



Ynni
Cymunedol Cymru
Community Energy
Wales

State of the Sector 2025

Realising our potential, creating thriving communities



The background of the page features a stylized illustration of a landscape. In the foreground, there are rolling hills in shades of green and brown. On the left, a field of solar panels is visible. In the middle ground, there are several white houses with dark roofs. To the right, there are wind turbines of varying sizes. The sky is a solid light blue, with a few white clouds and two stylized birds flying. The overall aesthetic is clean and modern, with a focus on renewable energy and community living.

Contents

Executive Summary.....	3
Headline figures: Welsh community energy in 2024.....	5
Community energy policy context.....	7
A changing support landscape for the sector in Wales and the UK.....	9
Community renewable energy generation in 2024.....	10
Community renewable energy finance and investment in 2024.....	13
Employees and volunteers in the community energy sector in Wales.....	14
Community energy contribution to local economies.....	16
Energy efficiency.....	18
Fuel poverty.....	18
Pipeline and barriers to community energy in Wales.....	20
Barriers.....	21
Stalled capacity.....	23
A Vision for Energy Communities.....	26
Get involved in community energy.....	28
About the research.....	29
Afterword – SP Energy Networks.....	31

Executive Summary

As this report is published, there is some sense of momentum around decarbonisation plans in Wales and the UK, with millions of pounds of grant funding being injected into capital projects by Ynni Cymru, and the launch of GB Energy and the Local Power Plan in Westminster as characteristics of a growing support environment for community and local energy.

Our State of the Sector data reaffirms the incredible benefit to society that our sector secures where projects are delivered, and our established generating members continue to build on and deepen their positive impact in their communities, providing jobs, encouraging volunteering, and reaching beyond generation into sustainable food and transport networks, energy efficiency and fuel poverty support, and smartening local energy systems with battery storage and innovative connections.

At face value, it would be easy to assume that the prospects of the community energy sector should be bright.

The data indicate otherwise. 2024 saw an incremental capacity increase of 3% in total community energy capacity, which now stands at 33.4 MW – a fraction over 2% of Welsh Government's target of 1.5 GW of capacity in local and community ownership (58% is privately owned 'local' energy). There is a shortfall of 600 MW to achieve the Welsh Government's 2030 target. While Wales is progressing on the target in terms of renewable energy defined as 'local', the deep and wide social economic benefits of community owned energy are not being realised, even as the transition to a low carbon energy gathers pace.

New groups and projects continue to be few and continue to lack meaningful support from the existing network of services. The pipeline is stagnating, and the most likely destination for projects currently in development is the 'stalled' category – up from 24.8 MW to 42.8 MW between 2023 and 2024. Why? The barriers remain fundamentally the same as they have since 2016 – route to market, cost and effort of consenting, and cost of grid – all compounded by the increasing competition from private sector investors. What policy makers should notice here are two things. Firstly, that the existing cohort of community energy generators established during feed in tariff have a basis from which to grow and demonstrate the unbeatable value of cooperative action on energy in local places year on year: **community energy is better for society than any other business model**. The second, sobering, learning, is that there is no meaningful growth potential in the abiding market and regulatory conditions. The image is one of, on the one hand, a once-in-a-generation opportunity to secure unmeasured benefits from technological transformation – but on the other, a comprehensive failure to do so; one that sits squarely on the shoulders of policy makers and regulators both in Wales and at San Steffan (Westminster) who know the barriers, and have persistently failed to remove them. Grants keep a tiny fraction of what we could achieve on life support, but sustainable market conditions could release potential that far outstrips current targets.



Our solution to this is Energy Communities. Energy Communities would create a route to market for community energy, reduce bills, improve energy security and would reduce pressure on the grid. In the 2026 CEW manifesto, a suite of measures are outlined which would create the conditions for energy communities. Mandatory shared ownership, mandatory community benefits with an additional levy on energy development to contribute to a Community Wealth Fund to support new community energy start-ups, changes to procurement rules to enable public bodies to buy community owned energy, more apprenticeships, a duty on public bodies to support the circular economy and disincentivise extractive economic activity, a Community Right to Buy law, community access to land, improved finance structures and the devolution of the Crown Estates would all help to help the sector and society realise the bright, sustainable future it should have.

Community energy delivers positive outcomes on all seven of the WFG Act's Wellbeing Goals, (note the mention of community energy in the [latest Commissioner's report](#)) – goals which often seem to be deprioritised in decision making. We hope – and expect – the next Welsh Government to provide new focus in centring these goals and the role of the community energy sector in meeting them, in the next programme for government.



Headline figures: Welsh community energy in 2024

Total community-owned capacity: 33.4 MW ↗ up 3%	Full-time employment in the sector in 2024: 177 ↗ up 8%
Total community electricity generation ¹ : 47.5 GWh ↗ up 3%	Active surveyed ² community energy groups and umbrella organisations based in Wales: 58

Sectoral challenges

The small increase in new generation capacity was down to existing organisations increasing their capacity rather than from new organisations. This situation is replicated across the UK, with new generation only being added where existing community groups have managed to identify opportunities for expansion.

There has been an increase in the number of new community energy businesses being set up and becoming members of Community Energy Wales. Many of these projects are still in their infancy, but if circumstances become more favourable to community energy – as we outline further in this report – more communities will be in a better position to take advantage of new opportunities as they arise.

Project development

Like last year, the data points to a stagnation in the number of new projects. There are numerous reasons for this. Our members reported that a lack of funding and expertise at the start-up stages is hampering new growth in the sector. Uncertainty about the outcomes of Ofgem’s Queue Management Reform process continued to impose disproportionate risk on community projects. The UK Energy Secretary considered switching over to a new zonal pricing system. This presented a risk of increased barriers to developing new community projects. A decision was made against introducing zonal pricing in summer 2025 which will provide some certainty, however, the problem of grid constraints across the UK remains unresolved.

Further positive news is that the UK Government and the Department for Energy Security and Net Zero (DESNZ) and its wholly owned operationally independent company Great British Energy have stated their intention to invest almost £3 million in community clean energy projects across Wales. At the time of writing, DESNZ was running a consultation asking whether community benefit funds and shared ownership of major renewable energy projects should be made mandatory.

¹ The method for calculating the total electricity generation has changed for this year's State of the Sector Report. To ensure consistency across future years, generation is now calculated by multiplying the capacities of each generation type by the official DESNZ load factors for Wales.
² Active organisations in Wales which completed the State of the Sector portal or whose details could be found through desktop research.



Welsh Government

Just 3 projects (of a total of 30 since 2020) have signed agreements for a proportion of shared ownership with community counterparties prior to submitting planning applications. Despite attempts by **Community Energy Wales (CEW)** to work with developers collectively in a Shared Ownership Working Group, there has been limited engagement from the commercial sector. Verbal statements of intention from developers to meet the policy objective have not led to meaningful commercial arrangements. This is why we have concluded, alongside our partners in Community Energy Scotland and Community Energy England, that shared ownership must now be made mandatory³.

