## **NET ZERO NEWS**



The newsletter of the Midlands Net Zero Hub

Spring 2023



# 'Springing into action'

Michael Gallagher, Head of Midlands Net Zero Hub

Spring is always an exciting time of year. The days lengthen, nature springs to life, and the promise of an exciting year ahead comes into focus with budgets being confirmed. It has been a difficult winter for many, and the cost of energy continues to be a concern with fuel poverty continuing to be a key focus of the Hub's work. The team have secured a further £185m of retrofit funding for the region, alongside a further £10m for other programmes all of which will run through to March 2025.

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With the Hub team settling into delivery mode against this latest round of funding, it is worth noting that the success is reflective of the hard work that is being done in partnership with local authorities and LEPs alongside other stakeholders in the region. Local authority and LEP officers are delivering these complex and fast-paced programmes with the support of Hub colleagues, and I would like to thank them for their dedication, hard work, and collaborative approach. This way of working helps ensure we continue to demonstrate the region's ability to deliver against its Net Zero ambition.

In this newsletter, we look at innovative work taking place in Herefordshire with carbon audits being conducted on farms. While the Rural Community Energy Fund is now closed, projects that had feasibility funding are starting to be realised with Cromford Mills on track to be the first of the groups to have a fully completed project. There is also an interesting insight into the CleanMobilEnergy vehicle-to-grid pilot at Nottingham City Council's Eastcroft Depot which has recently seen the hardware element of the project completed.

The Midlands Net Zero Hub is funded by the Department for Energy Security and Net Zero as part of the Clean Growth Strategy. It is supported by Nottingham City Council who are the accountable body.

#### News

## More than £185m of retrofit funding secured for the region

Over 10,000 homes across the Midlands are getting upgrades to improve their energy efficiency following successful bids for funding from the Department for Energy Security and Net Zero through the Social Housing Decarbonisation Fund (SHDF) and Home Upgrade Grant (HUG). The money will go towards improvements to vulnerable households and off-gas grid homes with an EPC rating of D or below and could save residents between £220 and £400 a year on energy bills.

In addition to reducing instances of fuel poverty by helping residents save on their energy bills, the energy efficiency upgrades made through these schemes will make homes more comfortable and improve the household's health and wellbeing.

#### **Home Upgrade Grant**



The Midlands Net Zero Hub consortia bid has been awarded £135.8m through HUG. The funds secured will be used to provide energy efficiency upgrades and low carbon heating sources to up to 6,665 domestic properties that are off the gas grid across 60 local authority areas within the Midlands region.

This second iteration of HUG funding builds on success in retrofitting privately owned homes in the Midlands through the Local Authority Delivery and Sustainable Warmth schemes. Through the second phase of Local Authority Delivery scheme, over 4,700 measures were delivered to more than 3,700 homes across the region.

## **Social Housing Decarbonisation Fund**

Working in partnership with 24 consortia members, made up of 14 housing associations and 10 local authorities, the Hub used the experience of previous project successes to make a strong case to secure £47m of funding through SHDF. The grants will be used to retrofit homes in the region, using a 'fabric-first' approach which will see over 15,000 measures such as insulation, draught-proofing, and double glazing installed to improve the Energy Performance Certificate of the properties.

Nearly £600,000 of the funding will be used for developing digital technologies to support smart building use, for example sensors to monitor the effectiveness of the measures installed. The information collected will be used to make improvements to retrofit work in the future as well as identifying issues such as damp and mould within properties and flagging fuel poverty.

In the first phase of the Social Housing Decarbonisation Fund, the Hub secured £14m to retrofit 1,550 social homes in the Midlands region. Work is currently underway and is due to be complete later this year.

## Carbon audits now taking place at a Herefordshire Farms



Nine of 30 farm carbon audits have now taken place in Herefordshire as part of the county's drive to reach net zero by 2030.

The innovative audits, which have been organised by the Herefordshire Council Sustainability and Climate Change team and funded by Herefordshire Council's Climate Reserve, aim to help farmers understand the carbon footprint of their farms. This includes both direct emissions from activities such as livestock production and fuel use, and indirect emissions from purchased inputs such as fertilisers and energy.

