

# NGED Community Energy: State of the Sector Report



# Contents

About this report .....	3
Overview.....	4
Organisations.....	4
Energy Generation and Storage.....	6
Low Carbon Transport .....	9
Energy Efficiency .....	11
Funding & Finance.....	13
Networks & Partnerships .....	14
Community Energy Impact .....	16
Overcoming Barriers.....	17
Project Pipeline .....	18



# About this report

Community energy organisations are playing an increasingly important role in the transition to net zero. As trusted, embedded members of their communities, they are uniquely positioned to engage local people and deliver wide-ranging environmental, economic, and social value. This report provides an overview of community energy across National Grid Electricity Distribution (NGED) licence areas i.e. the Midlands, Southwest, and South Wales regions of England and Wales. It focuses on the progress made throughout 2024 and aims to offer insights that will help improve support for the sector, enabling community organisations to maximise their contribution to net zero goals.

The findings are based on research conducted as part of the annual Community Energy State of the Sector UK project, using data gathered between February and May 2025, along with historical data from previous surveys and desk-based research.

The 2024 survey focused on:

- Community energy activities during the year
- Key motivations and challenges faced by community groups
- The value community energy delivers to people and places
- Funding and investment trends
- The outlook for the sector in 2025 and beyond

**This report was produced by** Community Energy England, Scotland and Wales, the voices of the community energy sector across the UK. We aim to create a supportive policy landscape for community energy and 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:



# Overview

The community energy sector in NGED's operating areas is vast, employing a large proportion of the UK's community energy workforce and hosting a sizeable component of the UK's total community energy generation and low carbon transport infrastructure.

## In 2024:



160 community energy organisations active across the NGED region



17 newly created FTE posts bringing the total FTE staff to 278 employed in the sector



