

ENERGY NEWS

The newsletter of the Midlands Energy Hub



Winter 2021



'2021 - The year of Clean Growth'

Michael Gallagher, Regional Energy Projects Manager

Welcome to the winter edition of the Midlands Energy Hub newsletter. The beginning of a new year is a good chance to reflect on challenges overcome, mark achievements, and determine the next steps on our journey towards Net Zero. Many local authorities have now declared climate emergencies and with publication of the [Energy White Paper](#), the [Sixth Carbon Budget](#), momentum is building both locally and nationally. Using this policy and political commitment, and the pressure to recover from Covid-19 to drive action, we need to make 2021 a year of clean growth.

Our work with kMatrix and Sustainability West Midlands analysing the Low Carbon and Environmental Goods and Service Sector is showing the Midlands is well placed to accelerate the transition to a decarbonised economy. In the Midlands, the sector is worth £26.6bn to the economy, as indicated by the value of sales in 2019/20. The sector being comprised of over 10,500 businesses employing 195,000 people across the region.

This newsletter looks at some of the exciting activity underway at the local and regional level. It looks at the work being done to repower the Black Country, Coventry's ground-breaking drive to become an all-electric bus city and explores possible locations for Low Carbon Transport Hubs. We give an update on the Green Homes Grant Skills & Training programme and look at the issues facing the agricultural sector and the work being done to decarbonise our food supply.

This year is going to bring challenges but is also going to bring opportunity for positive change. I am very much looking forward to continue working with our stakeholders and partners in the coming year.

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

Committee for Climate Change publishes 6th Carbon Budget.

The [Climate Change Committee \(CCC\)](#) has published the UK's [Sixth Carbon Budget](#). It proposes a 78% reduction in UK territorial emissions between 1990 and 2035, in effect bringing forward the UK's previous 80% target by nearly 15 years. To achieve this goal, low carbon investment must scale up to £50 billion each year. Such an investment will generate substantial fuel savings, as cleaner, more-efficient technologies replace their fossil-fuelled predecessors. These savings will cancel out the investment costs entirely, meaning that over time costs will be below 1% of GDP over the next 30 years. Other key recommendations include all new cars, vans and boiler replacements in homes and other buildings to be low-carbon (largely electric) by the early 2030s, with all new trucks being low-carbon by 2040. All UK electricity production will need to be zero carbon by 2035 with offshore wind becoming the backbone of the UK energy system by 2050. The report also recommends, less waste and reliance on high carbon goods, with the transformation of agriculture and use of farmland whilst maintaining the same levels of food production per head as today.

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Alongside the work on the Sixth Carbon Budget, the CCC has published a [report on the role of local authorities](#) in delivering Net Zero. The report aims to provide a framework for aligning climate action at the local level.

Repowering the Black Country

The Black Country has an industrial base of more than 3000 energy-intense businesses, many still engaged in the region's traditional metal processing operations. The [Repowering the Black Country](#) project aims to reduce emissions from these industries through a co-ordinated programme of transformational projects focused around a new type of industrial estate: 'the [zero carbon hub](#)'. The Black Country Consortium has been awarded [funding from UK Research and Innovation \(UKRI\)](#) to support businesses and local authorities develop to plans for the proposed zero carbon hubs and reduce energy costs for industry across the Black Country.

Midlands regional Transport Hubs

The recent [announcement from Government](#) bringing forward the ban on sales of new petrol and diesel cars to 2030 has focused minds on the practical measures necessary to decarbonise transport and logistics. Alongside our work with local authorities and other partners supporting the installation of electric vehicle chargers, the Midlands Energy Hub recently concluded a study with Cenex and Coventry City Council exploring the potential for a Midlands network of 'Infrastructure Scale' energy and transport hubs.

This study combined a mapping exercise with local knowledge to create a blueprint for a Midlands wide network. [Cenex](#) carried out a 'strategic outline case' firstly looking at the particular strands of activity expected on the sites before looking at the short, medium and long-term needs for each activity. This was developed further to look at capital cost, operating costs and revenues before ranking the potential sites in order of suitability for development into combined transport and energy hubs.