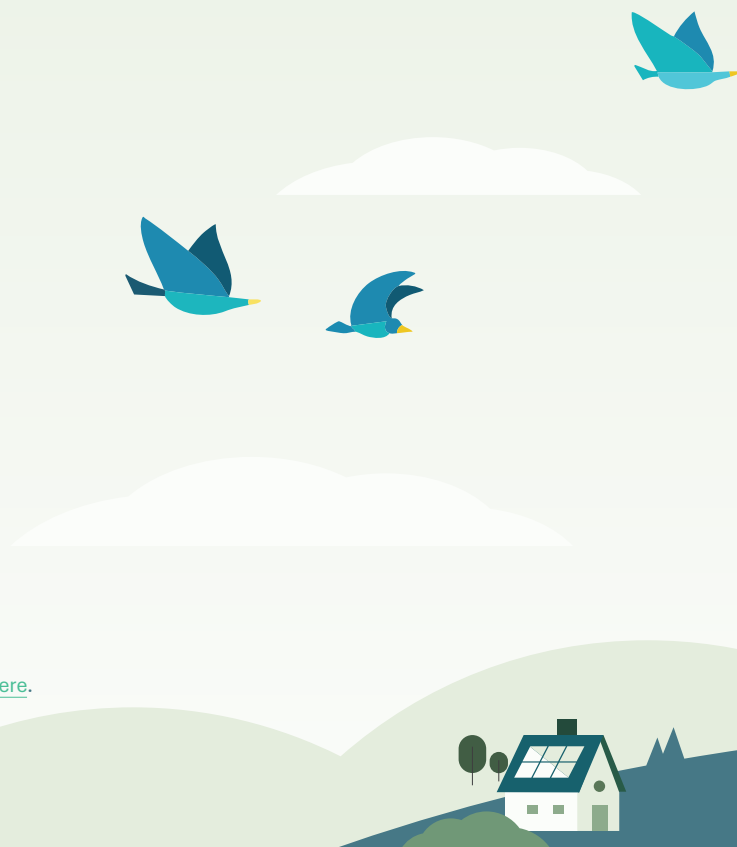
Trydan Gwyrdd Cymru was officially launched on 15th July 2024. This is the new publicly owned renewable energy developer for Wales. The company's stated aim is to accelerate the development of renewable energy projects, particularly onshore wind, on the wider Welsh public estate and maximise their value for the people of Wales. Trydan Gwyrdd Cymru's outreach and survey "YOU first!"⁴ found a "significant call for Trydan to prioritise public/ community ownership, suggesting a strong preference for localised (Welsh) control and benefits" (1 in 5 respondents) and a strong desire for Trydan's profits to be invested in the local community on initiatives directly benefitting local people and their surroundings (65% agreed).

2024 also saw the initial round of Welsh Government's **Ynni Cymru** capital grant funding programme. £10 million in capital grants to develop Smart Local Energy Systems (SLES) were awarded across Wales, with projects finishing by March 2025. We look forward to seeing the benefits of the solar PV, battery storage, EV charging infrastructure, heat pumps, smart lighting and smart controls installed in future State of the Sector reports.

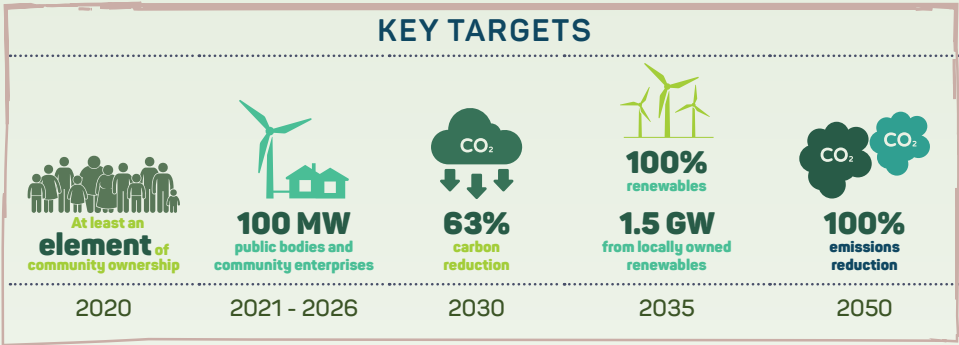
At the time of writing, a second £10 million Ynni Cymru funding round had just closed, with further smart local energy system projects due to be completed by the end of financial year 2025-26.

³ For our joint response to the DESNZ consultation on *Community benefits and shared ownership for low carbon energy infrastructure*, see [here](#).

⁴ [Trydan Gwyrdd Cymru YOU first! summary report](#)



Community energy policy context



CEW campaigned with Power for People to support an amendment to the Bill to include “... measures to increase low carbon and renewable energy schemes **owned, or part owned, by community organisations**”. While this was voted down, a subsequent House of Lords amendment that “Great British Energy may facilitate, encourage and participate [...] through projects involving or benefiting local communities” was successfully added to the face of the Bill.

Wales

A motion laid in the Senedd by Adam Price (Plaid Cymru) for a “Community Energy Benefits bill”⁶ requiring profits from renewable energy developments to have a direct benefit for local communities and be kept in the local area. The motion was agreed without government support and so the proposal has not proceeded.

United Kingdom

The **Great British Energy Bill** made its way through Parliament during 2024. Minister for Energy Michael Shanks stated in the House of Commons that community energy was key to local power plans: “We want to see many more community-owned energy projects, for a combination of reasons. They have real social and economic benefits for communities. For us, there is the belief that communities having a stake in those projects is important: communities having ownership and feeling part of the mission will help us with some of the arguments for the amount of infrastructure that we will have to build in the next few years”⁵.

⁵ [Great British Energy Bill \(Second sitting\) \[Hansard\]](#)
⁶ [Senedd Plenary 26/06/2024](#)

NET ZERO WALES CARBON BUDGET 2 (2021 – 2025)⁷

- Reduce carbon emissions by **63%** by 2030 and **at least 100%** by 2050
- Expansion of renewable energy generation by public bodies and community groups **by over 100 MW** by 2026

“HOW COULD WALES MEET ENERGY NEEDS WHILST PHASING OUT FOSSIL FUELS BY 2035?” REPORT⁸

The **Wales Net Zero 2035 Challenge Group** published a series of reports in September 2024. Community Energy Wales submitted evidence to its inquiry into the phasing out of fossil fuels. The report supported the local trading of electricity and recommended meaningful shared ownership of commercial renewable energy projects and innovative financial models for community energy projects. The report also recommended the establishment of an expanded advisory service for community energy groups and local communities by 2026 to help convene potential finance providers, enable knowledge sharing, promote the opportunities and benefits provided by community energy projects and include the development of a community benefits toolkit and community benefit funds support scheme.

DESNZ CALL FOR EVIDENCE ON BARRIERS TO COMMUNITY ENERGY PROJECTS⁹

Community Energy Wales contributed a detailed submission on behalf of its members to the Call for Evidence from the Department for Energy Security and Net Zero on the barriers to community energy projects in April 2024¹⁰.

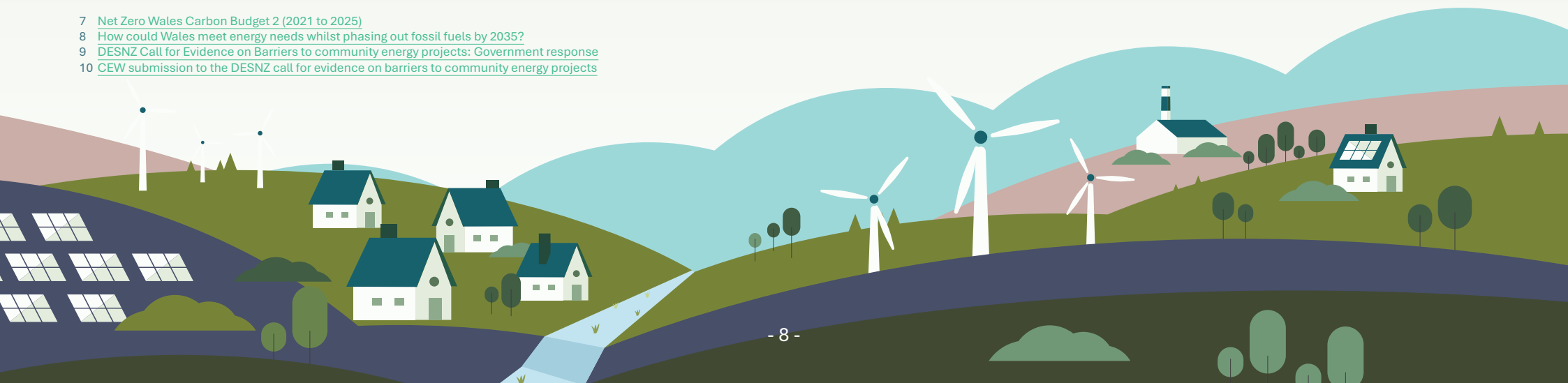
Analysis of the collective responses to the consultation indicated that the chief barrier (according to 72% of respondents) to communities developing or expanding community energy projects was access to **funding**. A raft of central government regulatory and policy barriers, compounded by a lack of supportive policy and action at local government level, were identified as the remaining key barriers. Proposed solutions included adjustments to tax, levies and subsidies, policy/regulatory/contractual changes and more support and engagement between local community energy organisations and local government. Historically, the **Feed-in Tariff (FiT)** scheme was identified by 78% of respondents as the key support mechanism enabling the existing sector. Since the closure of FiT, the market and regulatory conditions identified as barriers have prevented significant further growth in the sector.

