

Environmental Audit Committee inquiry into community energy - written evidence submitted by the Centre for Sustainable Energy and Bristol Energy Network (joint response).

[The Centre for Sustainable Energy \(CSE\)](#) is an independent national UK charity (#298740) working to tackle the threat of climate change and end the misery of cold homes. Established in 1979, CSE undertakes practical work to support individuals, communities and organisations to take action on energy, alongside original research and analysis to inform local and national policy.

[Bristol Energy Network \(BEN\)](#) is an umbrella organisation for individuals and community groups with an interest in energy in Bristol and the surrounding area. BEN has over twenty members involved in many different energy projects, including: assisting people struggling to pay their fuel bills; advising people on how to reduce their energy use both by changing their behaviour and ensuring homes and community buildings are more energy efficient, supporting the transition from fossil fuels to renewable energy and education, campaigning and lobbying activities.

Together, we are very aware of the challenges faced by community energy groups but also of the dedication and enthusiasm of communities who continue to develop projects despite the current challenges. We believe that in order to achieve a smart local energy system, as outlined in the white paper, there needs to be a more supportive community energy framework that enables (i) greater participation and agency in shaping [local future energy landscapes](#), and (ii) a greater share of the benefits that arise from the transition (see the [Ambition Lawrence Weston Wind turbine project](#)).

What contribution could community energy (through renewable power and/or energy efficiency) make to achieving net-zero by 2050 in the energy sector and its potential role in decarbonising the heat and transport sectors?

To achieve rapid and fundamental changes to the way we heat buildings and use energy and how people and goods get about; we need to draw on all sections of society, make and enable a range of investments (both financial and social investment), and create new and different forms of partnerships.

We work with voluntary, social enterprise and community groups everyday who are passionate about leading these sorts of changes in their communities – they want to see the EV charge points installed, they want to know if communal heating systems could help tackle high fuel bills, and poverty in their neighbourhoods.

These groups are an important and trusted source of advice in their neighbourhoods; they're helping to increase local electricity generation; they're exploring alternative heating options; they're helping local people to understand their retrofit options – and access Green Home Grants; they're promoting EVs (and a few are running EV car clubs); and they're helping to tackle fuel poverty and support a smart and fair transformation of the energy system. But it isn't made easy for them.

We see community energy - in its different forms – as a crucial component in building the underlying capabilities, vision, trust and support required for a rapid and fair transformation of the energy system and the achievement of various net-zero targets:

- Community owned generation assets: Establishing community owned energy generation assets, e.g. wind farm, roof-top solar on a factory, wind turbine, heat network, with surpluses being fed back into the local economy and used to support local development.
- Awareness raising and Education: General awareness raising and education about energy and climate change, e.g. with public, local community schools, youth groups. Community energy organisations are able to communicate with the harder to reach groups (see for example 'energy champions').
- Tackling Fuel Poverty: Helping people living in fuel poverty, e.g. providing free advice and support to help people manage their bills and make low cost energy improvements to their homes and educating people on their rights.
- Improving community buildings, e.g. installing more efficient heating, LED lighting, insulation or solar panels on village and community halls, religious buildings or sports clubs.
- Establishing Low Carbon Transport options: Improving low carbon transport options, infrastructure and take-up, e.g. through a community car club, active travel schemes, or installation of EV charging points.
- Home Energy Improvements: Improving the energy performance of homes through retrofitting improvements, e.g. community bulk buying schemes or advice on domestic retrofit. Generally targeted towards the 'afford-to-pay market' as opposed to those living in fuel poverty.
- Energy Storage and Flexibility: Providing energy storage and flexibility assets, systems and services, e.g. managing excess generation and reducing peak demand or providing flexible supply and demand to the District Network Operator.

The benefits of community energy are depicted in this diagram from the [Bristol Community Strategy for Energy](#):



How well are the financial and technical needs of setting up and running community energy projects met by existing government support mechanisms?

While there is a huge appetite for action and change, setting up and running community energy projects is often delayed or inhibited by a lack of existing government support mechanisms for community and the challenges of developing viable business models in the current regulatory and financial context.

Most obviously, the early demise of UCEF has significantly affected what has been possible in towns and cities across the UK. Examples of the types of project this scheme made possible can be found [here](#).

CSE also routinely receives enquiries about funding gaps in the following areas:

- For subsidies and technical support for smaller projects.
- For urban projects.
- For engagement, communication and awareness raising projects.
- For innovation, research and development.
- For energy planning - which is critical to setting the foundations for collective action whether at the neighbourhood, local or LAEP level.

Additionally, it has particularly been the experience of BEN that where limited financial support is available (e.g. local government, or charitable trust like Power to Change):

- Longer term grants are needed rather than cycles with short deadlines.
- Great predictability is required - Currently when funding is made available it is often done on short notice.
- There needs to be adequate funding in all regions as the current methods create competition rather than collaboration – pitching communities against each other.