A more detailed analysis of the Anstey Park site, put forward by Coventry City Council, has also been completed as a precursor to developing a more comprehensive business case.

Not in an urban centre but near to/on the site of retail and/or leisure attractions (or a site that has potential for retail and leisure attractions)	Large site footprint (> 10 acres), with capacity to grow with demand	Near to major distribution network infrastructure, such as grid supply points, bulk supply points or primary substations	Alongside or near to strategic road network, or other road links with high traffic flow
Within a short bus/tram journey of a large urban centre	Near to a major road interchange	Near to major employment sites, including companies with large fleets	Brownfield development land
Unsuitable for housing or employment development	Near to the gas transmission network		

Criteria used to identify potential Transport Hub sites

The next step is to conduct site-specific discussions with relevant stakeholders to identify land ownership, planning constraints and assess local support to determine whether the Anstey Park proposal can be replicated. In order to begin this work the Midlands Energy Hub, in collaboration with [Midlands Connect](#), will arrange an event in February to bring together potential partners. If you wish to attend, or alternatively provide feedback on the [report](#), please contact us [here](#).

Specialist Energy Advice to industry in Worcestershire.

[Worcestershire LEP](#) has appointed energy specialists to provide bespoke energy advice to local companies. These advisors will work to identify savings from energy efficiency and renewable energy generation. They will also identify grants and other financial help available to industry. The service will be offered via the county's Growth Hub, [Worcestershire Business Central](#), and work closely with County Council initiatives such as the [Business Energy Efficiency Programme](#). Initially the focus will be on carbon savings via reduced usage before looking at generation, energy storage and connection issues. The support will be available to Worcestershire businesses from March 2021 onwards.

Rural Community Energy Fund

The winter round of RCEF applications saw approval of funding for three, Stage 1 projects including a heat network, a sustainable village and the use of ex-airfield sites to generate electricity.

[Ludlow21](#) is a not for profit company in Shropshire tackling fuel poverty in housing association properties. This project will investigate the potential cost and carbon savings of a shared-loop ground source heat pump (GSHP) to supply heat to rural off-gas-grid homes. In Sedgberrow, Worcestershire, [SeSaME](#) are looking to reduce the carbon footprint of their village. This community interest group has already helped the community adopt low carbon technologies. The RCEF funding will be used to map the energy consumption of the village and look at the feasibility of low carbon generation technologies. Meanwhile in Lincolnshire, [CERT](#) is looking to develop a sustainable income from renewables. The project seeks to

generate solar energy on Ex-Ministry of Defence sites that have been converted to housing. The income will enable the group to continue to offer support to charities and social enterprises.

The [Cromford Mill](#) and Harbury e-wheels projects were awarded Stage 2 funding enabling these groups to set up community interest companies, make planning applications and conduct further technical surveys. If you are based in a rural area and have a project that could benefit from RCEF support, please contact the team [here](#).

Features

Coventry – All Electric Bus City

John Seddon - Head of Transport and Innovation, Coventry City Council

Coventry has been shortlisted, along with Oxford, for [All Electric Bus City](#) status, with the Department for Transport committing [£50 million](#) to support the transition of the bus fleet operating in the city to all electric operation. This builds upon Coventry's existing initiatives to decarbonise the transport system, with the number of on-street electric vehicle charge points set to reach 400 by April 2021, 70 electric vehicles being added to the City Council's fleet, and ten electric buses already operating within the city.



A Coventry electric bus in action

The Coventry All Electric Bus City programme is being run by a partnership led by the [WMCA](#), with Warwickshire County Council, Coventry City Council and the bus companies. Working together, they will develop a scheme covering all public bus services operating within the city and surrounding areas.

In total, the programme will see 297 electric buses operating in the city by the end of 2025, in addition to the [ten already operating](#). This will have air quality benefits in Coventry, where an Air Quality Action Plan is being implemented to tackle nitrogen dioxide levels, as well as within neighbouring towns such as Nuneaton, Bedworth, Kenilworth, Leamington, and Warwick. The buses will provide a more comfortable, quieter journey for bus passengers, making the bus a more attractive option for local journeys within and between these communities.