171.1 MW of installed electricity capacity generating 183.5 GWh of community owned electricity



£2.28M development funding secured and £5.12M investment raised for new projects



Community Benefit Fund spend of £1.09M

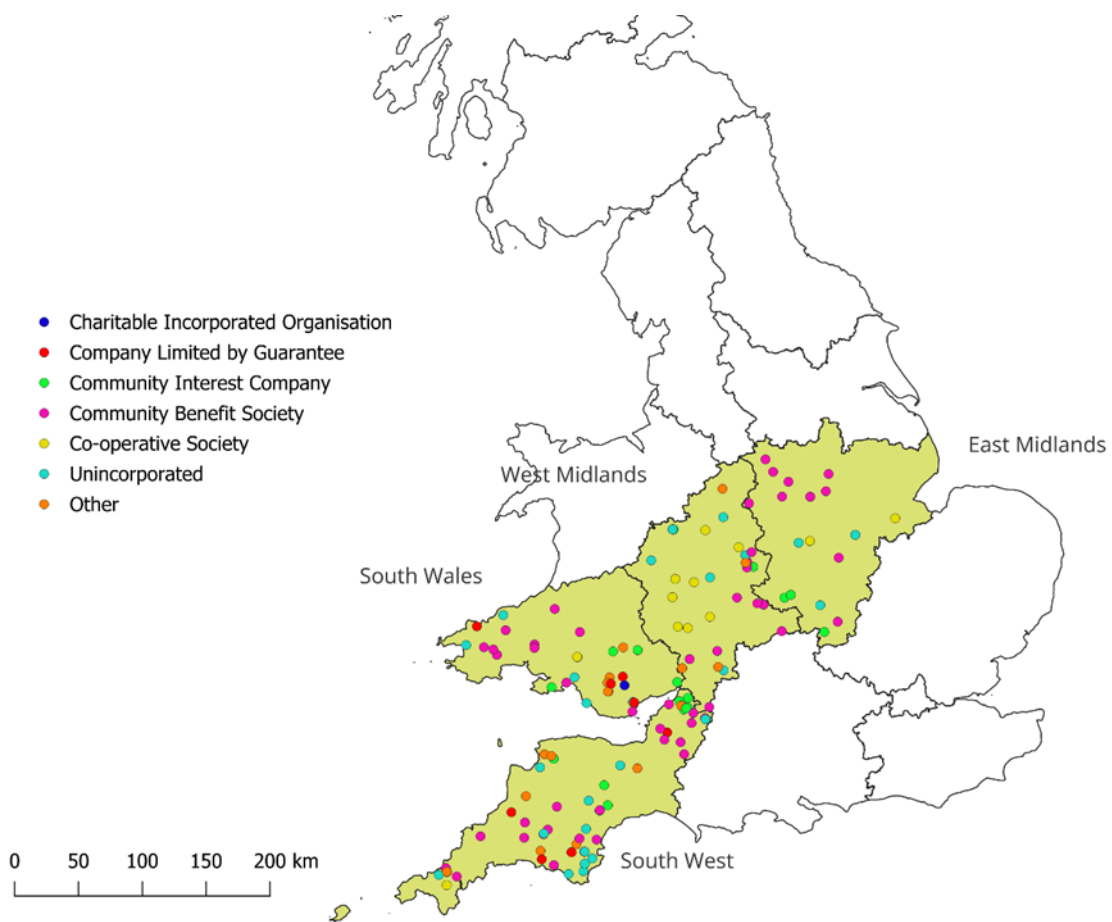


Hosts 14% of UK's community EV charger infrastructure

# Organisations

160 community organisations working on community energy projects were identified across the NGED region in 2024. 52 in the Midlands area, 36 in the South Wales area and 72 in the South West area. 63% are registered as Community Benefit Societies, Cooperatives or Community Interest Companies, with the remainder primarily made up of limited companies, charitable groups and unincorporated community groups engaged in energy activities.

A total of 278 full-time staff were delivering a range of projects, with 17 new full-time equivalent positions created in 2024. The largest employers in the region were Ripple Energy and Plymouth Energy. 278 FTEs represents an average of just 1.7 FTEs per organisation, however significantly more volunteers and members are associated with community energy projects in the NGED region i.e. 1,156 volunteers and 31,265 members representing an average of 7 volunteers and 195 members per organisation. The largest membership organisations are the 10,900 members of Ripple Energy and 5000 from Meadows Ozone Energy Services Company.



31,265 members



160 organisations delivering services



278 FTEs employed

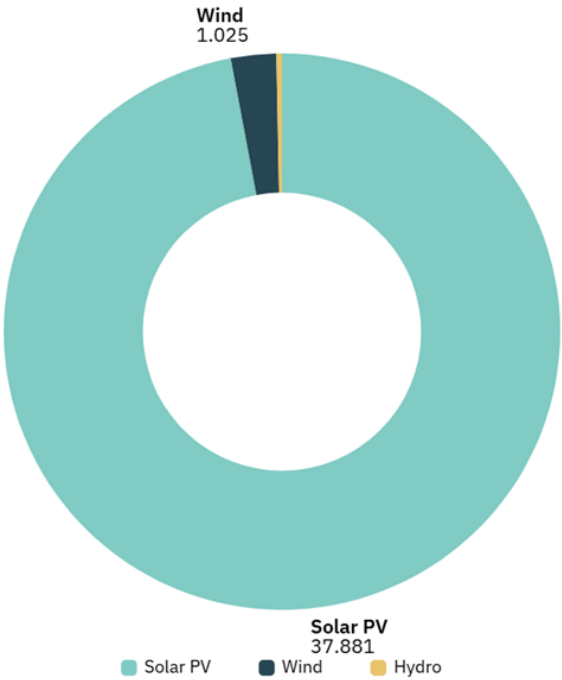
# Energy Generation and Storage

There are 90 community organisations involved in electricity generation projects across the licence areas: 26 in the Midlands, 24 in South Wales and 40 in South West. The total electricity capacity across the region in 2024 was 171.1MW, an increase of 2.1MW since 2023. This increase is entirely made up of solar power.

Total generation capacity is dominated by solar power, which has an installed capacity of 155MW, representing approximately 58% of all installed community solar capacity in the UK. The remaining generation consists of 15.5MW Wind capacity and 0.56MW hydro capacity. Of the newly installed 2.1MW of capacity installed in 2024, most of this has come from expansion to existing projects such as the additional 0.63MW added by Egni Cydweithredol Cyfyngedig. However, there is also one single new solar development reported by Ynni Teg, adding 0.576MW to the network.

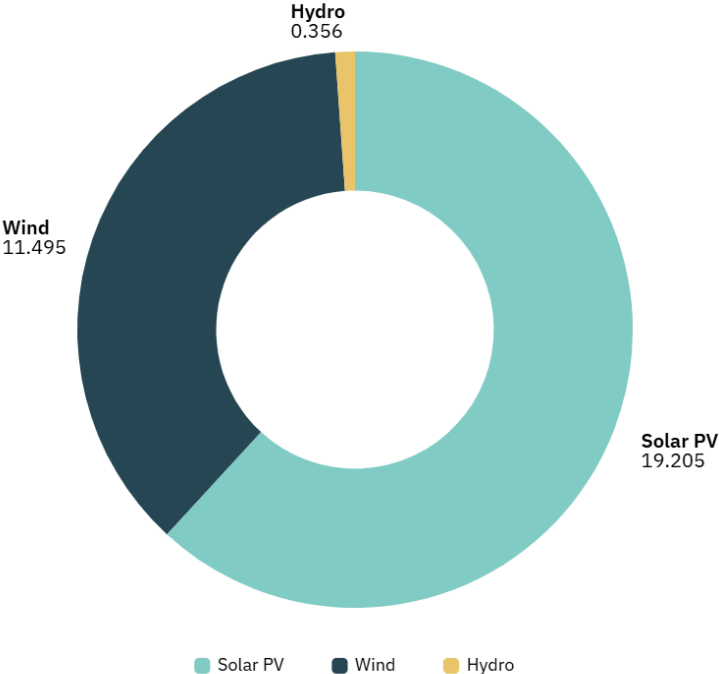
Total renewable electricity capacity in the Midlands is 39 MW. Virtually all of this is solar PV (97%) with just over 1 MW of wind and 127kW of hydro.

