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COMMUNITY ENERGY STATE OF THE SECTOR



A study of community energy in
England, Wales and Northern Ireland

Infographic Booklet





OVERVIEW



More than

 **222**
Organisations

Involved in

 **269**
distinct **Projects**

With over

 **121 MW**
Energy Capacity

And

 **74**
Energy Efficiency
projects

Reducing

CO₂ Emissions
by **110,000**
 **Tonnes**

Producing

 **265 GWh**
Generation to date

Equivalent to

Energy Demand
of **85,500**
 **Homes**



Supported by

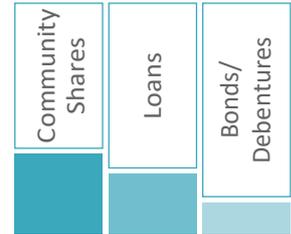
Early Stage **Funding**
 **£1.9M**

Leveraging

 **£190M**
 further **Investment**

 **269**
 distinct **Projects**

Through



Delivering over

£620K last year in
community benefits

 **127**
 full time **Staff**

Helping to fund





ORGANISATIONS



More than



Organisations with over



Members

and



Volunteers

Community energy groups are found throughout England, Wales and Northern Ireland, the success of which is made possible by a large number of staff, volunteers and members. The number of organisations has risen rapidly over the last ten years: the community energy sector is now composed of groups utilising a diverse range of business models and legal structures and includes a range of financing approaches.

- Community Benefit Society (BenCom) ■
- Co-operative ■
- Community Interest Company (CIC) ■
- Charity ■
- Unincorporated ■
- Limited Company ■
- Other Structures ■



ACTIVITIES



Activities by Type



- Electricity Generation
- Energy Efficiency & Demand Management
- Energy Storage
- Heat Generation
- Transport

The community energy sector is dominated by energy generation projects (191 projects), often complemented by secondary energy efficiency and demand reduction initiatives.

Energy efficiency and demand reduction projects are considered the primary activity of 40 community energy organisations, with a further 34 organisations undertaking projects secondary to energy generation.

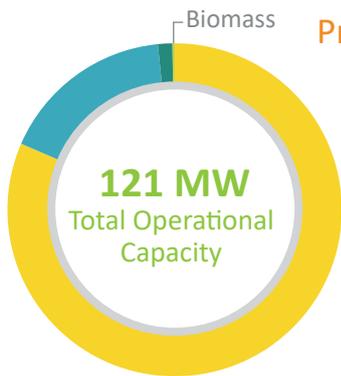
Few organisations are currently actively engaged in low carbon transport or energy storage activities.





ELECTRICITY & HEAT GENERATION

Capacity by Technology



Equivalent to

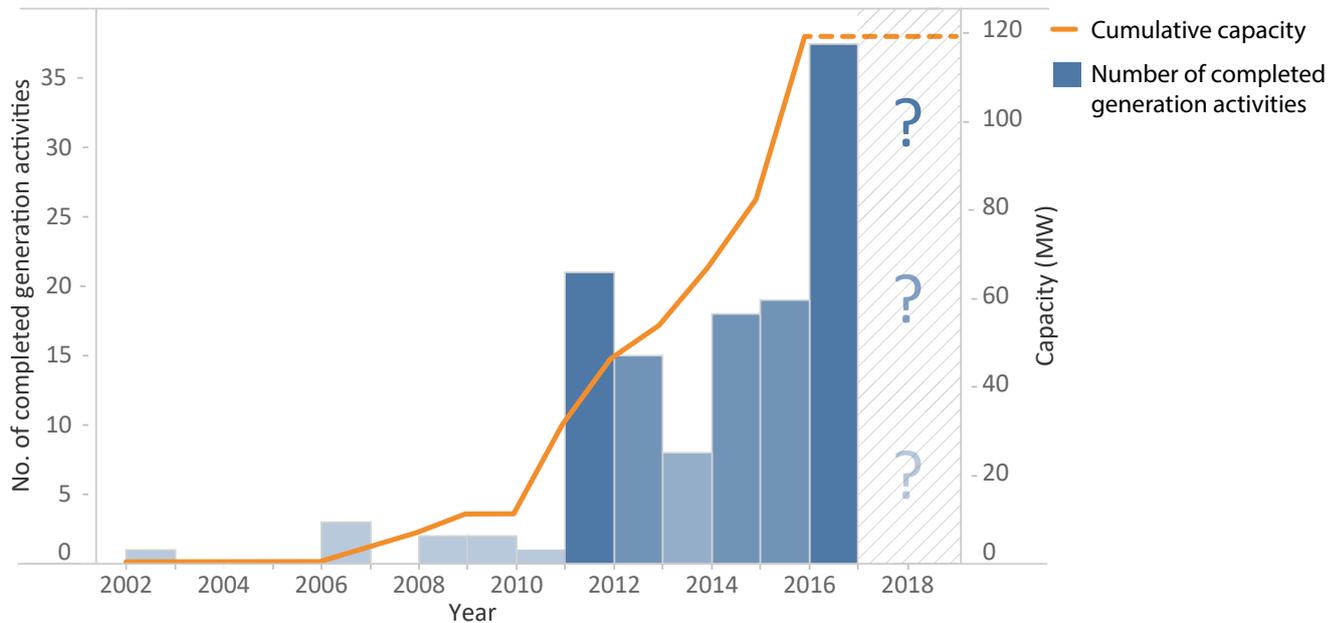


- Solar PV
- Wind
- Hydro
- Biomass

Over 121 MW of electricity generating infrastructure has been installed by community groups in England, Wales and Northern Ireland since 1997, generating 265 GWh, equivalent to the energy demand of over 85,500 homes.

