





About this report

This is the third annual Community Energy State of the Sector report for the Electricity North West licence area. It focuses on the progress of the sector in 2020 across Electricity North West's region, showcasing the ambition of the sector and highlighting the importance of community energy for achieving net zero and a green recovery. The report also provides insight for policy-makers and stakeholders into the barriers the sector faces and how these might be overcome.

Electricity North West supports this annual survey to understand the current state of the community energy sector in the North West region, as well as to identify evidence-based areas of growth and opportunity. This enables Electricity North West to better support and collaborate with community energy organisations to make sure they are a core part of the net zero energy systems transition. It also aims to create an accessible database for stakeholders.

Anonymised data from this and previous years' surveys is publicly available, which reduces the need for community energy organisations to fill out multiple surveys and gives stakeholders access to relevant data to better understand the sector.

The survey was open from February to April 2021, with the data analysis and reporting delivered by Regen, before publication in June 2021. Questions were asked about electricity generation, low carbon transport, low carbon heat, energy efficiency, barriers to projects and future plans. There were also questions about the social impacts of community energy, diversity, funding, and how COVID-19 has affected activities.

Thank you to the 12 community energy organisations in the Electricity North West region who took the time to complete the survey. These responses provide the basis of this report. The final database includes an additional 16 community energy organisations who have been identified in previous years.

We hope this report and corresponding dataset are useful tools in understanding and supporting the development of the community energy sector. This report is part of more extensive research that was carried out on behalf of Community Energy England, Scotland and Wales. The UK State of the Sector report can be found here.

To access the anonymous database, please contact data@communityenergyengland.org.



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Community energy sector in the North West: in brief

With the right support, community energy in the North West could play a key role in achieving net zero.

FTE roles

17.6 MW of communityowned generation

spent locally in 2020

A route to net zero

Community energy is playing a crucial role in achieving net zero by gaining consent, increasing participation and embedding behaviour change. Community energy organisations will be a critical part of making sure the energy system transition is fair and no-one is left behind.

Provision of social benefits

Community energy delivers additional social and environmental value and is contributing to a green recovery. The sector advocates for the most vulnerable in society, such as those in fuel poverty.

Community energy needs the right support

The main barriers to community energy include lack of funding and a challenging renewable energy generation business model. To unlock the potential of community energy to deliver at scale, we need a long-term, stable and supportive policy environment.

People powered net zero:

The role of community energy in a net zero future

Over 20 local authorities in Electricity North West's region have declared climate emergencies and are drawing up plans on how to achieve their goals. Community energy is uniquely placed to help reach local and national net zero targets whilst keeping important social issues at the heart of the energy transition.

Community energy organisations work to tackle decarbonisation and social justice, both of which underpin a fair transition to a net zero energy system. However, the social value of community energy is often overlooked by policy makers and potential project partners; this report is designed to help build up this evidence in the Electricity North West region.

Across Electricity North West's licence area, 29 community energy organisations are involved in renewable electricity generation schemes, energy efficiency work, fuel poverty alleviation and low carbon transport projects.

These projects create local employment, with 10 new jobs created in 2020. During 2020 the community energy organisations in Electricity North West's region engaged over 6,250 people, empowering them to take an active role in reducing their carbon emissions. For example, Torrs Hydro has engaged with their wider community through events, word of mouth and newsletters.

Most community energy organisations are community asset holders, but many also interact with their communities; with five engaged in education initiatives, five working to improve their local environment and seven providing additional funding for other local improvement projects. Whalley Community Hydro funded solar panels and low energy lighting for four local schools, cutting costs for the school while educating pupils and their families about energy efficiency.

This combination of grassroots education, work reducing fuel poverty, wider support to local communities and use of low carbon technologies make community energy a necessary part of a net zero future.

The transition to net zero will affect everyone. **Community action in North West England has** the local reach to ensure no-one is left behind.



People powered net zero:

Community energy: delivering social value

Community energy organisations are the key link between the seemingly inaccessible world of the energy system and people's everyday experience of using energy.