**Midlands Electricity Capacity (MW)**



In South Wales, there is 31.1 MW. This is comprised of 19.2 MW of solar PV (62%), 11.5 MW of wind (37%) and 356 kW of hydro (1%).

### South Wales Electricity Capacity (MW)

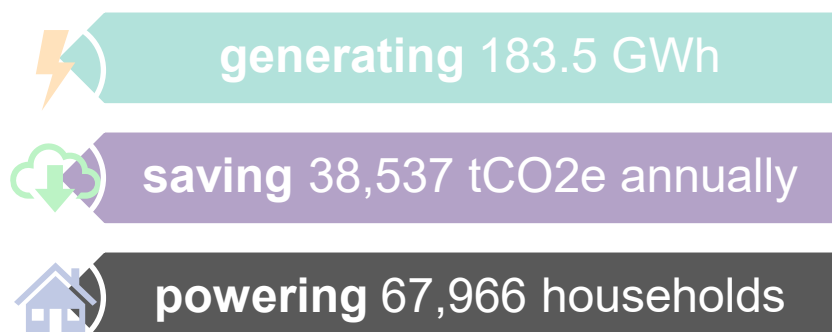


In the South West, there is 101 MW of generation capacity. This is mostly comprised of solar PV with 97.9 MW (97%), 3 MW of wind (3%) and 77 kW of hydro (<0.1%).

### South West Electricity Capacity (MW)



Based on the installed capacity, the amount of electricity generated across the licence areas in 2024 is estimated to be around 183.5 GWh, equivalent to the energy demand of 67,966 UK households (assuming Ofgem's annual average household usage of 2900 kWh) and providing carbon emission savings of 38,537 tonnes annually.



Community-owned heat projects are less common than electricity projects and the sector has highlighted the high capital costs involved in heat network projects, as well as a lack of technical expertise and problems securing investment as significant barriers to development. As a result, there was only 8KW of heat generation capacity installed in 2024, bringing the total up to 2,380kW. All of this 8KW of additional capacity comes from an ASHP project developed by the Diocese of Exeter - Church and Society and Environment. This increase in ASHP capacity is more than the average licence area, across the UK capacity for ASHP projects rose by just 20KW in 2024.

The benefits afforded by energy storage projects are becoming increasingly attractive to communities looking to reduce their reliance on grid imports and maximise their consumption of local, onsite generated electricity. Energy storage technologies allow communities to be more flexible about when they consume energy which can balance out peaks and troughs in demand and enable more low carbon generation to connect to the grid.

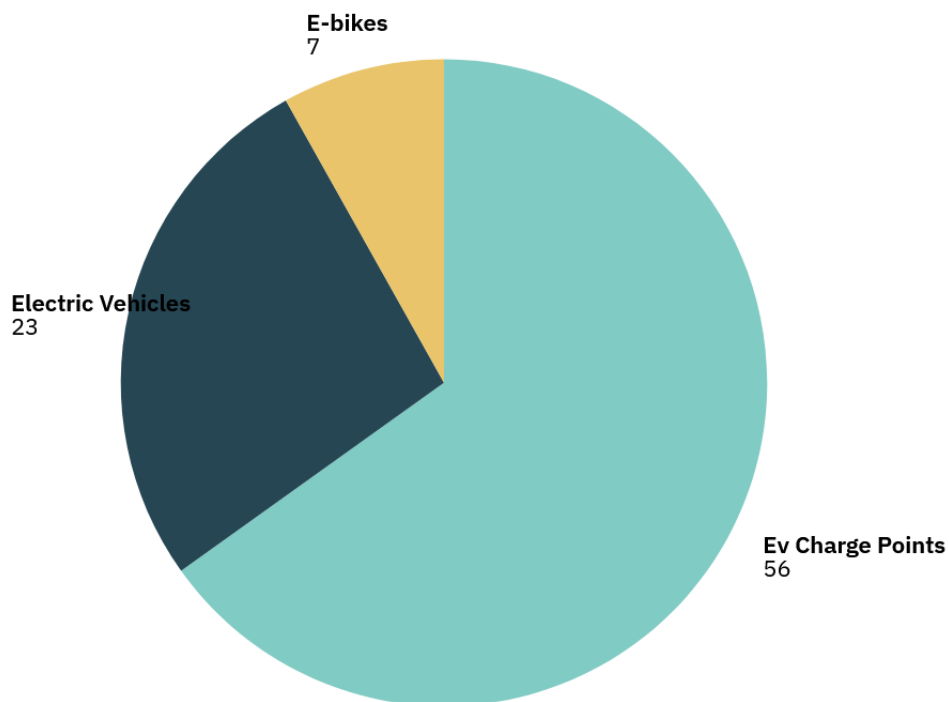
At present, there are 11 electric battery systems operating in the NGED area, with a total storage capacity of 1841 kWh, this has not changed since 2023. These projects are distributed evenly between the Midlands (4), South Wales (4) and South West (3). There are also 12 organisations developing energy storage projects as part of wider flexibility and local supply innovation projects which may lead to future capacity being developed.

