

Energy Learning Network

Rhwydwaith Addysg Ynni

The case for community energy:

Understanding the added value of a community energy approach and why support for community energy is vital for the success of the UK's transition to net zero.

Community energy

The UK Government has set out its ambition to become a clean energy superpower:

of its electricity generation coming from renewable and nuclear power by 2030.

It also aims to achieve this in a way that gives local people a stake in the transition to net zero, and ensures UK taxpayers, bill payers and communities benefit.

The community energy sector has a strong track record of achieving these two key goals: delivering locally owned, democratically run energy projects that create significant social value.

Its strength lies in its ability to generate localised and longterm benefits that maximise value for society, fostering equity and ensuring sustainable and inclusive growth. The community energy sector can also play a crucial role in building public support and acceptance for the scale and speed of change that's needed to meet the 2030 target.

"Great British Energy stems from a simple idea: that the British people should have a right to own and benefit from our natural resourced. That these resources belong to all of us and should be harnessed for the common good."

Ed Miliband. Secretary of State for Energy and Net Zero

What is community energy?

Community energy is about people and communities taking democratic control over their energy future, by understanding, generating, using, owning, and saving energy in their communities, as well as working together across regions and nationally.

Although the sector covers a diverse range of organisations, they share key characteristics:

- Owned and operated by ordinary citizens.
- Have the overarching goal of reducing the use of fossil fuels.
- Respond to the specific needs and interests of their local community.
- Capitalise on local opportunities by harnessing investment, funding, technical skills, volunteer time, and local knowledge and networks.
- Deliver activities by collective action with individuals working together and pooling resources.
- Encourage inclusive participation, fostering trust, fairness and a sense of shared purpose.

- Promote energy literacy and increased awareness of sustainability.
- Prioritise social and environmental goals over profits
- Financial surpluses are reinvested in more energy projects and used to benefit the wider community and their members.
- Help reduce fuel poverty and value wellbeing.
- Develop innovative business models and approaches, driving system transformation.



The Community Energy Sector in 2023

583

organisations were present in the community energy sector

69,500

combined membership through the 583 organistions

398 MW

renewable electricity generation capacity was owned through community energy

617 GWH

was produced by community energy

£225 million

has been secured in investment

Almost

800 FTE staff

are employed through community energy projects

£12.9 million

was generated to the local economy through community energy's own expenditurer

£4.4m

in savings were delivered by community funds through energy efficiency improvements and giving advice.

Scope for growth

There is significant potential for growth in community generation projects.

There are 270 MW of stalled renewable projects currently reported by the sector. In addition, the Community Energy Fund, a key sector funder, is reporting significant oversubscription for feasibility funding. With the right support the community energy sector has the potential to significantly scale its generation, and therefore its profits, which in turn are used to leverage additional community-led activities that support the energy transition such as energy advice and fuel poverty programmes. The impact of the sector is also growing through the development of innovative community energy business models relating to shared ownership, the electrification of heat and transport and energy management - such as energy storage, demand side flexibility and local energy trading.

Community energy delivers many benefits

Community energy produces a wide range of outcomes, which are valuable to multiple stakeholders.

Principle stakeholders include community energy members, participants in the activities the organisations deliver, the wider community in which they are based, wider society and the energy system. Outcomes derive from the activities undertaken (such as advice services or renewable energy generation and trading) as well as where, and how, they are carried out. This results in 3 types of value outcomes.

Practical value:

the objective, quantifiable results that stem from activities undertaken by communities.

These are the functional outcomes or tangible benefits that arise from their energy projects and the application of the profits they create.

Environmental

- Renewable electricity generation
- Improved energy efficiency
- Low carbon heat
- Low carbon transport
- Improved air quality
- Enhanced biodiversity

Technical

- Energy storage
- Enhanced demand side flexibility
- More efficient use of current energy infrastructure
- Grid stability
- New technology adoption
- Energy literacy
- Access to skills
- Apprenticeships

Social

- Energy security
- Community capacity building
- Reduced fuel poverty
- Better health and wellbeing

Economic

- Delivers value for money
- Energy cost savings
- Job creation
- Creates economies of scale
- Attracts investment
- Interest payments to investors
- Leverages matched funding
- Reduces energy infrastructure costs
- Reduces dependency on grant funding
- Use surpluses for community benefit
- More financially resilient community organisations and spaces

Examples

A report for Devon County council on the socio-economic benefits of community energy using Treasury Green Book values calculated £15.9m of additional local benefit would accrue if the Council entered into a power purchase agreement with community energy rather than procuring commercially.

An independent report found that community owned wind farms deliver an average financial return to local communities

34 times greater per MW

installed than comparable commercially owned wind farms.

2.

Participatory value:

The subjective outcomes of CE that are experienced by individuals.

Community energy places people at the heart of the energy system through its democratic and participatory processes. By focusing on what feels fair, meaningful, and right, community energy can empower people to participate in the energy transition, generate a sense of ownership and control whilst helping to address emotional and ethical aspects of the energy transition. These normative value outcomes can strengthen community well-being, build public support and trust for sustainable initiatives, and encourage long-term participation and commitment.

Empowerment

- Creates sense of agency
- Voice in local energy decision making
- Increases local control over energy resources
- Creates more opportunities for participation
- Creates active energy citizens

Fairness

- Inclusion and transparency of decision making
- More equitable distribution of costs, benefits and opportunities arising from the energy transition
- Greater trust in the process

Social capital

- Engages people
- Strengthens social ties
- Sense of ownership and pride
- Builds networks
- Fosters collaboration
- Creates shared purpose
- Sense of belonging
- Resilient businesses
- Resilient communities

Sustainability

- Encourages behaviour change and more sustainable lifestyles
- Promotes environmental stewardship

Examples

Bristol energy activists from disadvantaged communities led the consultation and creation of the City of Bristol Just Transition Declaration. It sets out 10 principles that underpin the city's work on climate change and puts local people at the heart of decision making.