The UK community energy sector has a combined generating capacity of over 188 MW, including Scottish community renewables.

Activities and Cumulative Capacity in the Community Energy Sector



The community energy sector has grown rapidly in the past 20 years. Increasing project numbers from 2011 onwards have been a result of the introduction of the Feed-in Tariff.

A slowdown in the sector will soon become evident as the last schemes accredited before the 2015 cuts are installed. Many communities stated that a lack of subsidy support is limiting their ongoing and future energy ambitions.



ENERGY EFFICIENCY

Energy Efficiency Services



74 community organisations were identified as providing energy efficiency or demand management support to members of their community - ranging from advice and support to services and funding.

46% of all energy efficiency or demand management projects were considered secondary activities, building upon existing energy generation projects.

Services	Energy audits Energy efficient lighting Retrofit assessments Infrared camera audits Insulation
Advice & Support	Energy switching Energy cafés Awareness raising
Demand Management	Heating control Smart meter provision Energy monitoring
Funding	Grants Loans





FUNDING & INVESTMENT



Early Stage Funding

Development funding supports a wide range of activities from initial feasibility assessments through to formal consents, such as planning permissions and resource licences.

33% of surveyed organisations are using, or have previously used, grants from UCEF, RCEF or Ynni'r Fro to progress their project development to a total of £1.9m across the sector.



■ Government Funding

■ Other Development Funding

£409 K



Urban Community Energy Fund (UCEF)

£353 K



Rural Community Energy Fund (RCEF)

£237 K



Ynni'r Fro

£846 K



Other Development Funding



Investment Types

Overall it was reported that £190 million has been invested in financing projects across 108 community energy projects.

Though a large number of organisations source finance through loans – similar to many commercial developers – the bulk of investment has been raised from individuals through share offers, both locally and at a national level.



£63.5 M



Community Shares

£47.5 M



Loans

£25.1 M

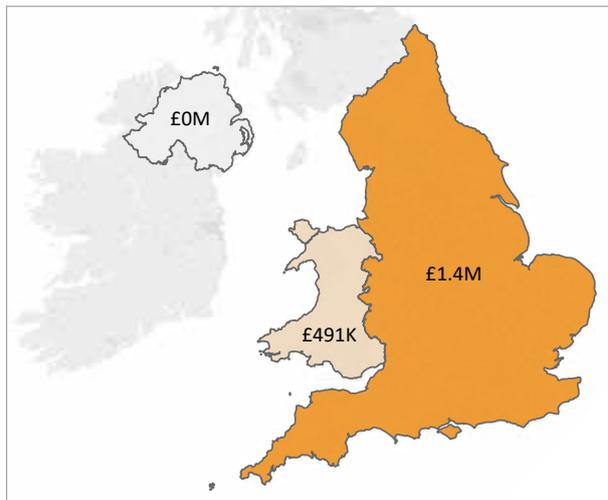


Bonds/Debentures

*£54.3m unreported investment source



Early Stage Funding by Country



Project Finance by Country*



Primarily through the Urban and Rural Community Energy Funding schemes (UCEF & RCEF), as well as further secondary funders, England utilised £1.7m of project development funding to progress projects to a financially viable stage. From this, over £120m of further investment was sourced.

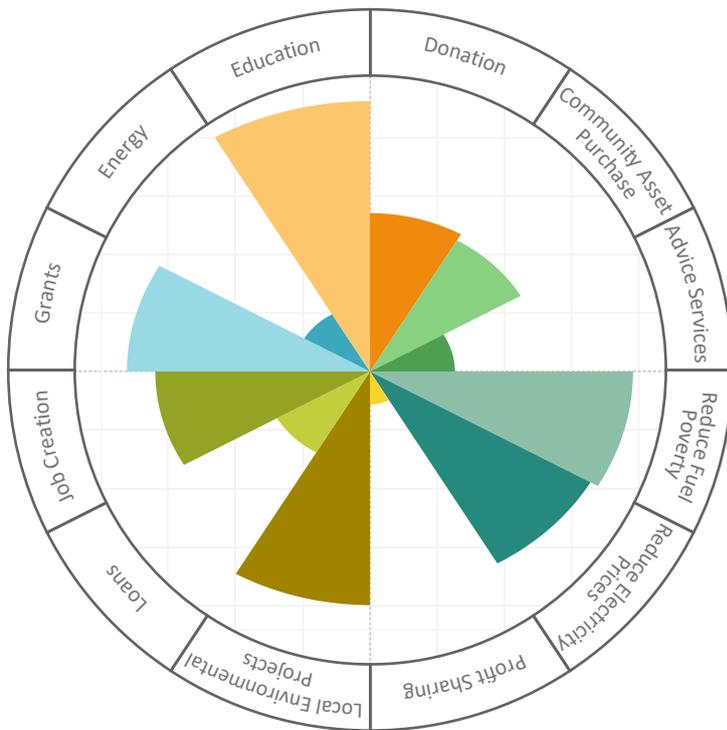
Wales was found to be more reliant on both development funding and project financing from Ynni'r Fro - Leveraging over £5.2m from an initial £474,000 of development funding. Both Welsh and Northern Irish organisations were found to have accessed RCEF and UCEF, though to a lesser extent than projects within England.