⁷ [Net Zero Wales Carbon Budget 2 \(2021 to 2025\)](#)

⁸ [How could Wales meet energy needs whilst phasing out fossil fuels by 2035?](#)

⁹ [DESNZ Call for Evidence on Barriers to community energy projects: Government response](#)

¹⁰ [CEW submission to the DESNZ call for evidence on barriers to community energy projects](#)



A changing support landscape for the sector in Wales and the UK

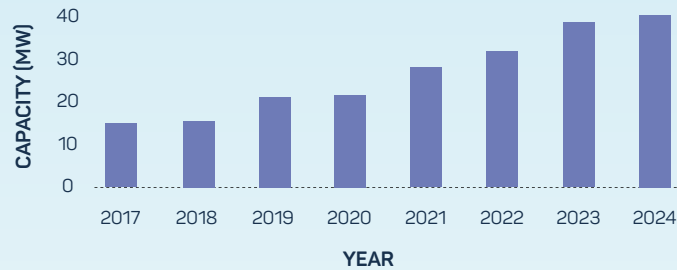
Community Energy Wales works alongside YnNi Teg representing the sector. We convene the All-Agencies Community and Local Energy Group, bringing together a network of different stakeholders, government (UK and Welsh) departments and regulators. The current focus of the All-Agencies Group is to clarify roles and create a clear 'customer journey' through the different support strands funded by Welsh Government.

We represent our members, sitting alongside our counterparts in Scotland ([Community Energy Scotland](#)) and England ([Community Energy England](#)) on a range of different committees and roundtables, speaking directly to GB Energy and the Department for Energy and Net Zero (DESNZ).

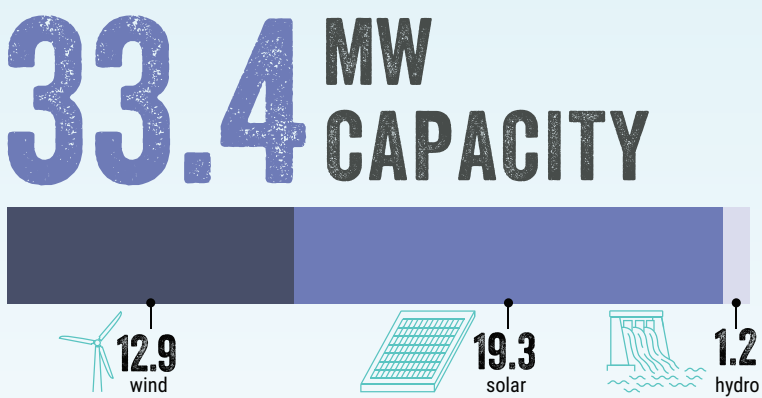


Community renewable energy generation in 2024

INSTALLED GENERATION CAPACITY IN WALES (MW) SINCE 2017



WALES TOTAL RENEWABLE ELECTRICITY CAPACITY



Total community-owned generation capacity	33.4 MW
Total renewable electricity generation	47.5 GWh
Equivalent to powering	17,583 homes
Total CO ₂ emissions saved	9,975 tonnes

The data indicates a modest increase from 32.4 MW to 33.4 MW generation capacity between 2023 and 2024. At just over 3%, this is under the figure for the UK as a whole (7%).

However, most of this increase either comes from existing projects previously unreported to **Community Energy Wales** (i.e. were generating but had not fed into the State of the Sector before) or were the result of optimisation of projects with existing generating assets. This means that effectively growth was flat in 2024.

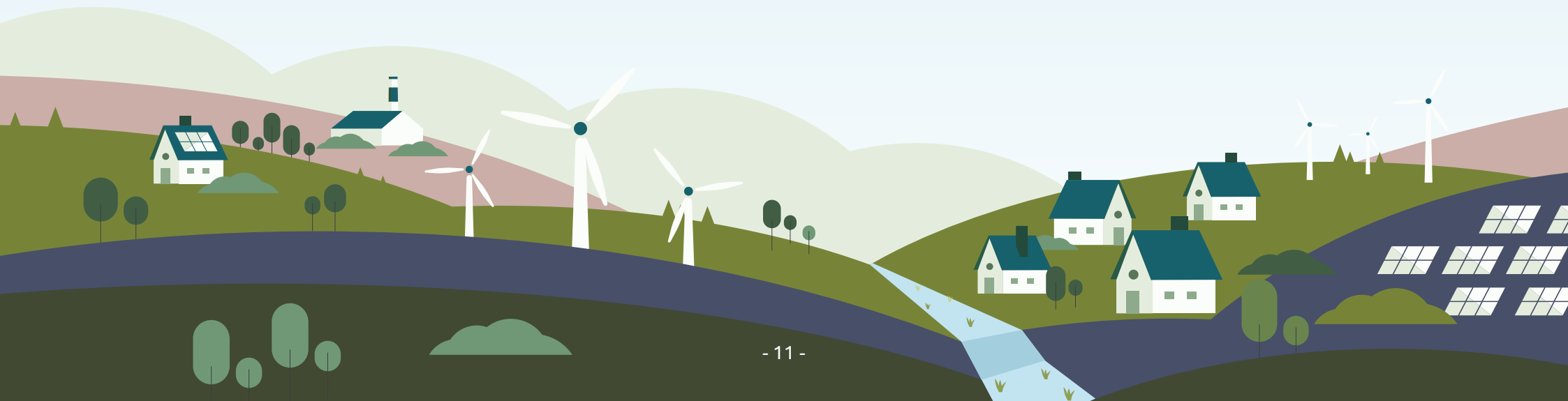
Smaller and newer organisations with limited capacity or knowledge are not developing new generation projects. More detail on this can be found in the section on **barriers to new community energy** (see pages 21-22).

Welsh Government figures show a total capacity of ‘local generation at 0.9 GW – at face value, significant progress towards the target for at least 1.5 GW of renewable energy capacity to be locally owned by 2035. Community ownership¹¹ levels continue to be low. The current definition of ‘local ownership’ is broad enough to include companies headquartered in Wales as well as community energy organisations. This carries a growing risk of the 1.5 GW target diluting efforts towards achieving the maximum possible amount of generation in true community ownership. Community-owned renewable energy generation delivers exceptional levels of wider economic benefit and locks assets into places¹² in a way that cannot be delivered by private ownership.

Ynni Cymru awarded £10m of capital to build smart local energy systems in 2024, split across community owned and other local projects. This capital funding is welcome, but in the long term our policy recommendations provide a more sustainable way forward for the sector.

¹¹ “a renewable energy or renewable storage development located in Wales, which is wholly owned by a social enterprise whose assets and profits are committed to the delivery of social and/or environmental objectives”, [Local and shared ownership of energy projects in Wales](#)

¹² Community energy locks assets into a place, whereas private schemes can potentially be sold off to companies which are not headquartered here, thereby siphoning off ownership and profits to individuals and companies outside Wales.





Case Study

Ynni Teg Bwlch Gwynt Solar Farm

With grid constraints once again topping the barriers leaderboard (see previous page), some Community Energy Wales members are finding innovative ways to utilise existing capacity to get the most out of their installations.

By locating solar and wind generation technologies side by side, **Ynni Teg's Bwlch Gwynt Solar Farm** project optimises existing allocated grid assets, helping Wales progress towards its Net Zero targets.

The solar farm project located in Carmarthen has created an elegant solution to capacity constraints by adding solar panels to fill the spare grid capacity for its existing wind turbine. This innovative approach allows for energy generation with the ability to shift and balance outputs between solar and wind sources, e.g. the system can flexibly allocate 200 kW from solar and 700 kW from wind, ensuring full utilisation of Ynni Teg's 900 kW maximum export capacity.

Additionally, the ground-mounted solar farm was designed to minimise land disturbance while significantly contributing to carbon emission reduction efforts. The installation's layout was carefully planned to optimise land use, preserving the surrounding environment. By generating 651,472 kWh of clean energy annually, the project substantially reduces the community's carbon footprint, aligning with the transition to renewable energy sources and upholding the principles of the Well-being of Future Generations Act.