There is also a need to fund networks such as BEN that can enhance and catalyse more community energy projects.

What changes would be needed to the access or nature of support to develop community energy further?

In addition to a broad range of accessible funding that corresponds to the points raised in our answers to the previous two questions:

- Inclusive and participatory local leadership on energy and climate.
- Infrastructure and mechanisms that enable local energy flexibility markets like those being trialled by Project LEO.
- Accessible guidance on the evolving energy system and community energy opportunities for grass-roots organisations.
- Clearer policy, guidance and support for community energy groups in England to undertake joint ventures (or alternative methods) with private and public sector actors.
- Platforms for learning, sharing and networking at local and regional levels.
- Change to the restriction of becoming a supplier ([as per the Local Energy Bill](#)).

What are the main barriers to development of new community energy schemes under the current regulatory regime? Do lack of connection or high access charges to the electricity grid pose an obstacle? How could these be overcome?

Based on research recently conducted in the North East of England, the main constraints on new community energy projects are:

1. Funding (and the financial viability of projects).
2. The ability to connect to the grid and engagement with DSOs.
3. The availability of local technical and commercial expertise (e.g. installers, consultants).

Other barriers included:

- Knowledge of the energy system.
- Knowledge about specific energy technologies.
- Experience navigating the planning system.

What role should Ofgem play in supporting community energy and resolving regulatory issues, such as decentralisation and incorporating community energy projects into smart electricity grids?

- Ensuring community energy groups should be invited to participate in any local trials for demand management, flexibility peer-to-peer trading etc.
- Actively promote renewable energy generation and community-based solutions in order to bring forward a smart local (community) energy system.
- Consider a threshold connection cost for community energy projects as this is a huge cost and potential barrier for many projects.
- Prioritising local and distributed generation.
- Work with existing community energy models to work out how they can support the ambitions of a local project.

What role can local authorities play in developing community energy, for example in planning, decision-making and ensuring the availability of sites for energy generation?

Local authorities can:

1. Ensure community groups feature together with climate and energy in their climate emergency declarations and strategies.
2. Establish community energy organisations (e.g. Plymouth Energy Community).
3. Provide financial support to community energy organisations. (e.g. London Community Fund).
4. Support the creation of networks like Bristol Energy Network who have developed a Community Energy Toolkit for community groups and local authorities based on their experience [here](#).
5. Partner with community energy on a wide-range projects. This could be making their sites available to local groups, or collaborating on innovative projects, like Project [LEO](#) in Oxfordshire.
6. Encourage engagement between business and community energy sectors to promote opportunities for collaboration and business support for local community energy projects.
7. Allocate locations for renewable energy through a renewable energy plan (including for urban areas).
8. Partner with community energy organisations to ensure that the community are involved in post-covid recovery plans.

9. Work with community energy groups to deliver targeted energy services that address fuel poverty.
10. Ensure that community energy groups are able to participate in any emerging local flexibility markets.

How can policy ensure that community energy projects maximise their positive impacts (social, environmental, economic) on their local communities?

- Make the positive benefits achieved by local and community schemes material in national and local policy.
- Ensure policy is inclusive and addresses challenges such as the digital divide and poverty premiums ([see CSE's Smart and Fair Report](#)).

What are exemplars of successful community energy systems from across the UK's urban and rural communities; what makes them so successful?

Community Energy success factors include:

1. Highly motivated volunteers.
2. Access to a broad range of skills and capacities.
3. Locally responsive, applicable models that marry local needs and opportunities.
4. Partnerships with local organisations, government, DNOs, DSOs, suppliers and other actors.
5. Supportive policy environments, regulations and legal frameworks.
6. Finance, investment and support to raise shares or bonds.

CSE is the leading partner in the Next Generation Innovation programme supported by Power to Change. As part of this we have been working with 11 organisations to develop and test new business models on behalf of the community energy sector. Each project was provided with up to £100,000 of grant funding and the support of our consortium to develop their project ideas, test the real world application of their business models and share this learning to benefit the wider sector.

- [All learning materials from Next Generation programme](#)
- [Case studies from the 11 funded Next Generation community energy projects](#)
- [Blog Post: Five things we've learned about new community energy models](#)

In addition to the projects readily accessible on the Next Generation Innovation and CEE's website, we would like to make sure that you are aware of:

- [Green Open Homes programme](#) which has helped inspire 71% of visitors to install energy saving or low carbon technologies.
- [Futureproof](#), a market transformation initiative aiming to stimulate low carbon retrofit in West of England by connecting homeowners and skilled building contractors.
- Bristol's Community Energy Propagator which aims to enable CE to play a role in Bristol's net zero energy transition, specifically through the council's [City Leap investment programme](#).
- [The Cold Homes Energy Efficiency Survey Experts \(C.H.E.E.S.E.\) Project](#) is a Bristol-based not-for-profit CIC that aims to reduce domestic energy losses, at low cost: surveys start at just £100 and are free to people in poor housing conditions and in fuel poverty.