# Community Energy State of the Sector 2018 Executive State Of Security Energy Energy

**Executive Summary** 





Annual Review of Community Energy in England, Wales and Northern Ireland

























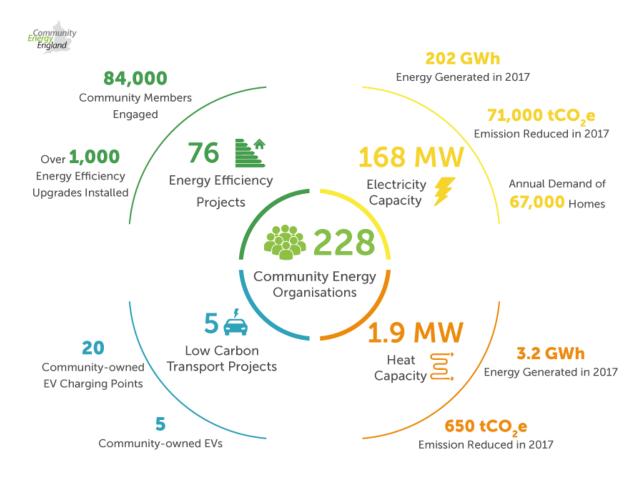


## **Executive Summary**

The State of the Sector Report 2018 is the second annual review of the community energy sector in England, Wales and Northern Ireland. This report has been conducted by Community Energy England (CEE), Community Energy Wales (CEW) and Scene Connect (Scene) with the support of the Esmée Fairbairn Foundation, Electricity North West, Northern Powergrid and Westmill Solar Cooperative.

### **Key Messages**

- ♦ 2017 has been a challenging year for community energy: Only one new community organisation was constituted in 2017, with 30 fewer successful projects and 31% less generation capacity installed or acquired in comparison to 2016
- ♦ The sector faces increasing risk: The impacts of subsidy and tax incentive retractions and reductions continue to be felt, with lower project margins impeding the progress of the community energy sector in 2017
- The community energy sector is resilient: Whilst conditions have been difficult, there have been a number of successes in large scale generation, increased innovation and greater collaboration throughout the sector.
- Innovation can provide solutions: New ideas are being investigated across the sector, including new business and ownership approaches, innovative financing and new technologies
- Clearer strategy is needed: Communities require clearer government and local authority strategies including early stage funding, financing support and subsidy review to enable community energy success and associated wider benefits.















### State of the Sector 2018

This report details the changes, progress and barriers to development within the community energy sector throughout 2017. Over two hundred community organisations participated in the State of the Sector 2018, providing details on their organisation, energy projects and community outcomes. Though not exhaustive, this report provides the most in-depth understanding of the community energy sector in England, Wales and Northern Ireland to date.

### The report found that:

- 228 organisations have active or in development community energy projects, supported by over 48,000 members and 166 full time staff
- Communities across England, Wales and Northern Ireland own 168 MW of electrical generation capacity and generated 202 GWh in 2017, enough to meet the annual demand of 67,000 homes
- Including Scotland, UK communities own a total of 249 MW of generation capacity as of the end of 2017<sup>1</sup>
- Communities own 1.9 MW of renewable heat generation capacity, generating 3.2 GWh<sup>th</sup> in 2017
- 76 community organisations offer energy efficiency improvements in their communities, engaging 84,000 community members and installing over 1000 upgrades in 2017
- 5 communities have installed 20 electric vehicle (EV) charging points and provide 5 EVs as a community service
- 5 energy storage projects were identified as being installed or progressing in 2017, showing the drive for, and necessity of, innovative approaches to community energy
- Over 71,650 tonnes of CO<sub>2</sub> emissions were avoided by community energy activities in 2017
- Over £1.1 million in community benefit funding has supported community education, environmental improvement, community asset purchase and supported local community development in 2017
- Nearly 30% of community energy organisations have a stalled or failed project due to a number of issues, in particular poor project margins due to reduced or removed subsidies and early stage support.

### **Community Energy in 2017**

The first State of the Sector Report, which reported on the community energy sector up to the end of 2016, identified a number of key barriers to community energy in the UK and predicted a slow down in sectoral grow onwards into 2017. These barriers, notably the reduction and removal of generation subsidies, tax incentives for renewable investments and early stage funding streams for community energy, have not been addressed in the last year.

