

# ENERGY NEWS



The newsletter of the Midlands Energy Hub

Summer 2021



## 'With the climate changing action is urgent'

Michael Gallagher, Head of Midlands Energy Hub

Welcome to the summer edition of the Midlands Energy Hub newsletter. [The UK's climate continues to change](#). Recent decades have been warmer, wetter and sunnier. 2020 was the third warmest, fifth wettest and eight sunniest year on record. No other year has fallen in the top 10 for all three variables for the UK.

While it is clear that there is support at all levels to decarbonise, the rate of change is not yet fast enough. The recently published [Climate Change Committee](#) Progress Report to Parliament provides a comprehensive overview of the progress made to date on reducing emissions and adapting to climate change. It offers more than 200 recommendations on the actions that need to be taken to achieve Net Zero.

The Department for Transport has published its plans to decarbonise transport by 2050. The [Decarbonising Transport: A Better, Greener Britain](#) plan includes a raft of policies including measures to ban the sale of new large diesel trucks weighing more than 26 tonnes by 2040, and smaller diesel trucks from 2035. Logistics and transport are a key part of the Midlands' economy, and a sector we need to support through this transition. Hydrogen-powered heavy goods vehicles could well be part of the solution and the Midlands Energy Hub has supported a [regional bid](#), which successfully attracted funding from the Department for Transport's Zero Emission Road Freight programme.

There continues to be a range of exciting work across the region that we are able to highlight in our newsletters. This edition covers the Midlands Engine 'Ten Point Plan', the lead up to COP26, woodland creation and the work being done to support the decarbonisation of businesses in Leicestershire. I am looking forward to learning more about other great projects in the lead up to COP26, and would encourage you to get in touch if you have any case studies you would like to share.

*The Midlands Energy Hub is funded by the Department for Business, Energy and Industrial Strategy (BEIS) as part of the Clean Growth Strategy. It is supported by Nottingham City Council who are the accountable body.*

### News

#### Midlands Engine Launch 'Ten Point Plan' for Green Growth

The [Midlands Engine](#) has published their plan to accelerate both the Midlands and the UK's path to net zero. The [Ten Point Plan](#) has been produced and will be implemented in collaboration with over 300 partners and stakeholders across the Midlands. It will deliver a greener future for communities and address the economic and social impacts of the pandemic. By advancing the plan, the region is committing to deliver a 36% reduction in CO<sub>2</sub> emissions from current regional levels, whilst also creating 196,000 high-value jobs and generating a further £24.2 billion GVA for the region's economy by 2041.

#### Infrastructure for Zero Emission Vehicles in the West Midlands

Energy Capital is supporting the [WMCA](#) develop an [Infrastructure for Zero Emission Vehicles \(IZEV\) Strategy](#) for the West Midlands. The IZEV strategy will support the upcoming [revision of the Local Transport Plan](#) and will use the unique

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strengths of the West Midlands to ensure that the appropriate infrastructure is in place to support the transition to zero emission vehicles.

As part of the consultation process, Energy Capital is seeking input from stakeholders across the energy and transport sectors. A slide pack setting out their current thinking can be found [here](#), along with more details of how to engage with the development of the strategy. You can get involved by responding to their [questionnaire](#), or by joining one of three independently chaired, themed conversations. The first of these conversations (5<sup>th</sup> August; 12:30) will discuss use cases and infrastructure for hydrogen and alternative fuels. The second (12<sup>th</sup> August; 12:30) will discuss the infrastructure needs for electric vehicles, and the third (12<sup>th</sup> August; 12:30) will discuss the role of the public sector in driving infrastructure for zero emission vehicles. Alternatively, you can arrange to talk to the Energy Capital team directly. Please [email Energy Capital](#) if you would like to attend one of the conversations or arrange a meeting.

## Decarbonising Leicestershire Businesses

The [Business Gateway Growth Hub](#) for Leicester and Leicestershire is set to begin a trial of a new sustainability platform designed to help SMEs decarbonise as part of the Growth Hub's ambition to support businesses response to the Climate Emergency. One hundred Leicestershire businesses are being recruited to the trial who will each be given a year's free access to the [Zellar platform](#). The Business Gateway will use this trial to understand the effectiveness of Zellar and to identify additional support needed by the business community to assist in the transition to Net Zero.