# Low Carbon Transport

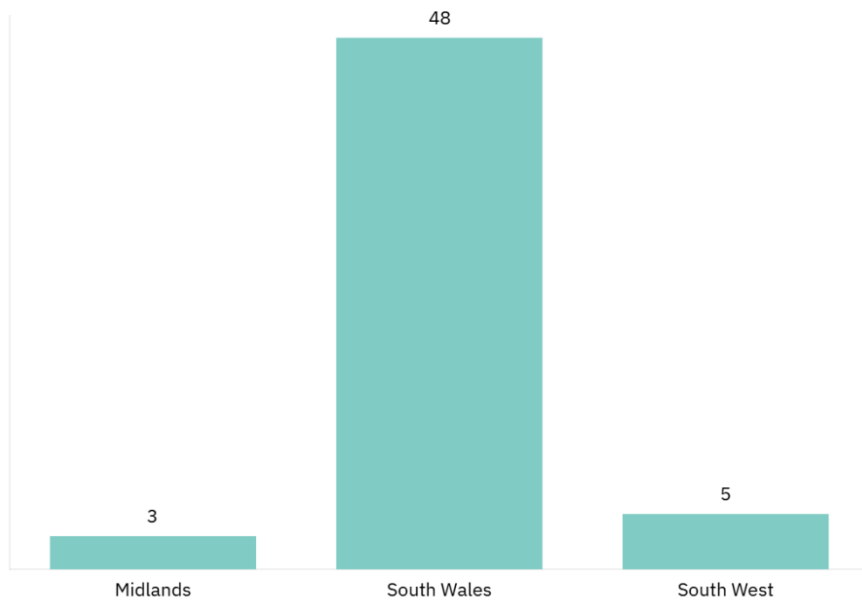
Low carbon transport projects are becoming increasingly attractive to community energy organisations due to increased difficulty developing energy generation projects following the removal of government subsidies in recent years. Across the UK, only 8% of all stalled projects in 2024 were transport projects, compared with 69% for electricity generation projects, indicating there are fewer significant barriers to development than for other project types.

In the NGED region, 14 community organisations have reported their involvement in Low Carbon Transport (LCT) projects in 2024 representing 18% of all UK community organisations involved in LCT project delivery. The total number of community-owned LCT assets across the licence areas in 2024 was 85 most of which are located in the South Wales region which hosts 12 EVs, 48 EV chargers and 7 E-bikes. The Midlands and South West host only 12 and 7 assets respectively with no E-bike ownership reported.

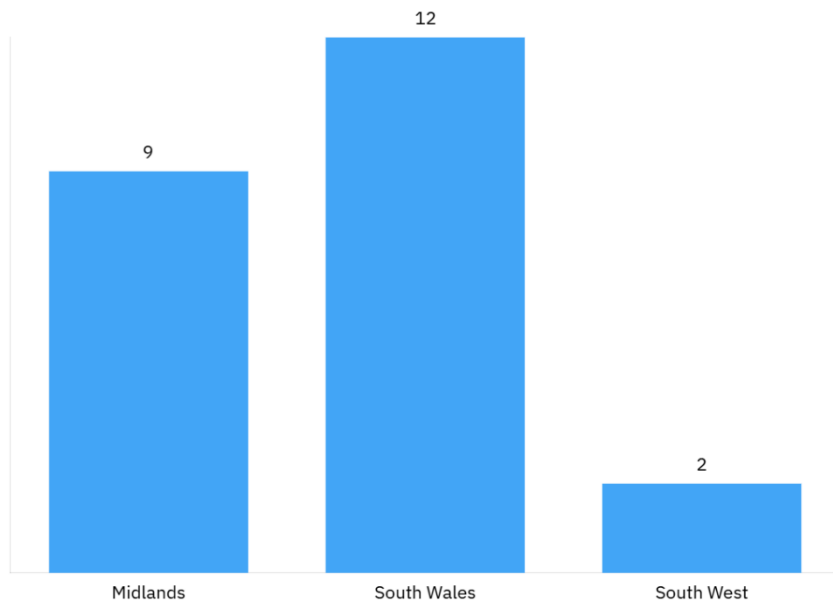
## NGED Low Carbon Transport Assets



## NGED EV Chargers



## NGED Electric Vehicles



EV ownership is still a prominent part of LCT activities within the community energy sector, with 41% of LCT projects across the NGED regions utilizing EVs within communities. The total number of community-owned LCT vehicles across the licence area in 2024 was 30 which is made up of 23 EVs and 7 E-bikes. There has been a slight increase in the level of community e-bike and EV ownership during the last year, with the e-bike fleet expanding from 2 in 2023 to 7 in 2024 and the EV fleet size growing from 20 in 2023 to 23 in 2024.