This will help farm managers to identify opportunities to reduce emissions and increase the farm's overall efficiency, potentially leading to cost savings and improved business profitability – as well as helping to tackle climate change. The first audit took place at the Hereford Estate and was well received by the farm manager, who commented that the process had been "much easier than expected".

The 30 farms based across Herefordshire that are receiving carbon audits were selected following an open Expression of Interest process in partnership with the NFU and Farm Herefordshire. The audits are being carried out by independent consultants 4R Reassurance and will all take place between March and June 2023 with a follow up audit between January and June 2026.

This project is part of the Greener Footprints campaign - Herefordshire Climate and Nature Board's strategy to help the county reach net zero by 2030. For more information visit the Zero Carbon Herefordshire website or search Greener Footprints Herefordshire on social media.

## Rural community energy projects make progress



Ruth Mulvany visiting the rugby club

## **Birmingham and Solihull Rugby Club**

Birmingham and Solihull Rugby Club is exploring the opportunity of installing a ground mounted solar and battery storage project that would meet all of the club's electricity needs.

The 1.2 MW solar project would be connected to the local grid and via a private wire to the club and could save the club over £36,000 per annum on energy bills.

The project also includes the installation of a lithium-Ion battery solution to allow the club to provide EV charging to the local community and meet evening and wintertime energy requirements with electricity generated by the solar array.

Thanks to funding support provided by the Rural Community Energy Fund, and technical design and planning advice from renewable energy specialist IPV Flexgen, the club has been able to carry out a detailed feasibility study, pre-application works, and secure a grid connection. Subject to further approvals the project could be connected by Spring 2024.

#### **Cromford Mills**

Ground was broken at Cromford Mills in February as work gets underway for their Rural Community Energy Fund supported hydro power project. The enabling works step up a gear, with permission to excavate the new turbine housing under an archaeological watching brief.

This was always going to be the biggest unknown as to what the team could unearth as they uncover earth from the foundation of Arkwright's second mill. It's great to see works getting started on this amazing project.



Breaking ground at Cromford Mills

Visit Cromford Mills' website to find out more about the project.

## Innovative electric vehicle charging project launches in Nottingham

Installation of solar panels, battery storage, and 40 bi-directional electric vehicle charging units mark the completion of the CleanMobilEnergy vehicle-to-grid (V2G) pilot at Nottingham City Council's Eastcroft Depot.



Batteries being craned into position

Funded by Interreg North-West Europe, with a contribution from Innovate UK, the V2G pilot will show how technology can be used to optimise the site's energy demands, using the growing fleet of electric vehicles (EVs) batteries as a resource for short-term energy storage, as vehicles are transitioned from traditional internal combustion engines to EV.

This pilot aims to maximise the use of renewable energy that is generated locally by using the batteries and the 40 V2G vehicles for short-term storage of the electricity generated by the solar panels at the depot.

Each of the giant batteries that have been installed for

the project is made from 24 used EV batteries. These batteries are no longer sufficient for car journeys, but they have plenty of life left in them for energy storage.

Controlled and monitored by purpose-built Energy Management Systems, the bi-directional charging units can send power back to the Battery Energy Storage System on the depot or to the grid during peak times. The system balances the demand of electricity and reducing energy costs.

Across the depot, solar arrays with a combined generation of 138kWp will allow Nottingham City Council to use clean energy to charge the growing electric vehicle fleet. 51% of the council's vehicles are now powered by electricity, including six bin lorries, road sweepers and vans.

The hardware elements of the project have now been installed and the final steps are underway to:

 Link onsite assets and integrate with the interoperable energy management system (REMove)



Bi-directional charger and electric vans

- Complete G99/100 Agreement specifications with the Distribution Network Operator
- Optimise system performance to maximise cost savings and emission reductions

Follow the Enivronment and Sustainability Division on Twitter to keep up with all the latest on the project.

## Our partners





