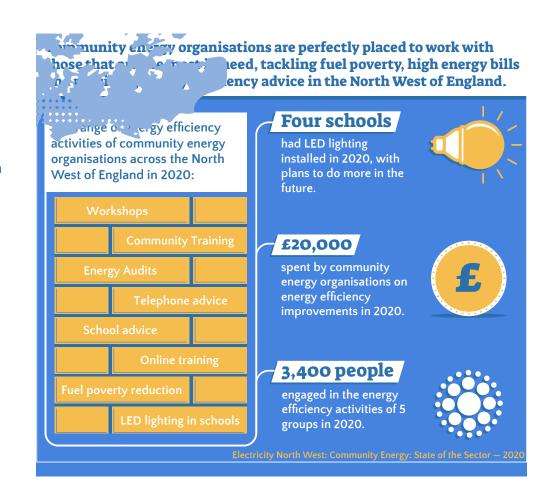
They are uniquely placed to converse with the large players in the energy system, while advocating for the most vulnerable in society. At least seven groups have either delivered or are currently delivering a project in partnership with Electricity North West, while four others have worked on projects with charities and local businesses.

Net zero will mean significant changes in our communities, such as switching to heat pumps and retrofitting our homes. Community energy organisations are well placed to communicate these changes to people and build public support for the energy transition.

As part of their work to improve energy efficiency and tackle fuel poverty in their communities, groups used workshops, online training sessions, energy audits, telephone advice and advice for schools. For example, Carbon Co-op and Ambleside Action For a Future provide retrofit advice services, while Greater Manchester Community Renewables provide energy audits and energy switching services.

Across the region, community energy organisations spent over £20,000 on local energy efficiency improvements during the past year.

During a challenging year, community energy organisations across Electricity North West's region were able to continue supporting their community through the pandemic by having a recognisable and trusted local presence.



The progress of community energy in the North West

Community energy organisations in Electricity North West's region employ 38 full-time people, supported by over 150 volunteers who spent over 6,500 hours in 2020 helping to deliver local energy projects. Overall, community energy activities in the region reached an estimated 6,250 people in 2020.

Whilst there have been 10 new FTE roles created in 2020, some groups have reported less FTE roles than last year which is why the total FTE has not increased by 10. There are also less community energy organisations reported due to the merging of some organisations

Deployment of new renewables slowed in 2020, due to the challenging nature of small-scale renewable generation business models and delays caused by the pandemic, resulting in many community energy organisations in the region focusing on energy efficiency and fuel poverty projects. However, one 70 kW solar project was installed by Baywind Energy Co-op last year.

There is currently 17.6 MW of community-owned renewable generation connected to Electricity North West's network. This includes High Winds Community Energy's 11.5 MW of wind generation across two sites in south Cumbria. The income from this project led to £60,000 in donations to Baywind Community Energy Trust in 2020, which supports local energy efficiency projects and fuel poverty relief, as well as specific COVID-19 support during the past year including donations to local foodbanks.

In 2020, community energy organisations spent £120,000 to support local people through community benefit funds, including £1,300 in specific COVID-19 relief funding.

Communities across the region have big ambitions for the future and are looking to scale up their projects. At least five electricity generation projects are being planned with a total capacity of 3.8 MW. This includes solar PV installations on large buildings such as factories and schools.

17.6 MW

electricity generation connected in the North West of England. 70 kW of solar PV was installed in 2020.

a solar farm part-funded by the Rural Community Energy Fund and up to 60 domestic properties with solar PV installed on the roof. One group is investigating an anaerobic digestion project with a capacity of 0.5 MW.

Charge My Street intend to install more electric vehicle (EV) chargers, while three other community energy organisations will be expanding on their energy efficiency work, with <u>Greater Manchester Community Renewables</u> working in partnership with an energy advice charity. Other community organisations intend to carry out thermographic surveys of homes in their community and to investigate bulk buying energy efficiency measures.

Throughout a challenging year, the ambition of community energy organisations to play a leading role in the recovery from the pandemic was clear. 2020 was another year of local climate activism in Electricity North West's region and communities' calls for a just transition were brought into sharper focus by the COVID-19 crisis. Community energy organisations continue to be agile and resilient, adapting their activities to the current climate.

Case studies: Urban and rural community energy

Community energy organisations across Electricity North West's diverse region are showing how they can support a just transition in their local areas.

Case study: Ambleside Action for a Future

There is a lot of ambition to carry out community energy projects in the Electricity North West region. Ambleside Action for a Future (AAFAF) was founded in 2018 and has grown to over 100 members, with six active subgroups progressing their vision to get Ambleside to net zero by 2030. Over the past year, they have been campaigning for low carbon transport in the Lake District and have restarted their community plant growing activities, including tree maintenance, plans for a wildflower meadow and targeted woodland and habitat restoration. Working with Cumbria Action for Sustainability (CAfS).

they have developed and launched a carbon footprint calculator for households and businesses. With CAfS. AAFAF are developing possible energy projects, such as retrofitting homes for energy efficiency where they will offer thermographic camera surveys to engage the local community, a solar PV project for larger nondomestic buildings and a solar PV bulk-buy scheme for homeowners.