Of the 405 community EV chargers currently operating in the UK, the NGED region hosts 56 charge points, or 14% of the UK total (48 in South Wales, 5 in the South West and 3 in the Midlands). EV charging points can provide real benefit to communities by keeping investment and revenues within the local economy and these benefits can be even more significant if a renewable energy asset such as solar PVs or wind turbines is used to power the chargers.

## Energy Efficiency

Energy efficiency services have increased steadily within the community energy sector in recent years, no doubt as a direct response to growing levels of fuel poverty caused by increasing energy prices. It is also an area where groups can make an impact with relatively limited resources.

In 2024, 37 organisations were delivering services in areas such as building improvement, and advice and education – a slight increase from 2023 across the licence area. This is made up of 10 in the Midlands, 10 in South Wales and 17 in the South West. This equates to 23% of NGED licence area organisations providing energy efficiency services which is in line with the UK average.



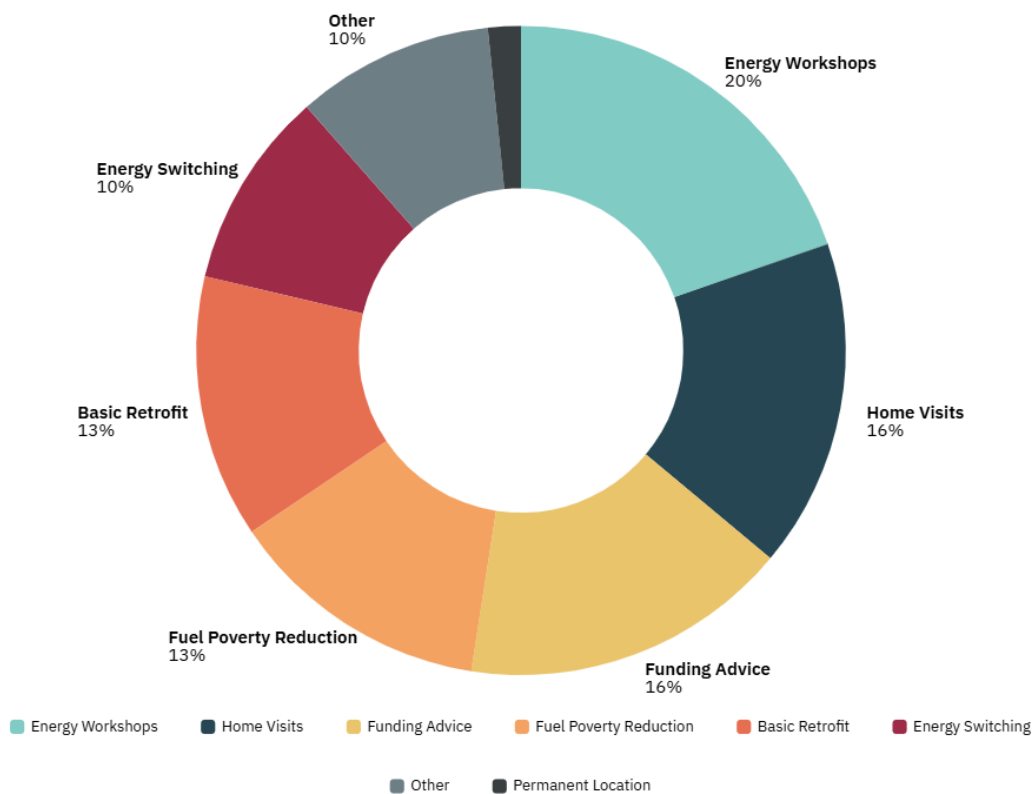
11,752 individuals or organisations engaged through energy efficiency activities



£573,000 of organisational spend on energy advice activities

Building improvements activities included the installation of insulation, draught proofing and energy efficient lighting, while advisory and education services concentrated on fuel poverty reduction activities, building assessments, funding advice, and energy tariff switching.

In terms of energy advice, organisations spent most of their time on workshops, home visits and providing funding advice.