Sonia Baigent, Chair of the Business Gateway Board and a [LLEP](#) Director, explained: "Becoming more sustainable is something that all businesses – big and small – must do. We see the Zellar trial as an excellent opportunity to support SMEs and other local businesses make this change in a cost-effective way, and to start building a community of low carbon champions."

Zellar has been designed to help businesses measure their environmental impact and take action to reduce carbon emissions. It will put businesses in touch with their peers so they can see what approaches similar organisations are taking, enabling them to learn from each other. In addition to taking direct action to reduce emissions, Zellar is also working to enable businesses minimise their climate impact with local carbon offsetting and other sustainability initiatives. The platform will also provide opportunities for local businesses in the [Low Carbon and Environmental Goods and Services Sector](#) to feature as solution providers in Zellar's supplier directory. Following the successful launch in Leicester and Leicestershire the trial is to be extended to the [Greater Birmingham and Solihull](#) region.

## Showcasing the Midlands at COP26

The UK will host the [26th UN Climate Change Conference of the Parties](#) (COP26) in Glasgow from 31<sup>st</sup> October to the 12<sup>th</sup> November 2021. COP26 will bring parties together to accelerate action towards the goals of the [Paris Agreement](#) and the [UN Framework Convention on Climate Change](#). The conference is split into two zones 'Blue' for delegates and 'Green' for civic society and businesses.

In the lead up to COP26, The Midlands Energy Hub is helping support the conference by putting on four flagship events across the Midlands. We will be looking to engage with partners working to decarbonise the Midlands to build awareness and put together case studies. In addition, we will also be holding a number of [green zones](#) throughout the region during November, to coincide with the themes and events happening in Glasgow. For more information, contact us [here](#).

## Features

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## Towards net-zero: New incentives and support for woodland creation.

### David West – Planting on Public Land lead, Nature for Climate Fund. Forestry Commission

A Chinese proverb says, *'the best time to plant trees is 20 years ago and the second-best time is now!'* We need to plant trees at scale, creating rich new woodlands and forests that will both sequester carbon and help address the [biodiversity crisis](#) – and we need to move quickly. Trees are not an instant fix. Since the arrival of the Nature for Climate Fund a great deal has been happening in the world of trees. We now have an [England Trees Action Plan](#) setting out a long-term vision for trees and woodlands along with a £500M commitment to a range of support and grant initiatives.

In this article, I would like to cover just two schemes that are now available to public and private landowners to help you achieve ambitious woodland planting targets.

If, like many Local Authorities, you own land but are struggling with the capacity and skills required to turn a large tree planting commitment into reality then the [Forestry England Woodland Partnership lease scheme](#) could be the answer. In essence, you supply the land and Forestry England (FE) does the rest. FE will enter a 60 – 120yr lease with the landowner negotiating a rent to cover income forgone. Sites must be at least 50 Ha in size and will become a part of the public forest estate as community woodlands with a strong preference for broadleaves.

Public bodies are also able to apply for the new flagship woodland planting grant – the [England Woodland Creation Offer \(EWCO\)](#). This new grant scheme offers capital grants, 10-year maintenance payments, and supplements for public goods. The minimum area for this scheme is one hectare. For further local support and guidance, contact your local Forestry Commission area team. Finally, if you are planting woodland as part of your Net Zero plans do not forget to register your land first with the [Woodland Carbon Code](#) before you start planting. The Forestry Commission also provide guidance and support with [calculating the woodland area](#) you need to meet your abatement strategy targets. For any further questions, please do not hesitate to [contact me](#). The planting season will soon be starting – are you ready?



*Planting for a future*

## New battery technology key to climate change battle

Mark Thompson - managing director, AceOn Group

New battery technology has a crucial role to play in the move to renewable and sustainable energy sources. While [lithium-ion](#) and lithium-phosphate batteries are still in widespread use, and will continue to be for many years to come, they do come with an environmental cost. The good news is that the UK and the rest of the world are now looking into developing plants that could recover over 80% of materials that can be recycled and used in the battery supply chain for future cell manufacturing.

