



Bringing energy to your door

An introduction to community energy



Welcome!

"Community energy offers an opportunity to work with your friends and neighbours to get involved with where your energy comes from and how it's managed and used. It gives communities the power to take control and do something positive for their local area.

At Community Energy England, we work with community groups across England to put people at the heart of the energy system. I am therefore pleased to introduce this guide from Electricity North West – the power network responsible for managing the overhead lines and underground cables that bring electricity to your property – to help you to understand what community energy is, how it works, its wider benefit and how to get involved."

Emma Bridge

Chief Executive

Community Energy England

Suma Bridge

For more information on Community Energy England, please go to www.communityenergyengland.org

When it comes to energy, the future's in your hands

While our Big Energy Conversation aims to help the North West get actively engaged and switched on to the reality of energy consumption, our recent research showed that although community energy was something that appealed to many, the majority of our customers still knew little about the finer details, or how they could actually get involved.

In this guide we'll cover what community and local energy is, what type of projects there are as well as some case studies, the benefits, our role here at Electricity North West, and information on how you can get involved.

If at any point you have any questions, please contact us by going to www.enwl.co.uk/communityandlocalenergy. Click 'Get in touch' and you can send a message direct to our community and local energy manager.

Community and local energy: what exactly is it?

In short, they are community-led projects or initiatives to reduce, manage, generate or purchase energy. Community energy offers an opportunity to challenge our assumptions about energy by encouraging us as individuals to take greater control over energy supply and get involved and engaged with energy efficiency and the process of demand reduction.

While local energy projects are motivated by a range of issues, including climate change, the emphasis is very much on engaging a sense of collective purpose to encourage positive change and to provide a real economic and social benefit to the communities they serve.

A good example is Carbon Co-op, a community benefit society established in 2008 and incorporated in 2011 by Greater Manchester residents who had begun carrying out changes in their homes and communities to reduce carbon emissions and energy bills. The organisation is owned and run by the householders who make up its members, reducing members' energy costs and carbon footprint by sharing experience, knowledge and bulk purchase.

In addition to community energy projects, local energy also includes activities by a wider set of partners such as local authorities, housing associations, intermediary or advisory organisations and businesses.

What types of community energy projects are out there?

Community energy initiatives include reducing the carbon footprint of a local area; communityowned renewable electricity installations; community members switching as a group to a renewable heat source; and a community trial of smart meters, to raise awareness of energy use.

Manchester and the North West is a national hub for community energy activity and innovation. Some have a focus on energy efficiency while others have developed community owned rooftop solar projects or reservoir hydro schemes.

Why not take a closer look...

Community and local energy is a small but growing sector; in the North West we are aware of a number of community energy groups with connected generation totalling around 20 projects deploying about 13.4MW (megawatts) - that's enough to power about 6,500 homes every year. Here are a few examples:

Oldham Community Power case study

Oldham Community Power is a community benefit society run by a board of volunteer directors, appointed by members. To date, the society has installed and commissioned six solar photovoltaic (PV) generation sites; five on schools, and one on a community building. Oldham Community Power retains ownership of the schemes while the schools and community centre use the power at a price less than they were previously paying. All money raised generating energy is kept local, through returns to investors and supporting local projects.

Community Energy Cumbria case study

Community Energy Cumbria Ltd (CEC) has developed two projects to date; a 152,000 kWh/pa Killington Reservoir hydro scheme where the income is sold directly to the grid, and a 30kW PV solar array on Murley Moss, believed to be the first National Park in the UK to purchase its green energy supply directly from the community. Income generated from these schemes is divided between covering the running and maintenance costs of the projects, repaying the capital investment to the shareholders and paying an annual interest to shareholders. Any surplus is then made available for community and environmental projects.

Whalley Community Hydro case study

Whalley Community Hydro is a community benefit society which owns a 100kW micro-hydro scheme at Whalley Weir on the River Calder at Whalley, in Ribble Valley, Lancashire. The scheme started

generating electricity in November 2014 and profits from the sale of that electricity has established a community benefit fund supporting local sustainable development and carbon saving projects that tackle climate change, promote energy efficiency and reduce fuel poverty.

Civic Quarter heat project case study

Manchester City Council (MCC) is developing a District Heating Network (CQHN), part-funded by the national Heat Network Delivery Unit, in the city's Civic Quarter. The combined heat and power (CHP) units within the energy centre will generate electricity, while the boilers capture the usable heat produced in this process and pipe it to buildings in the city centre. These include the Town Hall extension and Central Library, Manchester Central Convention Centre, The Midland Hotel, One St Peter's Square, Manchester Art Gallery, The Bridgewater Hall and Heron House.

So what are the benefits of community energy?

By taking control of your energy as part of a community energy project, you not only reconnect people with how energy is generated and how they consume it but you also help maintain energy security and tackle climate change. Community energy provides clean, efficient and affordable ways to power schools, hospitals, local government buildings, high streets and many more. However, the benefits of community energy initiatives go way beyond this. Taking control of your own energy supply can also be highly empowering, giving normally isolated groups common ground, boosting a sense of what's possible among individuals and the community as a whole and increasing public acceptance of renewable energy schemes.

There is growing recognition that community energy schemes are economically viable, and the potential for more affordable energy, in addition to generating surplus for a "community benefit fund" which is used to reinvest into community schemes, is often what prompts people to make the switch. In addition, another way that community energy keeps money in the local community is by using local energy firms, and some schemes are also investigating local trading.

What's Electricity North West's role in all this?

As the electricity network or distribution network operator, we have an important role to play in the development of community and local energy projects including enabling new connections, accommodating new generation and innovating for the changes that are taking place. This will involve a lot of internal changes to our systems and processes, not to mention developing new relationships and commercial agreements with community and local energy groups.

We believe there's a chance to develop an open, more democratic, efficient and affordable energy

supply in local areas, and community energy provides a real chance to get communities involved in this. Community and local energy groups are well informed customers who understand the potential of how the grid could operate in the future. It could therefore be mutually beneficial to work together to develop how the distribution system of the future may operate. Those with funds to invest in community shares can have a stake of ownership in the 'energy revolution', while those in fuel poverty will also get a chance to benefit.

In short, we believe community energy has a significant role to play in the future of a renewable and affordable energy system and we are actively looking to strengthen bonds in this area.

OK, I'm interested – how can I find out more?

There are a variety of resources and information available online for community and local energy groups. We're a proud member of Community Energy England, a membership body representing the community energy sector in England. Their <u>Community Energy Hub</u> provides a lot of free information on community energy projects and how you can get involved, such as how to find and get in touch with a local group.

Or why not come along to one of our Community Connects workshops, or even <u>sign up to our newsletter</u> - a great way to keep up to date with the latest community and local energy news?

You can also visit the <u>Big Energy Conversation</u> on our website, as well as our <u>community and local</u> <u>energy web pages</u> where we have other guides to download and information about our Community Connects events.