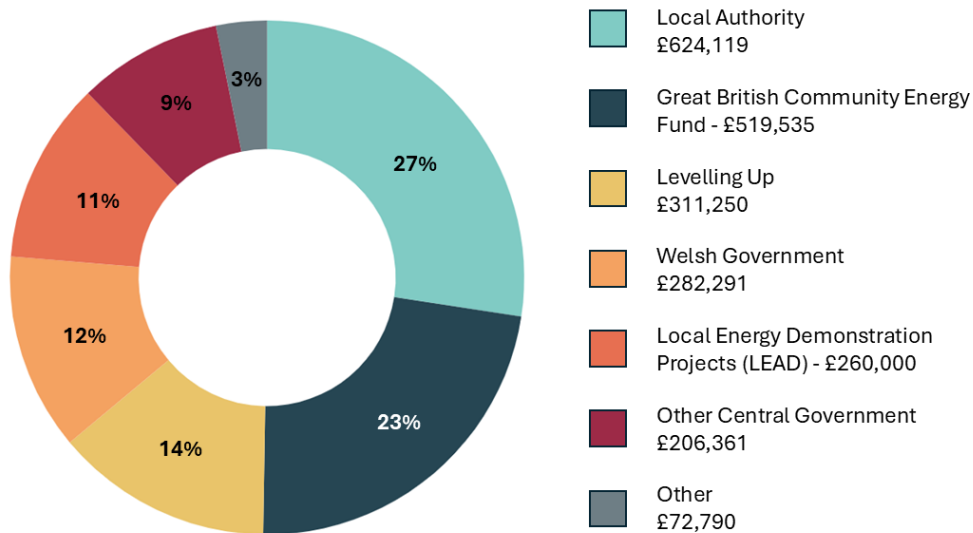


# Funding & Finance

Funding for the development of new and innovative projects has increased slightly compared to 2023. In 2024 the total figure secured was £2,276,346 compared to £2,188,343 in 2023.

In 2024, the largest development funding source was from Other Local authority funding, which supplied approximately £624K. Other significant funding sources were from; the Welsh government (£282K), Community Energy fund (£520K), Level up funding (£311K), Lead funding (260K) and other central government funding (£206K).

## Development Funding



In the Midlands, £562k was secured. The majority of this came from The Great British Community Energy Fund. £250k of this was delivered to Shropshire and Telford Community Energy.

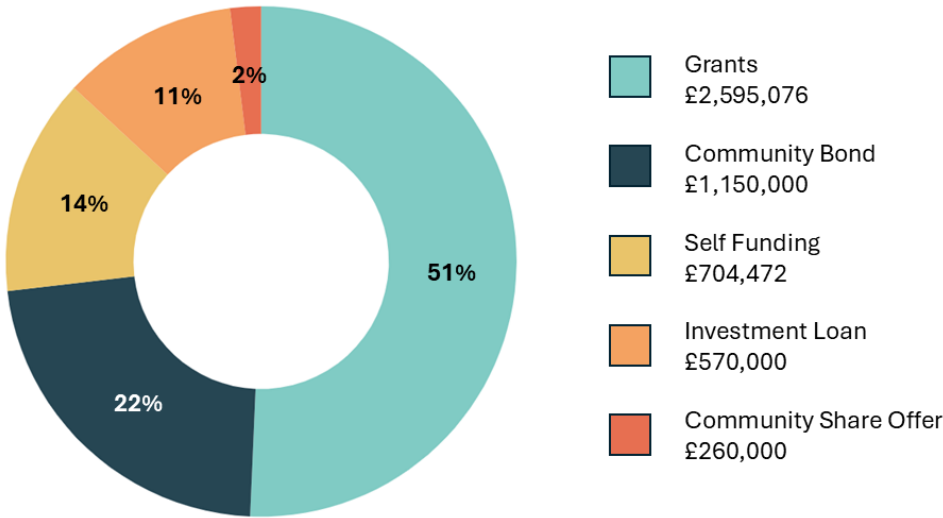
In South Wales, £756k was secured. The two main sources contributing to this were the Welsh Government (£282k) and Levelling Up funding (311k). The Levelling Up funding was split between Awel Aman Tawe (£200k) and Cwm Arian Renewable Energy Ltd (£111k).

In the South West more development funding was secured than in the other two regions, a total of £958k. The largest portion of this came from Local Authorities (£562k). Other sources included Lead funding (£240k) and The Great British Community Energy Fund (£136k). The development funding received from Local Authorities was almost entirely secured by one organisation, Bristol Energy Network (£560k).

In terms of investment, community energy projects reportedly raised £5.12M. More than half of this was sourced from £2.6M worth of grant investment. The largest beneficiaries of grant-based investment were Ynni Teg Cyfyngedig, Awel Aman Tawe and Cwm Arian Renewable Energy Ltd in South Wales which received £730K, £470K with £402K respectively.

The remaining investment consists of £1.2M in community bonds, £704K of self-funding, £570K of loans and £100K community shares.