Case study: Greater Manchester Community Renewables

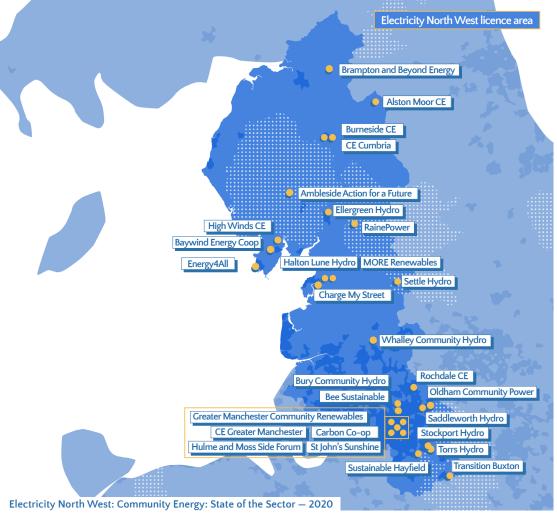
Run entirely by volunteers, Greater Manchester Community Renewables (GMCR) is a community benefit society set up to install community-owned renewable generation, focusing on schools and community buildings. GMCR benefits its local community through supporting schools to use PV on their roofs as an educational resource and a grant funded project in partnership with Groundwork Greater Manchester to provide domestic energy saving and fuel poverty advice.



Community energy in our region

In the midst of the COVID-19 pandemic, community energy organisations in the North West adapted and developed to deliver value to their area.





How the North West compares

of all community energy organisations in the UK can be found in Electricity North West's region

11.5 MW of wind generation, more than any other region in England

community energy organisations per million people, the same as the **UK** average

48% of the UK's community-owned hydro generation is in the region

Electricity North West supports community energy organisations in the region through an annual seed fund, 'Powering our Communities', which has funded 19 projects since 2018. Community and local energy stakeholders in the North West can also attend Electricity North West's Community Connects engagement events to access support and advice from their network operator, while Electricity North West's regular community energy newsletters keep stakeholders up to date on relevant community and local energy news.



Future innovation and new areas

Community energy organisations are finding new ways to lead the energy transition in their local areas.

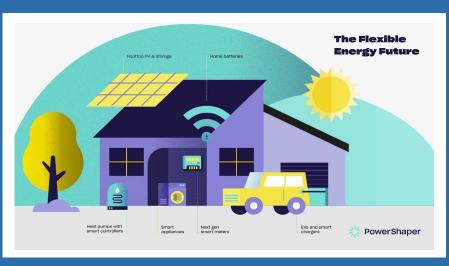
Community energy organisations continually adapt and innovate to find new business models and meet their mission to deliver net zero carbon energy projects.

Urban and rural communities in Electricity North West's region are innovating to seize opportunities and meet the unique local challenges that net zero will provide. Installing EV chargepoints in Cumbrian villages, retrofitting Victorian homes in Manchester and aggregating flexible energy use in our homes are all non-traditional community energy business models that North West community energy organisations are exploring.

Electricity North West worked with Carbon Co-op on a funded action research project, 'Warm Homes For All', which produced a practical toolkit to help funded energy efficiency schemes become more people-centred. The project explored what would happen if we turned our approach to designing retrofit schemes on its head, by designing a successful energy efficiency scheme from the point of view of a resident experiencing fuel poverty. This is a further example of communities working with their network operator and other partners to create innovative solutions to the energy transition, ensuring no one is left behind.

Case study: PowerShaper

PowerShaper is a community-owned energy aggregator service, led by Carbon Co-op, which has been developed as part of the 2019-21 Open DSR project, with funding from BEIS. The service aims to support the flexible use of the electricity network through domestic demand side response (DSR), so that more of the energy we use can be supplied by renewables. It works by paying customers to switch home electrical appliances, such as EV chargers and immersion heaters, on and off remotely. As PowerShaper is community owned, the service is local and trusted, which has proved to be valuable in engaging with early adopters of low carbon technologies, while retaining more of the emerging value of flexibility within the community energy sector. Across Electricity North West's region, a further four community energy organisations have expressed an interest in participating in similar flexibility projects or trials in the future.