Community renewable energy finance and investment in 2024

TOTAL ORGANISATIONAL TURNOVER

£11.3 MILLION TURNOVER

Last year's self-reported turnover figures from **Community Energy Wales** member organisations reached a total of £11.3 million, significantly up from the previous year's figures of £6.4 million. This represents around 16% of the UK community energy sector's total for the year. These turnover figures, as always, include grant income contributed by Welsh Government, local authority and National Lottery funding, as well as community shares, bonds and loans.

Two of our member organisations reported turnover figures over £1 million.

There was a reduction in Welsh Government funding from the previous year from £1.15 million to £415,000. Direct local authority funding increased by around 20% in 2024. Levelling-up grant funding accounted for around £315,000 per annum. Reported National Lottery funding dropped significantly from £140,000 to just under £43,000 per year.

TOTAL INVESTMENT SECURED

£3.2 MILLION



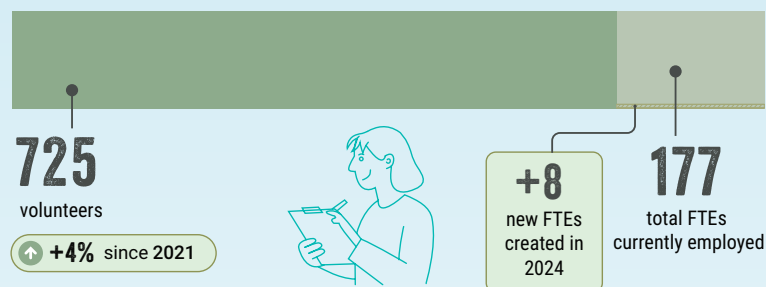
The largest percentage (over 70%) of investment secured for new projects in 2024 came from grants. This aligns with the UK-wide figures, where sectoral growth remained limited, especially in England. These grants are becoming more necessary given the increasing competition for loan investments in renewable energy. Some CEW members have also reported that investment has become more stringent, with investors beginning to require similar payback times to commercial developments. Whereas this can be interpreted as a good sign of professionalisation of the sector, small and local organisations are at a disadvantage to multinationals when risk and return are the leading drivers for investment decisions.

“ONE ISSUE WE HAVE HAD IS AROUND ROI WHERE FUNDERS ARE ASKING FOR A MAX OF 7-8 YEARS AND SUPPLIERS FINDING THIS DIFFICULT TO WORK WITH”

There were no new share offers or new groups registered with Community Energy Wales in 2024. More than a fifth of our member organisations reported that a lack of viable business models and strategies were a major barrier to them developing generation projects.

Employees and volunteers in the community energy sector in Wales

WORKFORCE



The community energy sector has always relied heavily on volunteers¹³. The backbone of the sector are all the people who contribute their time to improve their communities.

The number of volunteers has steadily increased. Co-operatives and other ‘democratic economy’¹⁴-type businesses – of which community energy organisations are an example – are well supported. A YouGov poll commissioned by Common Wealth¹⁵ carried out in October 2024 found that almost one in four of those asked (24%) said they would volunteer their time for a community energy project.

Volunteering in the community energy sector can cover a range of areas and activities. As well as board membership and fundraising or campaigning, many of our member organisations are supported by people offering their time to help with accounting, data measuring and handling and asset maintenance activities, plus much more.

In 2024, five member organisations offered training schemes or apprenticeships as a pathway to employment – two more than last year. This is an area of potential which needs to continue to grow as the sector scales up to meet Government targets for community energy.

¹³ [Community Energy England “Transforming energy: THE POWER OF LOCAL” toolkit](#), Community Energy England (2020)

¹⁴ “businesses that give people a stake and a say. It consists of organisations that are democratically owned and equitably controlled by their members”, “[Co-operatives and Mutual Economy 2024: A report on the UK’s democratic economy](#)” report Co-operatives UK (2024)

¹⁵ [The Public is Enthusiastic for Community Energy](#), Common Wealth (2025)



Case Study

Cambrian Village Trust, Clydach Vale

The Cambrian Village Trust (CVT) was set up in 2001 with the original aim of offering football opportunities to young people in the area. Now, CVT runs a community café (the Cambrian Lakeside Café Bar) powered by a 50 kW hydro scheme and 10 kW solar PV, and offers activities for a wealth of community groups including leisure and outdoor learning for adults with learning disabilities, health and wellbeing activities for different age groups and walking football and rugby sessions.

CVT produces and sells its own electricity, generating an annual turnover of £30,000. Their clubhouse and café are both powered entirely by their hydro generator via a direct wire connection that cost £12,000 to install. Due to subsequent bill savings, CVT had saved £12,000 within just 6 months of installation. CVT originally sold their excess electricity to the National Grid for approximately 7p per kilowatt-hour (kWh). However, CVT have since secured a Power Purchase Agreement (PPA), selling excess energy to Dŵr Cymru for approximately 12p per kWh. The income generated goes back into the local community to provide much-needed services and improves the Trust's long-term resilience.



Community energy contribution to local economies

FINANCIAL CONTRIBUTION TO WELSH LOCAL ECONOMIES

£4.3 MILLION CONTRIBUTED

to local economies from organisational expenditure and community benefit funds



Community energy makes a substantial contribution to local economies across the country. **Over £4 million** was spent by community energy organisations, with **60% of that either spent directly in local communities or remaining in the local area**. With the loss of much-needed local facilities and services, keeping money in the local area enables the retention or bringing back of what has been lost, building resilience and strengthening local circular economies.

As the 2024 UK-wide State of the Sector Report¹⁶ found, community energy spending may then be re-spent within the same local economies, supporting local employment and improving community cohesion, social satisfaction and belonging.

AVERAGE ORGANISATIONAL EXPENDITURE RETAINED IN THE LOCAL AREA: 60%

WELSH COMMUNITY ENERGY PROJECTS DELIVER MORE THAN THREE TIMES THE COMMUNITY BENEFITS OF PRIVATELY OWNED PROJECTS

Is £5,000 per MW for community benefits enough?

The current standard expectation for community benefit levels at £5,000 per MW for onshore wind projects dates back at least as far as 2012. This figure is outdated as it has not increased in line with inflation, fails to account for regulatory change, fails to be adaptable across other (non-wind) technologies with different commercial models, and is susceptible to a number of other commercial and regulatory levers. £5,000/MW is not a sufficient contribution for profitable projects to make to their host communities. While existing community benefit funds do provide for and support good works and community ventures, they are also regularly criticised as being ‘bribes’.

Local people need to have more agency in the energy transition, so funds should be more focused on asset building and ownership. Time and again, people express a clear preference for this: **communities deciding for themselves** which local priorities should be dealt with and how the profits and benefits from energy projects should be distributed. Shared ownership should therefore be offered in addition to and not as an alternative to community benefits.

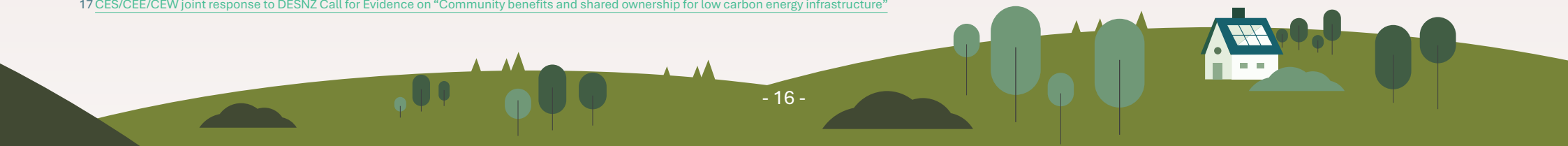
In response to a call for evidence from DESNZ, Community Energy Wales, along with its counterparts in Scotland and England, **called¹⁷ for mandatory community benefit funds and shared ownership for all future commercial projects across the UK.**

COMMUNITY ENERGY PROJECTS DELIVER AROUND £17,000 IN COMMUNITY BENEFITS PER MEGAWATT OF INSTALLED CAPACITY.

THIS IS MORE THAN 5% OF THE OVERALL SECTORAL TURNOVER, AND OVER 3 TIMES THE OUTDATED £5,000 PER MW FIGURE.