### NGED Investment



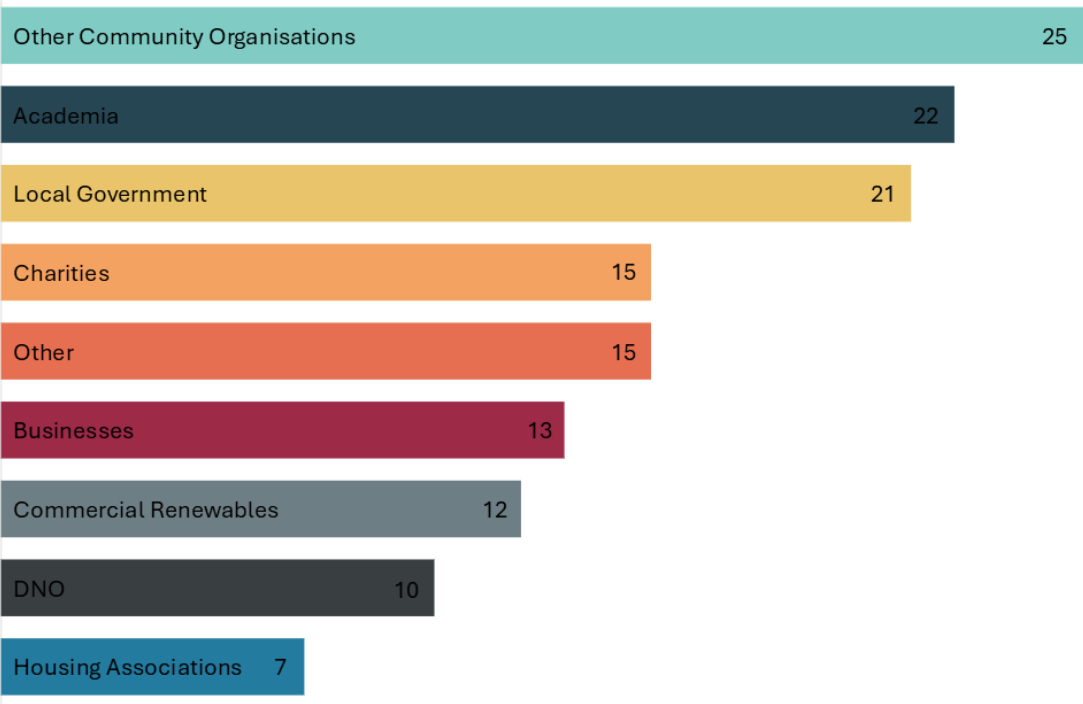
## Networks & Partnerships

In recent years, community energy organisations have consistently highlighted lack of capacity, technical expertise and early-stage funding as key barriers to project development. Working in partnership with other organisations is a way to address some of these issues by sharing knowledge and best practice, financial resources, and enhancing available staff time and capacity.

Community organisations in the NGED licence have highlighted the importance of engagement and collaboration with key stakeholders in the sector, with 140 new partnerships being established during 2024 reported by 29 organisations.

The most common types of partnership were with other community groups, academic institutions and local government, accounting for 18%, 16% and 15% of all newly established partnerships respectively.

### Types of Partnership



Shared ownership is where communities take a stake in a commercially owned onshore or offshore renewable energy asset with a private developer. In NGED’s licence areas, 8 organisations reported being currently involved in a shared ownership project and a further 21 reported they were planning to become involved.



21 organisations planning to become involved in a shared ownership project



8 organisations currently involved in a shared ownership project

# Community Energy Impact

Community energy organisations can bring a wide range of economic, social and environmental benefits to their communities. Revenue from community energy projects is commonly delivered directly to communities via community benefit fund distributions, which can take the form of grants or loans.

In 2024, 38 community energy organisations reported a total community benefit fund (CBF) value of £1,228,120 and distributed £1,090,044. By region, the Midlands had a CBF value of £120k and distributed £74k, South Wales, a CBF value of £620k with a spend of £569k and in the South West a CBF value of £488k and distributed £447k.

In terms of wider economic benefit, in all licence areas, an average of 57% of community energy organisational expenditure was spent locally, which is slightly less than the UK average of 63%. This amounts to £5,838,991 being used to directly support local economies in NGED distribution network areas. The community energy sector also created 17 full time equivalent jobs in 2024 bringing the total FTEs employed by community organisations to 278.

An estimated 38,537 tCO<sub>2</sub>e was avoided as a result of the 183.5 GWh of electricity generated by the community energy sector in NGED region during 2024, which could satisfy the energy demand of approximately 67,966 homes. This number is a conservative estimate however and does not take into account the carbon savings from heat, transport and storage projects, or energy efficiency activities which are more difficult to quantify.



