

ENERGY NEWS



Autumn 2019

The newsletter of the Midlands Energy Hub



‘Green Infrastructure Challenges’

Michael Gallagher, Regional Energy Projects Manager

Welcome to the autumn edition of the Midlands Energy Hub newsletter. It has been an incredibly busy three months across the Midlands Region. The highlight being the UK100 and Midlands Energy Hub workshop: Financing Energy in the Midlands. It was fantastic having such a blend of enthusiastic, knowledgeable and driven individuals from across the public, private and community sector come together to tackle the significant challenges our sector is facing. Leicester City Council with Leicester and Leicestershire LEP were excellent hosts of the event.

With the significant challenges facing the energy sector it is important that a positive mind set is maintained. There is a diverse range of solutions to these challenges, some proven, some incredibly innovative but with little understood and unknown risks. A balanced and carefully managed approach needs to be taken to ensure the energy transition is successful. This autumn edition will update you on the Rural Community Energy Fund and the work of the Regional Energy Team. Two of the Regional Energy Team met with Western Power Distribution recently to discuss the challenges around connection availability and grid capacity, and have provided some useful [advice](#); another member of the team has been engaged in the innovative work around extracting heat from [Mine Water](#). This edition of the newsletter also has updates on [events](#) and [funding](#) alongside other news from across our Energy Hub area.

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

In this issue:

- News
- Heat from Mine water
- Making the right connections
- Behaviour Change
- Events
- Funding
- Partners

News

Rural Community Energy Fund - First successful applications awarded

The [RCEF](#) is a £10 million programme supporting rural communities in England to develop renewable energy projects. [Apolitical](#) have recently published an [article](#), detailing the importance of Rural Community Energy.

Of the first round of applications received by the Midlands Energy Hub, three were approved by the board.

The Harbury e-wheels project in Warwickshire will investigate the feasibility of using a vertical axis wind turbine to generate electricity to power their electric vehicles that serve the community by taking vulnerable individuals to hospital appointments or the doctor's surgery.

Positive Activities in Greater Lincolnshire is looking into the feasibility of using an anaerobic digester on their 15-acre community owned site in a Lincolnshire village.



St Mary's Nether Boughton

The Framland Deanery is a group of churches led by a charity. Their aim is to bring churches into the 21st century and to ascertain how to make these very important community buildings sustainable, by both improving energy efficiency and developing low-carbon generation.

The Future Homes Standard:

In order for the UK to achieve 'Net Zero' all new buildings will themselves need to achieve this target. A [consultation](#) for changes to Part L and Part F of the Building Regulations for new dwellings is now underway. This consultation sets out plans for the Future Homes Standard, including proposed options to increase the energy efficiency requirements for new homes in 2020. [The Future Homes Standard](#) will require new build homes to be future-proofed with low carbon heating and world-leading levels of energy efficiency; it will be introduced by 2025. Submissions for the consultation need to be returned by 10th January 2020

Financing Energy in the Midlands workshop

On the 3rd October the Midlands Energy Hub, in partnership with [UK100](#) and with the support of Siemens, hosted the "Financing Energy in the Midlands" workshop at Leicester City Hall. The focus of the workshop was on green financing and intended to provide the public sector with an insight of the fundamentals for delivery of successful clean energy projects and the options available for low carbon investment.

Two panel sessions lead the discussions around the challenges and opportunities for the development of investable projects and the role of private finance in helping the public sector to deliver on the carbon reduction targets in response to the climate emergency. The discussion deepened during the roundtable sessions lead by the event sponsors: [Abundance](#), [Leapfrog](#), [SSE Enterprise](#), [Siemens](#) and [Octopus](#).



Event Sponsors

The event was attended by over 70 delegates from local authorities, LEPs, energy solutions providers and investors from across the Midlands. This was the second of five workshops, which will be held countrywide by UK100 in collaboration with each of the Local Energy Hubs

Establishing public-private Joint Ventures for Energy Projects

The Midlands Energy Hub have recently published guidance on "Establishing Local Authority Joint Ventures for Energy". This document sets out a high-level approach to creating Joint Ventures for public / private partnerships in energy projects. Written by Nottingham City Council, supported by Leapfrog and SSE Enterprise. To obtain a copy please email the [Hub](#).

Features

Mine Energy – An opportunity and a challenge

Mark Gibbons, Senior Energy Project Officer, Stoke & Staffordshire

The Midlands Energy Hub were invited to attend the latest meeting of the Mine Energy Taskforce in Newcastle-upon-Tyne. Chaired by Andrew Clark of the North East Local Enterprise Partnership, the Taskforce seeks to advance the uptake of Mine Energy through shared experience and collaboration. The location of old mine workings correlates strongly with urban populations and represents a real opportunity for the decarbonisation of heat.

THE OPPORTUNITY: The first presentation from the [Coal Authority](#) outlined a scheme close to implementation at Seaham Garden Village, County Durham. Heat recovered from the existing Dawdon mine water treatment works is to be used to heat 1500 new homes and other community buildings. Water extracted at 155 litres/second and 19°C will be boosted to 60°C by a 1500 kW heat pump system and distributed to all building in the new village. Top-up and standby power will be

provided by combined heat and power plus gas boilers. The scheme has the full support of the property developer.