Future innovation and new areas

Community energy organisations are finding new ways to lead the energy transition in their local areas.

Case study: Charge My Street

With the UK government's announcement to ban the sale of new petrol and diesel cars by 2030, more EVs and chargepoints are popping up around the country. Charge My Street is a community benefit society which installs and operates EV chargepoints. It raises investment through community shares, with the ambition to install 200 22 kW fast chargers across England. Their innovative business model gives local people the information and relevant guidance to finance their own chargepoints at the locations which would benefit most from a charger. In 2020, they supported the installation of 11 new public chargepoints across Lancashire and Cumbria.





Charge My Street is also supporting eBikes as a sustainable transport solution. Among their installations is a combined EV and eBike chargepoint at Eden Housing Association in Penrith, Cumbria.

Meeting our potential

Overcoming barriers in our region

Community energy organisations need a long-term, stable and supportive policy environment to reach their potential.

Across the UK, community energy organisations are faced with challenging business models for small to medium scale renewables.

In Electricity North West's licence area, three communities reported a lack of access to a suitable site, two respondents cited a lack of a clear or viable business model and two reported a lack of funding as some of the main barriers to their projects.

The sector has suffered from the government's removal of the Feed-in Tariff in 2019, the Urban Community Energy fund in 2016, the Non-Domestic Renewable Heat Inventive in 2021 and the Social Investment Tax Relief. There is also uncertainty about the continuation of the Rural Community Energy Fund, a vital source

of funding for new community energy entrants who want to address climate change.

Specific projects in the region, such as one from <u>Greater Manchester Community Renewables</u>, have also stalled over the past year due to lack of funding, as well as issues gaining permission from the Department for Education for 80 kW of solar PV on school rooftops.

Electricity North West's support to community energy organisations to overcome these barriers is vital for these organisations to realise their ambitions. Support with access to suitable sites, early-stage funding and expert technical support have been cited by communities as services they need to help them deliver projects. Electricity North West is exploring how it can work with other regional bodies such as local authorities and the regional energy hubs to provide more support for community energy in the North West and develop viable business models, as well as developing proposals as part of its planning for ED2, the next price control period for network operators. This includes a proposal for a £1 million per year fund for community energy organisations in the region. Electricity North West also actively supports Community Energy England's activities to secure a more supportive policy landscape and help the sector overcome barriers.

On a national scale, the year ahead looks brighter with COP26 providing an opportunity to engage more people in energy and push for a more supportive policy environment.



Community Energy England Membership

Community Energy England is the voice of the community energy sector in England, helping to create a supportive policy landscape for community energy. We also help active community energy organisations to connect, collaborate, share expertise and overcome obstacles. Join us to show your commitment to the sector and strengthen our collective voice.

Contact us for more information

033 3303 4126

info@communityenergyengland.org

Twitter: @Comm1NRG



Who is Electricity North West?

Electricity North West Limited is the North West's electricity distribution network operator (DNO). It owns, operates and maintains the network of overhead lines and underground cables and are proud to power the lives of five million people in the region.

The way we use electricity is changing rapidly. Electricity North West are at the forefront of energy innovation, working with local communities, key stakeholders and expert partners to ensure everyone has the power they need when they need it.

Contact us for more information



How can I help?

How you can get involved in community energy

Whatever your skills and wherever you are in Electricity North West's region, your time, skills and human energy can help community energy. We encourage you to get involved with your local community energy organisation, to take direct action on climate change and to ensure a just transition to net zero. We would also value your support for our work at national levels advocating on behalf of the community energy sector.

You can get involved in many ways, including:

- Find your local community energy organisation and...
 - Become a member
 - Sign up to their newsletters and follow on social media
 - Volunteer your time and expertise
 - Invest financially in one of their projects
 - Make use of their energy efficiency and other services
- Suggest that your local community group gets involved with an energy project
- Start up a new community energy group
- Email your MP to tell them about community energy and ask them to back supportive policies
- Spread the word about community energy to your friends, family and other organisations taking action on climate change or community building.

Community Energy England have resources to help you get involved with community energy, start a project yourself and invest in community energy share offers. Click on their logo to take a look at their introduction to community energy and explore more information on their website. Don't forget to follow them on social media as well.

You can also visit Electricity North West's community and local energy webpage for resources and information on how they are supporting the sector in their region.











Electricity North West: Community Energy State of the Sector Report 2020

Working together towards net zero