation. It identifies a number of topics which need to be addressed including environmental resource management, low carbon energy options, low emission farm vehicles, digital and robotic technology.

Key recommendations cover better valuation of nature and natural capital, approaches to restoring soil health, increasing biodiversity as well as land and water resource management. The Briefing paper will be followed by the release of the main “Farm of the Future: Journey to Net-Zero” report in spring 2022. For further information, contact us [here](#).

### Investigating the Potential of Mine Heat

Whilst not a new technology, there is increasing focus on the potential for [utilising mine energy](#) as a low carbon heat source to help achieve net zero by 2050. Mine energy uses geothermally heated water in abandoned coalmines to provide low carbon heat for use in domestic and commercial buildings via heat networks. The [Coal Authority](#) estimates that there are [23,000 abandoned deep coalmines](#) in the UK. They can provide free basic feasibility reports for Local Authorities seeking to investigate the potential of mine heat in their areas. To find out more, contact us [here](#).

### De Montford University develop ‘Smart Grid Trainer Kit’.

"The [Institute of Engineering and Sustainable Development](#) has recently installed state-of-the art Smart Grid Trainer kit in their “Smart Grid & Sustainable Energy Lab”. The facility simulates the generation of electricity from different sources as well as transmission and distribution components of the grid such as high voltage lines, relays and circuit breakers. It also incorporates micro-grid units including small solar PV and battery storage. [DMU](#) intends to use the equipment for teaching purposes on its MSc programme on Smart Grids & Power Systems and its undergraduate Electrical & Electronic Engineering course. The equipment will also be used on CPD courses for the benefit of the wider professional community.

## COP26

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# The Midlands Supports COP26

The annual UN [Climate Change Conference of the Parties](#) (COP26) is being held from 31st October – 12th November in Glasgow. Heads of State, climate experts and campaigners will come together to discuss action needed to tackle climate change in the largest event of its type to be hosted in the UK. These locally led initiatives are supported by [BEIS](#) and delivered by local authorities and other local actors to motivate and inspire people to join the race to net-zero and cut carbon emissions. The initiatives in the region supported by the Midlands Energy Hub include:



### Zero Carbon Tour

Planet Mark are leading a [Zero Carbon Tour](#). The ‘Tour’, featuring the 100% electric ‘Carbon Battle Bus’, is journeying around the UK for live events showcasing how the business community is taking action to address the climate crisis. Launched in London in June, the Battle Bus will arrive in Glasgow for COP26 in November. The Midlands region has hosted successful events in [Worcester](#), [Lincoln](#), [Birmingham](#) and [Nottingham](#) throughout September.

### COP26 Regional Roadshows

During the fortnight of the main COP26 event, the Midlands Energy Hub is also supporting four Midlands organisations to host their own unique Regional Roadshows to compliment activities happening in Glasgow.

The [West Midlands Combined Authority](#) will host an event (11<sup>th</sup> Nov). This [Roadshow](#) is free to attend and will focus on green transport, smart local energy systems, the built environment and green skills. It will explore findings from Energy Capital’s Regional Energy Systems Operator project, undertaken in partnership with [Coventry City Council](#). Energy Capital will also be formally launching their Net Zero Neighbourhood project, which will invest £2m into establishing a place-based approach to decarbonising our homes and communities. For more information, contact Energy Capital [here](#).

Nottinghamshire’s 5G partnership will host the [East Midlands event](#) (11<sup>th</sup> Nov.) from the [Workshop Turbine - Digital Innovation Centre](#). This online event will focus on the themes of climate, innovation and investment. Talks will be taking place all day giving attendees the opportunity to drop into any events of interest.

Coventry are hosting a [Transport Expo](#) (10<sup>th</sup> & 11<sup>th</sup> Nov) at Coventry University Technology Park. The event will include tours of the university's [National Transport Design Centre](#) and [Centre for Advanced Low Carbon Propulsion Systems](#) where attendees can learn about the importance of net zero in the battery and car manufacturing industry. There will also be the opportunity to participate in a micro-mobility taster session.

The [Marches programme](#) will support the local councils in running several smaller events, highlighting the themes of COP26 to wider community audiences. The events range from an EV demonstrator day in Shropshire to an [educational arts project](#), highlighting the importance of protecting our oceans and marine life from single-use plastics in Telford & Wrekin. Furthermore, in Herefordshire the [Beryl Bike](#) hire scheme will be free during the whole of COP 26 to encourage more sustainable transport. There will also be local walks, talks and other promotional events throughout to engage with a wide-ranging audience.

## Celebrating Local Decarbonisation

The Midlands Energy Hub is also working with [Carbon Copy](#) and local partners to collate a [range of case studies](#) to highlight low-carbon success stories and celebrate the imagination, commitment and hard work of all those working on decarbonisation at the local level. To date, over sixty case studies have been submitted from across the Midlands. These range from the revolutionary [Very Light Rail](#) project in Coventry, the hugely successful [MarRE](#) grant scheme, and include community projects such as [The Children's Forest](#). If you have a project, you would like to publicise, contact the [Midlands Energy Hub](#) or alternatively [submit your case study here](#).