£5.84m of community energy income spent locally supporting local economies



£1.09m of community benefit fund income given as grants to community initiatives



7 new full-time jobs created in 2024



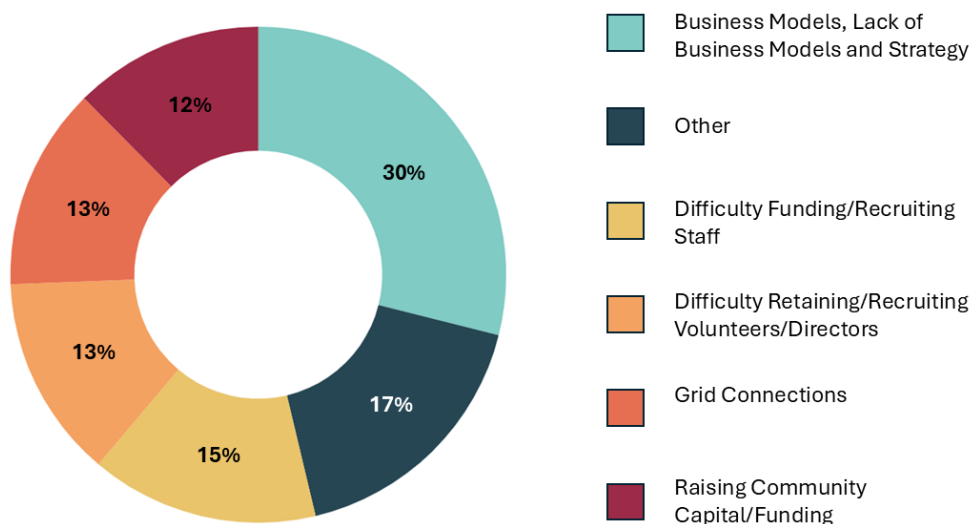
183.5 GWh of electricity generated by community-owned assets, satisfying the demand of approximately 67,966 households, and avoiding an estimated 38,537 tCO<sub>2</sub>e

# Overcoming Barriers

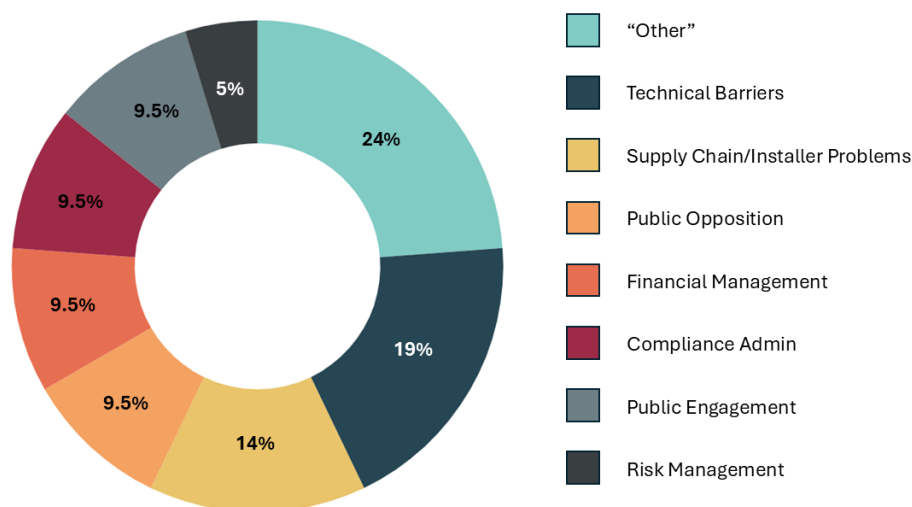
Similar to other regions in the UK the most commonly reported barriers to the community energy sector across NGED regions relate to raising staff funding (13%), securing grid connections (13%), a lack of viable business model (10%) and lack of volunteers (8%). To unlock the potential of community energy to deliver at scale, and to encourage the development of new business models and financial strategies, the sector has identified a need for a long-term, stable and supportive policy environment. This is crucial to the success of a post-subsidy community energy sector and would help support the freeing up of the capacity and resources necessary for organisations to thrive in the coming years.

Other barriers specifically identified include problems with gaining support from local government, and difficulties recruiting and retaining volunteers, staff and skilled board members which inhibits the capacity of organisations to develop projects.

## Barriers



## Barriers (Other)



As a result of these challenges, 23 projects in the licence areas were reported to be either on hold or stalled. 15 of these are electricity generation projects, with a total stalled capacity of 104.5 MW. Of this stalled capacity, 70 MW was reported by Bath & West Community Energy.

## Project Pipeline

There are currently 20 organisations across the Midlands, South West, and South Wales planning community energy projects, including the development of 34 energy generation projects with a combined potential generation capacity of 47.4 MW of solar PV, hydro, and wind. Approximately 22.5MW is wind generation and 24.5MW is solar.

Most of the planned solar generation was reported by Bath & West Community Energy, which is projecting the development of 18.7MW of capacity. Pipeline wind generation capacity was reported by two generators Awel Aman Tawe (16MW) and Bath & West Community Energy (5MW) alongside multiple other small generation projects.

Outside of generation there are 3 low carbon heat projects, 6 electrical energy storage projects and 38 other projects focusing on a range of areas such as local supply, grid flexibility, energy efficiency advice and retrofitting.

Organisations have estimated they will need to raise £20,130,000 in capital funds by the end of 2025, for these projects to be able to progress.