*£54.3m unreported investment source



FURTHER BENEFITS

Social Benefits - Response Frequency



Reducing
CO₂e Emission by
**110,000
Tonnes**

Community organisations were found to have a range of motivations and objectives relating to their activities.

A number of projects directly contributed to energy cost reduction or fuel poverty reduction or aimed to support further initiatives in this area. Softer approaches to local development included education and awareness, as well as investment in job creation to stimulate the local economy.

At a non-local scale, communities were found to have reduced over 110,000 tonnes of CO₂e since 2002.



Education



Local Environmental Projects



Reduce Fuel Poverty



Reduce Electricity Price



Grants



Job Creation



Donation



Community Asset Purchase



Loans



Energy Investment



Profit Sharing

Subsidiary benefits resulting from community energy projects were highlighted by the majority of respondents, in particular education initiatives (47%) and improving the local environment (35%).

More direct economic benefits were cited as the key impacts of projects, including fuel poverty reduction (33%), reduced energy prices (31%) and job creation (22%).

Community funds were often found to be utilised in securing community assets (14%), including further energy activities (4%).

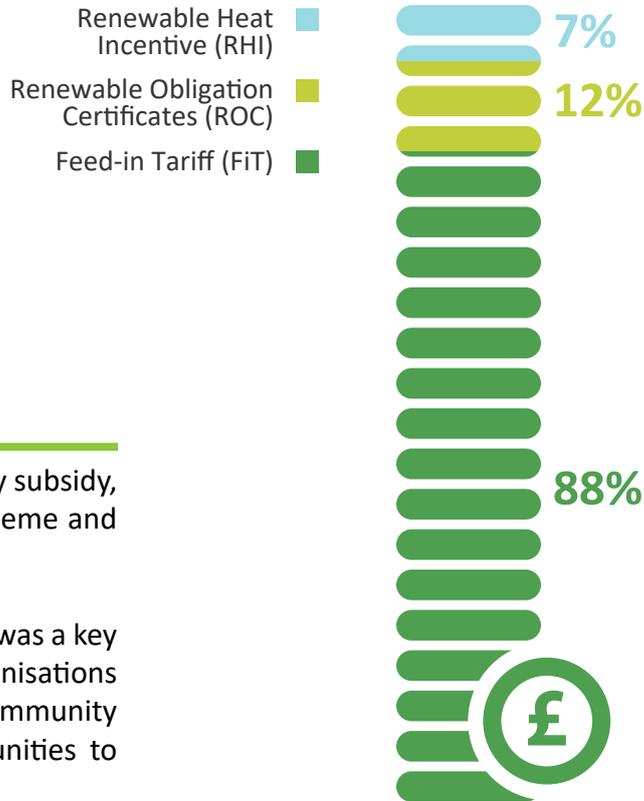
Income from projects is directed into the local community through a variety of means, including through grants (28%), donations (16%) and loans (5%).



POLICY, BARRIERS & OUTLOOK



Energy Subsidy Use



Of the 123 projects surveyed using a form of energy subsidy, 88% utilised the FiT subsidy, 9% used the ROC scheme and 2% used the RHI.

21 organisations stated that Feed-in Tariff changes was a key reason for their project stalling. A further 36 organisations stated that reinstatement of viable FiT levels or community specific support are essential in enabling communities to realise their community energy objectives.

* Some organisations have accessed multiple subsidies across several projects

Barriers to Community Energy



due to

Capital Finance

National Opposition

Engineering Issues

Feed-in-Tariff

Local Opposition

Lack of Expertise

Planning Process

Attracting Volunteers

Volunteer Motivation

48% of respondents stated that Feed-in Tariff changes are a major barrier to their project, with 34% of respondent also noting capital finance barriers, often as a result of a lack of subsidy support. Further barriers to project development included planning issues (25%), engineering issues (11%), lack of expertise and local opposition (7%).

A lack of viability across all generating technologies, and resulting lack of access to capital, is a critical issue in the downturn of the sector. With no similar support mechanisms in place, there are few opportunities in traditional generation schemes.



To find out more about the community energy in the United Kingdom visit Community Energy England online at www.communityenergyengland.org



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