¹⁶ 2024 State of the Sector Scrolling Infographic

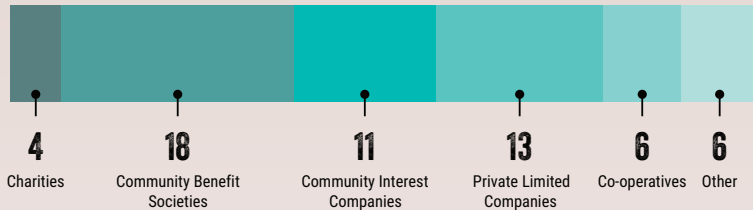
¹⁷ CES/CEE/CEW joint response to DESNZ Call for Evidence on “Community benefits and shared ownership for low carbon energy infrastructure”



Community energy organisations

COMMUNITY ENERGY ORGANISATIONS IN THE SECTOR

58 ORGANISATIONS



Just under 60 community energy organisations were operational in Wales in 2024. Most of these organisations remain a combination of community benefit societies (CBSs), community interest companies (CICs), co-operative societies and private limited companies. Most of the generating organisations are registered as either Community Benefit Societies (CBSs) or Community Interest Companies (CICs). There are a handful of ‘umbrella’ organisations such as DEG (Datblygiadau Egni Gwledig) and YnNi Teg, which provide community energy-related services, sometimes alongside their own generation.

Some of the increase in the number of organisations this year was due to the scope of organisations broadening to include arts organisations, small charitable companies and trusts, and community energy projects still in their infancy but looking for mentoring and support from their peers.

ORGANISATION MEMBER FIGURES

7,429 MEMBERS

↑ +139% since 2021

The number of members has increased since last year to 7,429. This is mainly due to the inclusion of the Graig Fatha wind turbine, which was previously overseen by Ripple Energy Limited (which entered administration in 2025) and which is now also included in the figures. This turbine is operated as an independent co-operative, so its 902 members have also been included in the member figures for the first time this year. The co-operative pays out community benefit funds to the Fuel Bank Foundation (distributing over 3,000 emergency fuel vouchers) and a local charity in Rhondda Cynon Taf providing free support and advice to community and voluntary groups in the area.



The Welsh language

The community energy sector remains a leader in the use of the Welsh language, with almost all the organisations that provided data on their use of the language, saying that they either produce ‘everything’ or ‘almost everything’ bilingually. **Community Energy Wales** is a fully bilingual organisation with half of the team able to use Welsh and the rest being ‘siaradwyr newydd’ (new speakers) that are provided with support to improve their language skills.



Energy efficiency

ENERGY EFFICIENCY

£436,956 **BILL SAVINGS**



Community energy organisations in Wales were able to save billpayers and businesses almost half a million pounds in 2024 through their energy efficiency activities. In addition to cutting bills, this also represents major carbon savings (almost 10,000 tonnes of CO₂ savings) – a win for bank balances and the planet alike.

[Cartrefi Clyd](#) (“Warm Homes”) developed from a **Community Energy Wales** working group. The project won funding from the Energy Industry Voluntary Redress Scheme and now provides expert advice or home retrofit for those able to pay. Cartrefi Clyd works with the Welsh Government’s Green Homes Wales scheme which offers interest-free loans over ten years for homeowners to invest in energy efficiency improvements.

Fuel poverty

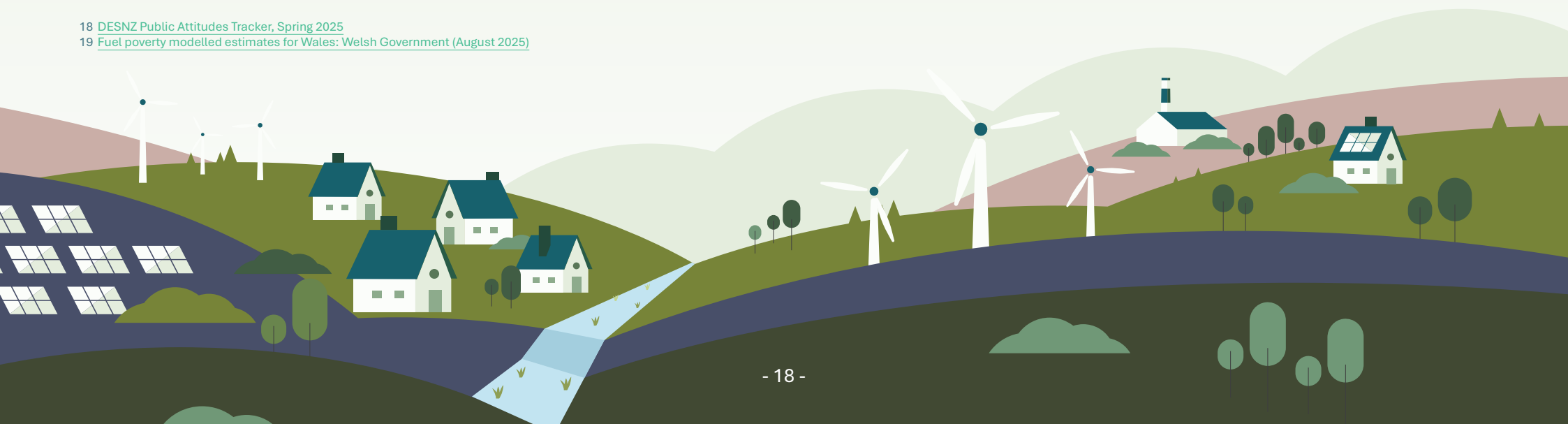
In spring 2025, DESNZ found¹⁸ that 52% of people said they were worried about paying their energy bills and energy bills ranked as the most worrying household expense (42%). At the time of writing, a new report from National Energy Action (NEA) revealed that official Welsh Government estimates showed that **25% of all households in Wales** (340,000) **were in fuel poverty** and 5% of households (63,000) were estimated to be living in **severe fuel poverty** in October 2024¹⁹.

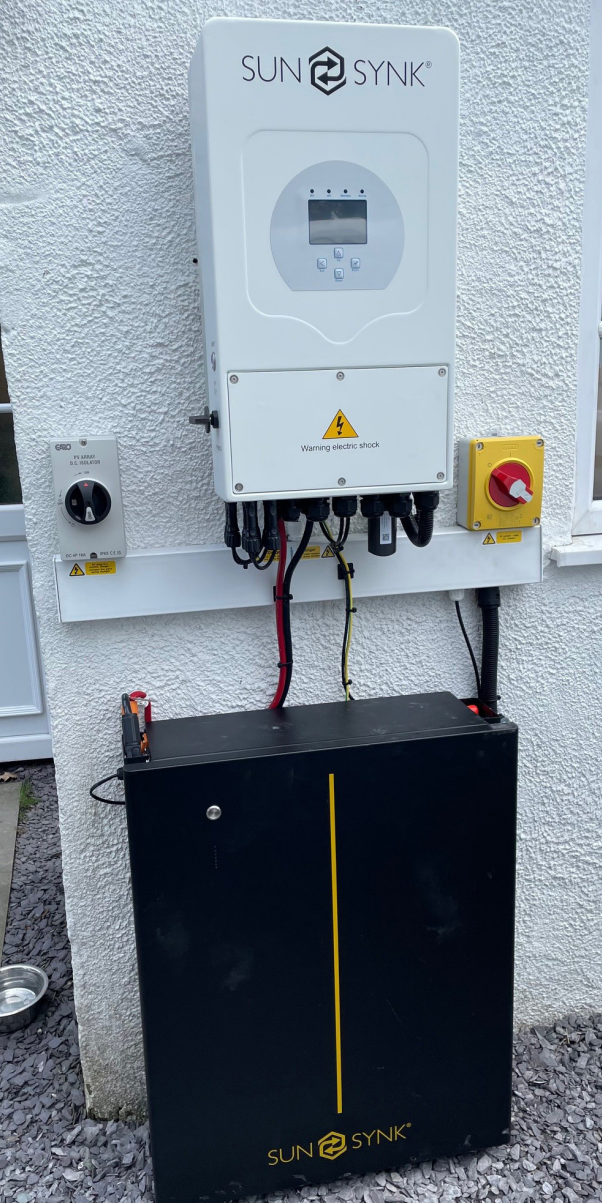
While fuel poverty figures are reported here in policy context of energy efficiency, they should not be taken out of context from overall poverty which continues to rise across Wales and the UK. Nor should we ignore the associated secondary issues that fuel poverty includes: failure to thrive among children and persistent physical and mental ill health.