*Building 'The Children's Forest'*

## Comment

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# Navigating the Energy Crisis.

## Cheryl Hiles - Director – Energy Capital

The energy crisis this autumn came at a particularly difficult time for a UK Government firmly under the COP26 international spotlight. The recently published [UK Net Zero Strategy](#) recognises how our overreliance on gas is pushing up energy prices and that this reliance on fossil fuels does not give the right message as we lead the call for faster international decarbonisation through our COP26 presidency. However, if we are going to wean ourselves off natural gas and other fossil fuels, it is clear that we need to make changes to the energy system. We are, of course, grateful to those who worked tirelessly to fix the [interconnector that went down](#) during the 'perfect storm' this September, but longer term challenges remain within our energy system that need to be addressed. With aging baseload plant and a lack of storage in the system, many predict a continuation of energy price volatility for some time.

In response to the calls from energy intensive industries for additional support to cope with cost increases, we heard [BEIS](#) say we need to focus on increasing the production of domestic, renewable energy generation to get ourselves out of this predicament. Yet even the most ardent supporters of renewable energy recognise that to enable the volumes of intermittent renewable energy needed, or to be honest any form of energy that we do not have complete control over, the issue of energy storage must be addressed. This is where those of us looking at energy systems from the end users perspective, have a strong view on where the solution to this crisis and long-term decarbonisation lies.

The publication of the Net Zero Strategy brought us confirmation that electricity from the grid will achieve zero carbon status by 2035 meaning that many of those who are seeking to invest in decarbonising their assets can see electrification as a low regrets option. However, switching from gas to electricity in the current market does not offer much reassurance of affordability. Those who pay attention to how their energy bills are constructed will be well aware of the environmental levies that have been placed on electricity to support the increase in renewable energy generation and improve energy efficiency for the most vulnerable. The long awaited [Heat and Buildings Strategy](#) was supposed to encourage end users make the switch away from fossil fuels by shifting these levies from electricity to gas in recognition of their changing carbon factors. This was never going to be popular, but in the midst of this crisis, it is unsurprising that the issue has been kicked into the long grass, with a deferred start date and a decade to achieve the transition. However, if we want to convince people to switch away from fossil fuels to cleaner forms of energy, given the state of public finances, there does not seem to be many other viable options.

The recent price shocks are definitely stimulating a change in attitudes. For high-energy users, the price hikes have been crippling. Consideration of how these users can both reduce their exposure to price volatility and minimise their carbon footprint is leading many to examine whether they can generate and store energy themselves. For people facing fuel poverty, fuel price rises increase the incentive to seek support and take advantage of schemes to insulate their homes to reduce energy demand. Considering this crisis from these consumer's perspectives supports our call in the West Midlands for the energy system to be run smarter. Enabling more people to participate in local flexibility markets will provide vital additional storage to enable a significant demand shift and help to reduce the pressure when future storms come our way. Providing greater storage capacity across a much broader range of [dispatchable assets](#) throughout the system and using the market itself to help make these investments more attractive for industry, businesses and consumers, seems a wholly sensible approach to many of us.

## Funding News

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### Public Estate Decarbonisation

The Midlands Energy Hub has been awarded funding to support public bodies decarbonise their buildings. The aim of the programme is to build business cases for direct investment, or enable bids into other funding (e.g. [Public Sector Decarbonisation Scheme](#)). The programme will fund energy audits of buildings, pre-feasibility analysis of possible renewable technologies, and provide tools to assist asset managers identify priority areas and develop retrofit strategies. In order to understand the demand for the above services, we have put together an Expression of Interest form. If you are responsible for decarbonising the public estate, and could benefit from this programme, please contact the team [here](#).

### Social Housing Decarbonisation Fund

The Midlands Energy Hub submitted a regional £14.8m bid on behalf of six social housing provider and three local authorities for [Wave 1 of the Social Housing Decarbonisation Fund](#) (SHDF) to support the installation of energy performance measures in social housing. Wave 1 projects will follow a fabric first, lowest regrets approach to improving the energy performance of social housing.

### Sustainable Warmth Competition

The MEH has submitted an £82m funding bid to the [Sustainable Warmth Competition](#) for delivery across the region. If successful the programme will run from January 2022 to March 2023 and will utilise the delivery mechanisms put in place for [Phase 2 of the LAD](#) scheme, including services to help with the customer journey, and assist with the procurement through [Dynamic Purchasing Systems \(DPS\)](#) for Installers and Professional Services.

## Partners

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### Sustainability West Midlands

Sustainability West Midlands (SWM) has [produced a report](#) outlining the progress the West Midlands is making towards the targets set out in the our [2030 Sustainability Roadmap](#). The SWM's role is to ensure that the region is on track, work with our members to build on best practice, and provide solutions where progress is slow. This is the first time SWM has monitored our Roadmap and the findings show that rapid and targeted progress is required on many issues. One particular difficulty is sourcing appropriate data to monitor renewable energy generation in the region. Whilst [renewable electricity data](#) is available, identifying reliable data that includes renewable heat is proving challenging. If any readers are aware of relevant datasets, or can advise us on how we can change our target to reflect available data, please [get in touch](#).

## Hub Partners

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