Research suggests that [less than 5% of li-ion batteries](#) are currently being recycled so it is vitally important that what happens to li-ion batteries at the end of their lives be considered. Projects such as [ReLib](#) at Birmingham University have a crucial role to play in this.

Battery and energy storage firms face twin challenges of developing new battery chemistries that are both sustainable and efficient, whilst also developing second-life uses and recycling technology for the batteries we are currently throwing away.

At [AceOn](#), we have teamed up with [Brill Power](#) and [Cranfield University](#) to work on the first scheme of its kind in this country to upcycle used electric bus batteries, repurposing them to store solar energy. The project will demonstrate the huge commercial opportunities of this approach and help find workable solutions to the problem of li-ion battery waste. Our research teams are also in talks with a range of manufacturers about other second-life opportunities and about how we can develop technology to scale-up recycling.

As regards new technology, [sodium-ion](#) can be a major factor in the years ahead. It uses resources that are low-cost and sustainable but retain battery performance. AceOn has been awarded a £1 million grant from Innovate UK to accelerate development of our mobile solar energy storage unit. This will use Sheffield-based [Faradion](#) sodium-ion batteries in a trial project in Nigeria. The success of our project will go a long way to demonstrating the environmental and commercial advantages of sodium-ion, paving the way for a major new green industry to emerge in this country.



*Custom Li Ion Battery Pack*

Lithium sulphur and solid-state batteries could also have a role to play in the green power revolution. Work at the [Faraday Institution](#) suggests lithium-sulphur represents a significant step up from lithium-ion in improved gravimetric energy density, operating temperature window, safety, reduced environmental impact and cost.

Meanwhile [solid-state technologies](#), in which the liquid electrolyte is replaced by a solid conductive material such as a polymer or ceramic, offer [huge potential](#) for the next decade because of their potential to offer a higher capacity in a smaller package, faster charge and longer life.

## Funding News

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### Sustainable Warmth Competition

The Midlands Energy Hub is planning to submit a regional bid for the [Sustainable Warmth Competition](#) as part of Phase 3 of the Local Authority Delivery (LAD) and the Home Upgrade Grant (HUG), which will run from January 2022 to March 2023. The £82m bid aims to utilise the delivery mechanisms put in place for [Phase 2](#) of the LAD programme to enable local authorities to effectively access this funding. The support will include services to assist with the customer journey in addition to the two Dynamic Purchasing Systems (DPS) that have been set up for the procurement of Installers and Professional Services. For further information, contact the project team [here](#).

### Rural Community Energy Fund

The [Rural Community Energy Fund \(RCEF\)](#) is a scheme to support rural communities across England who want to set up renewable energy projects. Funding is split into two stages. Stage 1 grants provide up to £40,000 for feasibility studies and Stage 2 grants provide up to £100,000 for business development and planning. In August, the Midlands Energy Hub Board approved funding to five successful community groups. Three projects received Stage 1 funding and two projects Stage 2 funding. The deadline for applications for the final round of funding is 1<sup>st</sup> October. If you are considering making an application and would like further information on the RCEF scheme, please contact the team [here](#).

## Partners

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### Energy Launchpad

[Energy Launchpad](#) is an exciting, interactive and collaborative meeting place for UK innovators who are transforming energy markets in the UK and internationally. The Energy Launchpad platform is a part of [Energy Systems Catapult](#). It offers a range of services including energy system insights, guides for start-ups, access to international market research, collaboration spaces for partnership working and case studies from the SME alumni.

Innovators seeking investment can make their needs known to an investor community who are actively interested in energy sector SMEs. They will also find detailed and regularly updated information on overseas markets. As well as helping find investment opportunities, Energy Launchpad regularly features other sources of funding, such as grants, and features the latest industry events and news. Sign up [here](#).

### Sustainability West Midlands

[SWM is recruiting an Office Manager](#) support their organisation develop and grow as they seek to guide the West Midlands to becoming a leader in contributing to the national target of net zero greenhouse gas emissions by 2050 whilst addressing health inequality and driving inclusive growth. Closing date for applications is Friday 27<sup>th</sup> August 2021.

## Hub Partners

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