Community Energy has the potential to deliver the measures that tackle fuel poverty directly (through projects such as Cartrefi Clyd), while tackling the wider issue of wealth distribution in society by building ownership of energy assets as a key lever in developing foundational economies.

¹⁸ DESNZ Public Attitudes Tracker, Spring 2025

¹⁹ Fuel poverty modelled estimates for Wales: Welsh Government (August 2025)





Case Study

Cartrefi Clyd

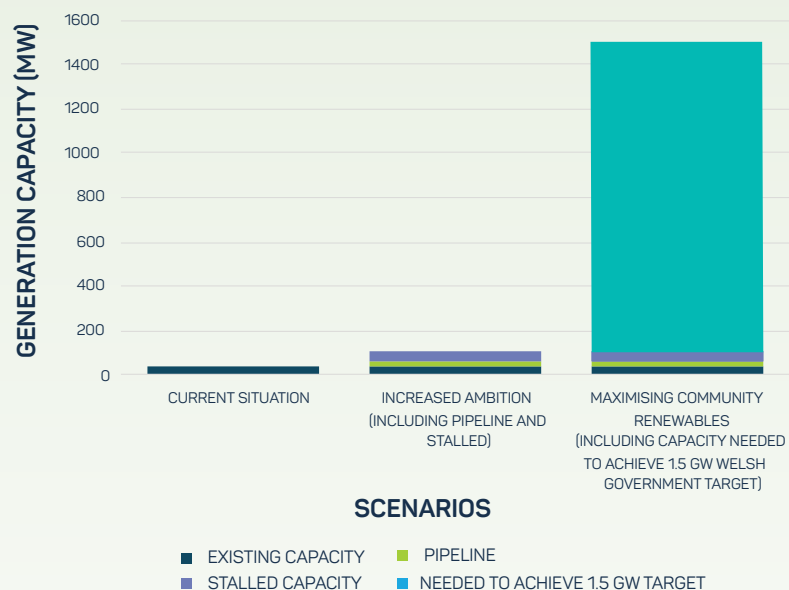
Cartrefi Clyd was created by a working group of Community Energy Wales members and retrofit experts looking at energy efficiency. The working group identified a gap in the market for able-to-pay homeowners, with no support available to them at the time. The working group was successful in receiving £199,152.50 from Energy Redress to carry out retrofit assessments for homeowners. During the funding period, the consortium assessed 246 homes over a period of 2 years. 27 customers have gone on to carry out retrofit work on their homes. Through their retrofit assessments, Cartrefi Clyd fulfils the vital role of providing independent and trusted advice, so that homeowners can have the security that the work carried out on their homes is the correct choice. Cartrefi Clyd follows the whole-house approach that takes into account the homeowners' lifestyle, the material of their building, its location, the local climate, and more. This means that the risks of doing damage to your home through retrofit is mitigated.



Pipeline and barriers to community energy in Wales

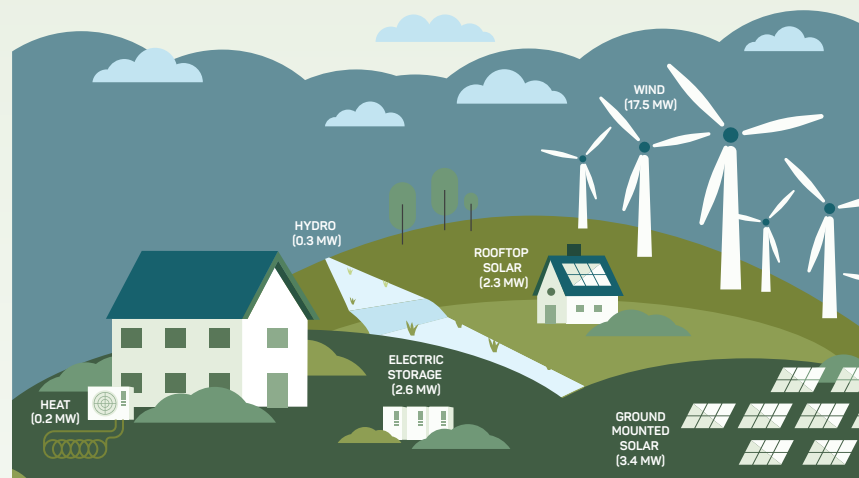
Charting potential trajectories for Welsh community energy

COMMUNITY ENERGY GENERATION IN WALES BY SCENARIO



26.3 MW In the pipeline

COMMUNITY ENERGY PROJECTS IN DEVELOPMENT (CAPACITY IN MW)



Welsh Government’s current target is for 1.5 GW of “renewable electricity and heat capacity to be locally owned by 2030”²⁰, yet the community energy sector in Wales is currently at just 33.4 MW of generating capacity, with the larger share of the 0.9 GW delivered to date in local, but nonetheless private ownership. To meet the 1.5 GW target with community owned energy projects alone, we would need to build over forty times the existing capacity we have now, **every year**, by 2035.

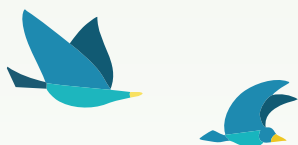
20 [Guidance on Local and Shared Ownership of Energy Projects in Wales](#)



Stalled capacity figure has increased by 24.8 MW to 42.8 MW since 2023. These projects represent significant sunk volunteer time and often substantial grant funding. If operational they would be actively displacing CO₂ emissions today. Delivering these projects could increase the capacity of the community-owned generating fleet to 76.4 MW (more than double the current capacity).

The pipeline figure describes projects that are currently in the development phase. Action is needed at both UK Government and Senedd to create market conditions enabling all communities to participate in a just energy transition. Without resolution to the barriers to community energy, most projects in the pipeline are likely to be added to the ‘stalled capacity’ in future reports, or will be entirely dependent on capital grants.

These data, observed over multiple State of the Sector Reports, are effectively a ‘canary in the coal mine’. If conditions are corrected, the Community Energy Sector is poised to meet and exceed the 1.5 GW target. Our policy ambitions, laid out in the Manifesto section of this report, describe what needs to be done to unlock the power of the community energy sector.



Barriers

Table of the leading barriers to community energy in Wales in 2024

Barrier	Number of times barrier mentioned
Grid connection challenges	11
Difficulty funding more paid staff (capacity funding)	8
Lack of viable business models	5
Moving into new technologies/business models	4
Fundraising	4
Raising community capital	3
Compliance and administration issues	3
Strategic direction and long-term planning	3
Lack of skills and/or technical expertise	3
Public opposition	2
Business strategy	2
Financial management	2
Difficulty recruiting and/or retaining volunteers/directors	2
Local authority and/or commercial developer relations	2
Public engagement	2
Risk management	1
Other barriers	1
Leadership team and/or board	1
Supply chain and installer problems	1
No significant barriers	

(Respondents could select more than one option)

The barriers table is data directly from this year's State of the Sector Respondents. Our members identified grid connection as the primary barrier (somewhat conflicting with the DESNZ consultation on barriers to community energy reported on page 8). Fundamentally, the barriers have remained largely unchanged since the end of the Feed in Tariff

The regulator Ofgem is in the process of reforming the connection queue to prioritise and accelerate the connection of renewable energy projects by using “ready, **needed** and viable” as indicators when deciding which projects to connect to the grid first (rather than the previous “first come, first served” basis). Alongside colleagues in England and Scotland, Community Energy Wales is asking for community owned generation to be incorporated as part of the ‘needed’ definition.

Some members have successfully developed new projects supplying energy directly via private wire to businesses with high electricity usage, thereby bypassing the need for connection to the grid.

“ROUTE TO MARKET FOR VIABLE [...] RENEWABLE ENERGY GENERATORS IS CURRENTLY CHALLENGING. THIS IS A KEY CHALLENGE ALONG WITH ACCESSING SPACE ON THE GRID TO ALLOW NEW GENERATORS TO EXPORT.”



21 [“The Public is Enthusiastic for Community Energy”, Common Wealth, January 2025](#)



Finance remains a major barrier. The continued lack of viable business models for new community energy projects coupled with challenges in fundraising and raising community capital continues to prevent large-scale sector growth.