£1.4m savings

have been made in energy bills in SE London from SELCE providing training and support to over 4000 households and individuals.

Co-operatives are over 50% more

likely to survive the early years of trading when compared to other start-up businesses.



3.

Transformative value:

Community energy delivers transformative value by fostering systemic change through innovation, redistributing power, promoting justice and reshaping public attitudes towards the energy transition.

Public acceptance will be vital if the transition is to succeed.

Innovation

- Developing and testing innovative models and technologies
- Normalising decentralised energy models
- Non-proprietorial and creative commons approaches

Shifting power

- Enhances local democratic governance
- Creates community resilience
- Supports transition to a distributed renewable powered energy system

Justice and inclusion

- Tackling fuel poverty
- Promotes inclusive energy system with affordable clean energy for all
- Connects grassroots initiatives to system change

Perception and practices

- Changes public perception around energy use
- Normalise adoption of low carbon technologies
- Embed participatory governance models

Examples

Energy Local enables households and businesses to match their energy consumption with locally generated renewable energy using smart technology and local energy clubs.

Low Carbon Hub conducted neighbourhood trials that provided key evidence about the social, technological and market conditions needed for a greener, more flexible, and fair electricity system as part of Project LEO. This is a £42 million energy sector collaboration.



By combining a local, place-based approach with a democratic and consultation approach, community energy delivers significant additional social value.

Crucially it can build the trust, support and acceptance that is vital for a fast transition to net zero.

By backing a community energy approach, the government will demonstrate its commitment to a fair transition and can build the public consent it needs to be able to deliver it.

"The future of the low carbon, local economy has arrived. Participating in trials like this means being part of that future."

Project LEO trial participant.

For further information

This initial briefing on the breadth and importance of the value derived from a community energy approach has been compiled on behalf of the Energy Learning Network (ELN).

The briefing will be followed by a report published in February 2025 that will document existing evidence and practice on the economic, social and environmental value derived from a community energy approach.

In parallel, ELN partners are collectively working to articulate the capacity building support required in order to realise this value from a thriving community energy sector delivering on net zero across the UK.

For further information visit:

www.ashden.org/energy-learning-network

References

Aquatera (2021)

A comparison of the financial benefits arising from private and community owned wind farms. www.pointandsandwick.co.uk/wp-content/uploads/2021/06/Financial-comparison-of-private-and-community-wind-farms-report-FINAL-1.pdf (Accessed 10 December 2024)

Barnes J, Hansen P, Kamin T, Golob U, Darby S, M. van der Grijp N, Petrovics D, (2024)

Creating valuable outcomes: An exploration of value creation pathways in the business models of energy communities, Energy Research & Social Science, Volume 108, 2024

https://doi.org/10.1016/j.erss.2023.103398

Barnes J, Parrish B, (2024), Valuing community energy, DigiDecarbon Project workshop, Helsinki

Bristol Climate Hub (2023), City of Bristol Just Transition Declaration. www.bristolclimatehub.org/just-transition/ (Accessed 10 December 2024)

CAG Consultants (2021),
Devon Community Energy: Socio Economic
Impact Assessment Final Report.
https://cagconsultants.co.uk/wp-content/
uploads/2021/06/Final-Report-March2021.pdf

Client Earth, What is community energy? www.clientearth.org/latest/news/what-is-community-power/ (Accessed 10 December 2024)

Community Energy England, State of the Sector 2024 Report.
https://communityenergyengland.org/files/document/960/1720710752_Community
EnergyStateoftheSector2024UKOverview.pdf (Accessed 10 December 2024)

Community Energy England,
What is community energy?
https://communityenergyengland.org/pages/
what-is-community-energy
(Accessed 10 December 2024)

Co-operatives UK (2024) Co-operatives and Mutuals Economy 2024. www.uk.coop/economy

Department for Energy Security & Net Zero (2024) Great British Energy Founding Statement. www.gov.uk/government/publications/introducing-great-british-energy/great-british-energy-founding-statement#what-is-great-british-energy (Accessed: 10 December 2024)

Devine-Wright, P (2019) Community versus local energy in the context of climate emergency.
Nat Energy 4, 894–896 (2019).
https://doi.org/10.1038/s41560-019-0459-2

Energy Local (2024), About Energy Local CIC. https://energylocal.org.uk/about-us (Accessed 12 December 2024)

Low Carbon Hub (2023).

Project LEO's Smart and Fair Neighbourhoods.

www.lowcarbonhub.org/p/programmes/
smart-and-fair-neighbourhood-trials/
(Accessed 10 December 2024)

South East London Community Energy (2024), Celebrating 10 years of SELCE. https://selce.org.uk/about-us/ (Accessed 20 December 2024)



The Energy Learning Network is made possible by four years of funding, totalling £1.5 million, from the National Lottery Community Fund.

This grant comes from the National Lotter Community Fund's Climate Action Fund, a £100 million commitment over 10 years to support communities across the UK to take action on climate change and involve more people in climate action. This commitment is helping the funder fulfil one of four key missions in its 2030 strategy, 'It starts with community' - supporting communities to be environmentally sustainable.

The Energy Learning Network

The network is a collaboration between climate solutions charity Ashden, the Centre for Sustainable Energy, and leading community energy bodies in every UK nation: Community Energy England, Community Energy Scotland, Community Energy Wales, and Northern Ireland's Action Renewables.













For further information visit:

www.ashden.org/energy-learning-network