Subject to final sign off by the WMCA Board in March 2021, the process of procuring the new buses and the supporting charging infrastructure will commence in April 2021, with the buses being phased into operation over the next four years.

Sustainable Agriculture

Adam van Winsum - Harper Adams University.

As the population grows, so do the [demands on the planet](#). Managing this precious resource whilst faced with climate and biodiversity emergencies has never been more critical. At [Harper Adams University](#), we are working to address these challenges through research, education, and innovation.

Crucial to meeting these global challenges is the issue of soil health. Soil is [vital to our survival](#); globally more than 99% of the calories we consume come from food that has been grown in soil, either directly, or indirectly via livestock. As such, soil degradation is one of the greatest threats to global civilization. Several civilizations have collapsed over the last few thousand years, in part due to soil degradation. These include the Maya in Central America, the Anasazi in North America, and the Easter Islanders in, well, Easter Island. At Harper Adams, we offer a range of courses to ensure the next generation understands the functioning of soils and how best to maximise soil health, for the benefit of us all!

One cause of damage to soil health has been the deployment of larger machinery introduced over recent years to improve farming efficiency. The [Hands Free Farm \(HFF\)](#) project follows the award-winning Hands Free Hectare study. This project was the first in the world to plant, tend and harvest a crop without a driver in the seat or an agronomist on the ground. The HFF project is further investigating the use of fleets of smaller autonomous vehicles to reduce the impact on the land and enable farmers to use their time more effectively.

We also seek to make the university's own activities more sustainable. [The Sustainable Transformation Energy Project \(STEP\)](#) is a major heating and power infrastructure scheme designed to reduce both energy costs and carbon emissions. Housed within a bespoke Energy Centre is a Combined Heat and Power (CHP) engine (400kWe) and a Biomass boiler (1MW) that will generate 75% of electrical, and 80% of campus heat demand. The Biomass boiler uses locally sourced woodchip to provide heat to the District Heating Network (DHN), with the CHP providing an additional 1.5 kWh of useable heat for every 1kWh of electricity generated. A 650kWp solar PV array, located on three dairy buildings will provide yet more renewable energy.



The STEP Energy Centre

Funding News

Green Homes Grant Local Authority Delivery Phase 2

The Midlands Energy Hub are to receive a total of £59.95m of funding as part of Phase 2 of the Local Authority Delivery (LAD) element of the Green Homes Grant scheme, which will run to December 2021. All councils have been informed of their indicative LAD Phase 2 allocation. The allocation has been calculated to reflect the number and proportion of EPC Band E, F & G properties within each local authority. The Midlands Energy Hub are keen to support proposal development so will be running a series of workshops. The first workshop will be on 'eligible measures', 2nd February at 10:00 to 11:30. Please contact your Regional Energy Officer for further details.

The Green Homes Grant Skills Training Competition Launched

The Department for Business, Energy & Industrial Strategy (BEIS) launched the [Green Homes Grant skills training competition](#) in September 2020. The scheme aims to ensure tradespeople are equipped and professionally trained to deliver home improvement measures that qualify for the [Green Homes Grant](#). The competition, managed by the Midlands Energy Hub, has resulted in the award of more than £6 million to [18 successful](#) providers. The scheme will result in more than 5,000 training opportunities to support the installer base across England. The successful providers will be launching courses from the 4th January with the training to be delivered by 14th May 2021.

Partners

Sustainability West Midlands

[Sustainability West Midlands](#) and [kMatrix Data Services](#) have been commissioned by the Midlands Energy Hub to provide an evidence-based study to understand the current state of the Low Carbon Environmental Goods & Services (LCEGS) sector across the Midlands. It will identify where support is needed to help grow this sector and the role the LCEGS sector can play in driving green recovery from Covid-19. The outputs will include data at local LEP authority and LEP level, along with a Midlands wide report.

Nine focus groups (one for each LEP area) were held in January 2021 to discuss the quantitative data. These were attended by 130 cross-sector delegates who shared their valuable insight. This input will be fed into the final recommendations with the final report expected by March 2021. The presentations for each LEP area and the Midlands Engine can be [downloaded here](#), along with executive summary reports.

Hub Partners

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