Capacity funding is insufficient, meaning an ongoing shortage of skilled staff continues to be a challenge to the sector. Recruiting for people with the right capability is a challenge as the private sector is growing to meet Net Zero, and the level of private sector salaries increases. One member commented on the value that any ‘sustainability’-related job has at the moment, and how this is resulting in increasing wage costs. More training places and quality apprenticeships would help tackle the green skills shortage.

Supply chain and installer problems have reduced, and fewer members are noting public opposition to their projects. This aligns with some recent research carried out by UK/US think tank Common Wealth²¹ in early 2025 which found widespread support for community-owned renewable energy projects. The same research found that Wales was the area of the UK with the greatest difference between support for a *community* energy project in the local area (63% in favour) and support for a *commercial* project in the local area (29%). People in Wales were least likely to have the funds to participate in community energy (33% of respondents said they would be unable to participate due to lack of funds and 19% due to lack of time).

Taken as a whole, the barriers identified in the State of the Sector Report are consistent with barriers reported to numerous UK and Welsh Government consultations since the end of the Feed in Tariff. Our policy recommendations offer a solution – it is time for our Governments in London and Cardiff to take action and create the market conditions that allow local people and communities to do what they can for themselves, and to take a fair part in the benefits of a just energy transition.



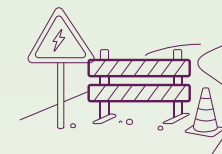
Stalled capacity

The following table shows the projects which are currently stalled in Wales:

STALLED RENEWABLE ENERGY

43 MW

STALLED
CAPACITY



Project	Technology	Scale	Barrier
Project 1	heat, generation	> 10 MW	capacity, site issues, lack of business model, lack of organisations willing to collaborate. Heritage Impact Assessment costs, river scoping costs (NRW), land ownership issues
Project 2	generation, storage	1 – 2 MW	feasibility, flexibility, lack of business model, lack of floor price for community energy
Project 3	generation	< 1 MW	feasibility, lack of capital, grid, site issues
Project 4	generation	< 1 MW	feasibility, lack of business model
Project 5	generation	< 1 MW	feasibility, capacity, local authority risk adverse
Project 6	generation, local energy club	< 1 MW	grid, flexibility, existing connection not allowed to supply domestic consumer club
Project 7	generation	unspecified	staff funding, negotiations for working with local authority
Project 8	generation, low carbon transport, lighting retrofit	unspecified	feasibility, capacity, finding suitable/reliable suppliers, having to work in stages due to funding constraints, staff time
Project 9	low carbon transport, EV charge point, education	unspecified	Covid-19

The leading stall factors were

- (1) lack of feasibility funding and/or development funding,
- (2) lack of capacity within the organisation (people or time),
- (3) lack of a viable business model and
- (4) grid constraints.

Of the miscellaneous factors, our members reported Covid-19 still causing ripple effects, a lack of floor price for community energy, excessive scoping costs required by Natural Resources Wales for new projects and risk-averse local authorities holding back on giving planning approval or working with community energy.

After listening to our members and co-creating a set of solutions

Ynni Padarn Peris hydro scheme



- › **Location:** Afon Goch, Llanberis, at the heart of Eryri National Park.
- › **Purpose:** Generation of renewable energy for the benefit of the local community, with any excess sold to the National Grid.
- › **Capacity:** 50 kW.
- › **Origin:** The group was founded in 2013, the design was completed in 2016 and the turbine was opened officially in March 2017.
- › **Funding:** Funds were raised via community shares with a minimum investment of £250. We have just over 200 shareholders, most of whom hail from the local area.
- › **Control:** The organisation is run by a team of local volunteers.
- › **Community interest:** The scheme has paid out a consistent 3% - 5% to investors since 2017. Dyffryn Peris charity was founded in 2019, and it currently distributes additional revenue (around £10,000 per annum) to environmental and local community projects.
- › **Collaboration:** The organisation has worked closely with the Llanberis Mountain Rescue Team, providing an electronic network for their digital radio system. It also contributes to the Dyffryn Peris Partnership Project Officer position, and is always looking for opportunities to collaborate with other community organisations in the Valley.
- › **Challenges:** We have recently experienced some acts of vandalism which have resulted in damage to the turbine hut and some hardware, although not the hydro system itself. The repair costs have meant that money has had to be redirected from other projects benefiting the community.
- › **Future projects:** The organisation has been looking for other projects in the Valley, but development challenges have made this difficult. Even though we've been trying to create a portfolio of electricity generation projects from scratch, we still only have one hydro system operational at the moment. The main challenge to a number of projects being able to develop further is the loss of FiT, which have meant the funding of renewable energy systems – and especially hydro – has been a difficult hurdle. Potentially this isn't so much the case for solar or wind, but they aren't the main resource in Eryri. We are still on the lookout for new projects to participate in.
- › **Effect:** The scheme has already created both economic and community benefits for the whole area by keeping profit local and supporting projects working in the environmental and sustainability sector. Ynni Padarn Peris is a fantastic example of the success of just what community energy in Wales is capable of.



Case Study

Bretton Hall Solar Farm

Bretton Hall Solar Farm is a pioneering community-owned project on 50 ha of land at Bretton Hall Farm, straddling the Flintshire and Cheshire border. The land will remain in agricultural use, continuing to support sheep grazing once the solar farm is operational.

The cross-border project represents an ambitious and inspiring vision: to create one of the largest community-owned renewable energy sites in the UK, placing ownership and benefit firmly in the hands of the people it serves. Managing two sets of planning regulations (Welsh and English) concurrently added some complication to the design, but both planning applications have now been approved.

Phase 1 of the vision is a 1.5 MWp solar installation, scheduled for construction in 2026. This interim project is a vital step, making best use of the grid capacity currently available, securing Welsh planning consent and clearing development debt so the project can move forward with a strong foundation. Once operational, Phase 1 is expected to generate approximately 1,388 MWh of clean electricity each year – enough to power around 350 typical households – and to displace more than 230 tonnes of carbon dioxide annually. It will also demonstrate the power of collective action and provide a platform for Phase 2, the much larger build-out to come.

From financial close of the initial share offer toward the end of 2025, the solar farm will be wholly owned by YnNi Newydd Cyf, a Community Benefit Society established to develop, own and manage renewable energy projects for community benefit. It has received the full support of Ynni Cymunedol Cymru – Community Energy Wales, worked closely alongside the Welsh Government Energy Service (WGES) for several years and has taken extra care to engage the local community at all stages of development, organising drop-in events and public consultations from the very first stages of planning and design.

Bretton Hall Solar Farm intends to stand as an exemplar of post-subsidy community energy, showing that ambitious, large-scale, community-led renewable power is still possible when people work together.



Bretton Hall Solar Farm
Fferm Solar Neuadd Bretton

After listening to our members and co-creating a set of solutions to overcoming the barriers to the community energy sector's rapid growth, **Community Energy Wales** has produced a detailed manifesto.

This will help members to engage with politicians, parties and candidates – as well as their wider communities – in the run-up to the Senedd elections in May 2026.

A Vision for Energy Communities

A Vision for Energy Communities – an Alternative Way

Government targets and measures to reach net zero are creating tensions within our communities.

Change, increasing bills and the lack of agency that many people feel because of the gap between them and the profits made from energy infrastructure is driving opposition to renewable energy development.

Community energy offers an alternative way. If the transition to a green energy system is to withstand resistance, people and communities must be able to meaningfully benefit from the opportunities.

With

- more community ownership of energy assets,
- more local decision making,
- more public procurement of community energy,
- local trading,
- improved skills,
- inclusion of those on low or no incomes,
- shared ownership in large energy developments,
- the circulation of profits locally and
- a way for communities to reinvest in additional generation,

we can change the narrative.