THE CHALLENGE: The second presentation from the Environment Agency highlighted the regulatory and operational risks where boreholes tap into aquifers and old mine workings. Higher temperature mine waters generally contain higher levels of contaminants so present fouling and environmental hazards. Changes in ground-water levels can also have serious implications for river pollution and flood resilience. In addition, the financial risks associated with exploratory boreholes into old mine workings are not yet sufficiently understood. However, the Coal Authority are seeking funding for such trials.

It was generally agreed that there needs to be a strong legal and regulatory framework that allows the inherent risks in Mine Energy business cases to be balanced against national decarbonisation objectives. The Taskforce is to pursue this as a top priority.

Making the right connections

Alex Pearson & Tim Yair, Senior Energy Project Officers

Grid connection issues was a challenge identified in the very early stages of the Midlands Energy Hub project, and has been a continuous theme in our work to date.

The first stage in any project involving an electrical connection is to find out what the available capacity is. Distribution Network Operators (DNO) hold this key information and make it available through their websites. The links below are particularly useful. Most of the Midlands Energy Hub region is served by Western Power Distribution (WPD) who provide the following online resources, a [Network Capacity Map](#), which identifies capacity-restricted areas, an [EV Capacity Application](#) that identifies substations with available capacity to add EV charging infrastructure. They also provide a central [Energy Data Hub](#) where all the publicly available data they hold can be accessed.

It may be that there is no capacity available at your first choice site, you can then use the information to look at other sites nearby or you can start a dialogue with the DNO. It is key to find out the reason behind the lack of capacity and if any improvements are planned in the near future. It maybe that there is a substation upgrade planned in the next year or so that will allow the project to progress. The earlier you can engage with the local WPD office, the more likely a suitable, timely solution can be found.



Capacity to connect?

Behaviour Change

Rebecca Hurt, Behavioural Change Officer

While a lot of the current focus is on the challenges around implementation of green infrastructure, it is important to remember that people and their behaviour can also have a significant impact on reducing energy consumption. Behaviour change is about encouraging individuals to think about their behaviour and how it affects the work place. Sustainable work practices can contribute to the overall success of a business or organisation.

Behaviour change activities engage colleagues to make positive adjustments in their day-to-day lives; this can have an impact on environmental objectives such as plastic use, carbon footprint and waste. For example, Nottingham City Council recently hosted a twelve-week competition across its leisure centres, challenging them to reduce their electricity usage. The various changes teams implemented at the eight sites made carbon savings of 18.6 tonnes. With highly ambitious goals for a carbon neutral city by 2028 and a plastic free council by 2023, these will require individuals to make changes and empower colleagues to do the same. Achieving behavioural change can be just as important as policy changes and will often influence how policy is delivered.

If you are interested in implementing behavioural change in your organisation, a good place to start could be the [Carbon Literacy Project](#). Carbon Literacy is “an awareness of the carbon dioxide costs and impacts of everyday activities, and the ability and motivation to reduce emissions, on an individual, community and organisational basis”.

Events

West Midlands Low Carbon Sector Action Plan

The Greater Birmingham and Solihull Local Enterprise Partnership (GBSLEP) are leading the development of the Low Carbon Sector Action Plan as part of the Local Industrial Strategy for the West Midlands. The Action Plan will highlight key opportunities for economic growth within the West Midlands and help businesses across Greater Birmingham & Solihull, Coventry & Warwickshire and the Black Country take advantage of the transition to a greener economy.

GBSLEP is currently consulting with local businesses in the low carbon and environmental technology sector to help shape the plan and ensure it is in line with their needs and wants.

Ecuity Consulting Ltd have been appointed by BGSLEP to gather the industry perspective through a series of [focus groups](#), phone calls and an [online survey](#). Key stakeholders in the low carbon sector are also invited to attend a [workshop](#) on the 6th November from 9:00am – 12:30pm and have their say on the final draft of the plan before it is published later in the year.

Funding News

£170m Industrial Decarbonisation Challenge

As part of the UK's Industrial Strategy Challenge Fund, the [Industrial Decarbonisation Challenge](#) (IDC) programme aims to accelerate the cost-effective decarbonisation of industry by developing and deploying low-carbon technologies. It aims to enable the deployment of green infrastructure at scale by the mid-2020s. The Industrial Decarbonisation programme is funded by £170 million from the Industrial Strategy Challenge Fund, which is expected to be matched by funding of up to £261 million from industry.

European Local Energy Assistance (ELANA)

[ELENA](#) provides grants for technical assistance focused on the implementation of energy efficiency, distributed renewable energy and urban transport programmes. It can cover up to 90% of technical assistance/project development costs. Smaller projects can be supported when they are integrated into larger investment programmes. The grant can be used to finance costs related to feasibility and market studies, programme structuring, business plans, energy audits and financial structuring, as well as to the preparation of tendering procedures, contractual arrangements and project implementation units.

Partners

Sustainability West Midlands – Upcoming Events.

The SWM [Annual Conference](#) will be held on 3rd December in Birmingham. This year the focus will be on the launch of its new Vision 2030 Sustainability Roadmap. The conference will provide 100+ delegates with the opportunity to outline how they would like the West Midlands to look in 2030.

Hub Partners

© 2019 The Midlands Energy Hub