The foundations for our vision for energy communities can be laid by the next Welsh Government by taking the following measures:

1. Introduce a **Community Energy Act**. This will include the creation of:
 - a. a Community Wealth Fund
 - b. a Natural Resources Levy and
 - c. meaningful shared ownership
2. Act on **devolution**:
 - a. Implement the Comisiwn recommendation²² on energy and ensure that the powers needed to build energy communities are devolved.
 - a. Devolve the Crown Estate. Funds raised from this, the Natural Resources Levy and private or community investors will contribute to an independent **Community Wealth Fund**, to fund new community wealth-building ventures.
3. Funding and finance – while the Community Wealth Fund is being established, make shared ownership loan and **grant finance** available to support capacity building.
4. Work with the UK Government on its review of **the wind industry's community benefits packages**. The funds contributed should be mandatory, cover all technologies and the amount raised doubled (and for any non-renewable development quadrupled), with a 'natural resources levy' top-sliced to contribute to the Community Wealth Fund.

5. **Set up a working group** to investigate ways to include everyone who wants to be involved in the ownership of community shares, using the Community Wealth Fund to subsidise shared ownership. Use the Community Energy Act to implement its findings.
6. Measures to favour **public service procurement** contracts for community-owned businesses.
7. **A public duty** to support the circular / foundational / cooperative economy.
8. Legislate for **Community Right to Buy**.
9. Legislate for **Community Land Reform**.
10. **Address the skills gap** by creating 5,000 professional apprenticeships.
11. Work with UK Government to establish a Right **to Access Local Energy Markets**.

**THE CHANGE TO A GREEN ENERGY SYSTEM IS AN
OPPORTUNITY TO DO RIGHT BY OUR COMMUNITIES.
WE CANNOT AFFORD TO MISS IT.**

²² Independent Commission Report on the Constitutional Future of Wales



Get involved in community energy

If you are an individual that wants to support community energy, [join the RhanNi network](#).

RhanNi (Our Part) is a growing movement for people who want to support Community Energy in Wales.

- › Do you want to help improve your community?
- › Do you care about our planet & our environment?
- › Do you want to see Welsh communities keep the benefits from green energy?

What is RhanNi?

We want a green energy system that is community-led, is fair and puts people at its heart. By joining RhanNi, you will be a part of a collective voice pushing for the change we need to see. RhanNi offers the tools and knowledge to help you inform and influence decision makers across Wales and Westminster when it comes to energy. You will be kept informed of the actions you can take to support the growth of community owned, not-for profit community energy, including share offers, volunteer opportunities and more.

We are building a strong movement of people working to help our communities realise their full potential, while tackling the climate emergency.

Membership of RhanNi provides access to Fforwm Datblygu – our quarterly development forum webinars that bring together community energy organisations with people who are keen to learn how to start a project.

If you are interested in finding out more about community energy or want to explore the opportunities for starting a community energy project in your community, please do get in touch with us through the RhanNi network by signing up.



The Energy Learning Network
Rhwydwaith Addysg Ynni

Energy Learning Network

If you want to develop your understanding of community energy sector, come along to our Energy Learning Network webinars. These webinars will explore a number of themes and topics relevant to those interested in setting up new projects or expanding existing ones. You'll have the opportunity to hear from and connect with expert grassroots groups in the sector. We will inform you of ELN webinars through your RhanNi subscription, via the mailing list.

Join Community Energy Wales as a member

Membership of **Community Energy Wales** is open to any form of organisation that supports our aims and objectives. If you are a community organisation, third-sector organisation, private developer or other, contact us to learn more about membership options. Through joining, you gain access to a network of over 40 community energy businesses that are at various stages of their journey in developing community energy projects. We have mutual membership with other organisations in the co-operative, social businesses and environmental field including Cwmpas, DTA, Climate Cymru and BCT.

About the research

This year's annual Community Energy State of the Sector (SotS) report has been funded by Welsh Government and sponsorship of SP Energy Networks. It analyses the activities carried out in Wales by community energy organisations throughout 2024 and is based on the qualitative and quantitative data captured via a specially designed portal through which **Ynni Cymunedol Cymru – Community Energy Wales**, Community Energy Scotland and Community Energy England work together to promote the sector and to demonstrate its scale and impact.

The sampling once again encompassed a wide range of organisations working in the Welsh community energy sector – from local, place-based schemes generating electricity, providing energy advice and retrofitting boilers and heating systems – to umbrella organisations which go above and beyond just generating electricity or heat, also providing outreach services, skills-sharing events and community-led action across Wales. This year we were also heartened to see contributions from a number of local cultural bodies and community centres either already running generation projects or starting their journey in the community energy sector.

A State of the Sector 2025 overview²³ for the UK has already been published. It contains headline figures in the following areas: [1] renewable energy generation and capacity, [2] finance and investment, [3] employees and volunteers working in the sector, [4] sectoral contribution to the local economy, [5] energy efficiency & fuel poverty measures and [6] project pipeline details. Data gathering, analysis and reporting were carried out by Community Energy England, Scotland and Wales together. We are grateful to the community energy organisations that took the time to complete the survey, and whose responses form the basis for this report. The dataset is supplemented by data gathered from other organisations via previous State of the Sector surveys and desk-based research. Our thanks go to Community Energy Scotland for their invaluable help and support in analysing the data on our behalf.

This report drills down into the figures in Wales within its specific context and policy landscape, providing an overview of the current sector and looking to the future. This year's SotS is quantitative data-driven, but also include some qualitative data taken from the portal or captured by the team during the research period.

Community Energy Wales (CEW), as always, would like to thank all the participants who took time to share their views, opinions and invaluable data on the status of community energy in Wales.

²³ [UK State of the Sector 2025 report](#)



Ynni
Cymunedol Cymru
Community Energy
Wales



About Ynni Cymunedol Cymru Community Energy Wales

Ynni Cymunedol Cymru – Community Energy Wales is a membership organisation which supports the interests of community energy groups throughout Wales.

We connect, inspire and support our members – a network of grassroots practitioners delivering energy generation, energy efficiency, low-carbon community heating, community transport, and education and outreach projects – to lead a just transition towards a zero-carbon society.

- › **We support** communities, which should be at the forefront of the transition to a renewable energy system, to deliver their projects.
- › **We connect** community organisations to share learning and best practice.
- › **We inspire** through leading innovative projects in partnership with our members so that other communities can learn from us.

Community Energy Wales is the voice of the community energy sector in Wales. Our work includes influencing decision makers, promoting the work of our members and researching the sector to continue improving community energy.

As many community organisations are aware, the journey from an initial idea to the realisation of a project can be fraught with frustration and delay (see pages 21-22 on barriers).

Community Energy Wales supports groups to develop projects through:

- › Fforwm Datblygu / Development Forum – a quarterly online forum where established community energy groups can pool their experience and new groups can learn from sectoral wisdom.
- › Gathering evidence about where the stumbling blocks or barriers are that delay or prevent schemes from being able to go ahead – be this access to the right kind of funding at the right time, regulation, planning and licencing issues or grid connectivity.
- › Campaigning on behalf of the sector and influencing the formation of energy policy in Wales and the UK in support of delivering clear community energy targets.

Afterword – SP Energy Networks

Second Year as Sponsor of the Community Energy 'State of the Sector' Report

At SP Energy Networks, we are proud to support this year's Community Energy 'State of the Sector' report for the second year running, reflecting our ongoing commitment to the growth and success of community energy across North Wales and beyond.

Now in its second year, our **Community Energy Team** has gone from strength to strength. Set up to provide dedicated support to community groups, the team works across our network areas to help turn local energy ambitions into reality. Over the past 12 months, we've had the privilege of working with passionate people from all across the region who are driving forward innovative energy projects in their communities — and we're just getting started.

SP Energy Networks plays a crucial role in delivering electricity to 3.5 million customers across Central and Southern Scotland, North and Mid Wales, Merseyside, Cheshire, and North Shropshire. Behind the scenes, we manage over 110,000 km of cables and 30,000 substations, ensuring that power gets where it's needed safely and reliably. While we're not your energy supplier, we're the people to contact when it comes to new connections, upgrades or network issues.

We believe community energy is essential to creating a resilient, inclusive and low-carbon energy system. These projects not only reduce emissions, they give communities the tools and confidence to lead change from the ground up.

We're proud to work alongside **Community Energy Wales** and support the incredible momentum of local groups who are proving what's possible when communities are empowered.

Thank you to everyone helping to shape the future of energy through collaboration, innovation, and sheer determination. We look forward to what we can achieve together in the year ahead.

SP Energy Networks Community Energy Team





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