As predicted, this second report has found a dramatic slow down in the formation of new community energy groups and initiatives, with only one newly constituted group identified in 2017. Communities reported difficulties throughout the project development process, as projects have become more difficult to initiate and traditional business models fail to 'stack up'. These poor project margins are reflected in the lower number of projects financed, where a 75% drop in investment in comparison to

<sup>&</sup>lt;sup>1</sup> Includes 81 MW in Scotland identified by the Energy Saving Trust (EST)













2016 was identified, alongside the lowest value of community shares raised in a decade for community energy activities.

Thirty fewer community energy generation projects were installed or acquired by communities in 2017, leading to a drop in new community generation capacity of 31% in comparison to 2016. Of this new capacity, 3 large projects dominated, accounting for 79% of all new generation capacity. These projects were conducted in partnership with commercial entities or collaborative community initiatives to purchase existing renewable generation sites installed prior to 2017:

- Drayton Manor Solar Farm: a 14.7 MW solar farm in Warwickshire purchased by Heart of England Community Energy (HECE) in partnership with Mongoose Energy
- Newton Downs Solar Farm: a 5 MW solar farm in Devon purchased by the Community Owned Renewable Energy Partners (CORE) initiative and transferred into the ownership of Yealm Community Energy in late 2017
- Mean Moor Wind Farm: a 6.9 MW wind development purchased by the Energy4All affiliated High Winds Cooperative alongside community energy partners Baywind Energy and Energy Prospects.

These large projects show that the gains seen in the community energy sector in 2017 are specific to a select few projects and that traditional, community-led and developed schemes have reduced greatly in number. Secondly, it shows that communities continue to search for, and are finding some success in, new approaches to local energy ownership.

Whilst there has been a wholesale decline in new organisations and projects, communities have shown resilience and motivation to overcome the barriers seen in 2017, including innovation in technologies, business models and project structures.



Figure 1 – Heart of England Community Energy's (HECE) 14.7 MW solar farm installed in 2017 with the support of Mongoose Energy.

### **Looking Ahead**

Innovation has been an increasing focus within the sector, with communities seeking new models, approaches and technologies to overcome the barriers to energy development. Innovation across technologies has been seen, with 5 new battery projects seeking to test and prove battery storage feasibility at the community level. Further to this, innovation in ownership models and partnership approaches, as well as financing (e.g. short-term bonds) and business models (e.g. peer-to-peer energy trading, behind-the-meter renewables) are increasing trends in 2017. Whilst exemplifying the resilience and determination of communities in the low carbon sector, these innovations are inherently higher risk and require greater time, effort and support to succeed in comparison to traditional models of energy development.

2018 is likely to see a continuation of the trends discussed above without improved government strategy and support for the sector. A similarly low number of new organisations and projects is predicted, due to continued low project margins and a lack of start-up funding for communities that often lack their own internal funds to initiate projects. With several new community funds available at the local authority level (e.g. Greater London Authority, Islington and Camden), it is hoped that more localised funding will go some way to addressing these issues.















Figure 2 - The Partneriaeth Ogwen in Bethesda are involved in a pioneering initiative – Cyd Ynni – aimed at linking hydro generation with local energy users.

Communities will continue to collaborate through 2018, maximising available resources, such as start-up funding from established community organisations, expertise knowledge sharing. Similarly, continued amalgamation of groups into wider bodies, networks and under umbrella bodies (e.g. Energy4all, Low Carbon Hub and Mongoose Energy) is expected. In line with these changes and the major successes seen in 2017, collaborative and partnership approaches to existing site purchase is likely to become the dominant model of community renewable energy development. This will include further developments by CORE, Energy4All and Mongoose Energy, amongst a number of similar organisations.

It is clear that the community energy sector has suffered in 2017 and dramatic changes are needed if the benefits of community energy are to continue to be felt in communities across the UK. Clearer government strategy and support are critical in overcoming the barriers seen in 2017, particularly in England and Northern Ireland where local energy targets and support mechanisms are needed to bring ambitions in line with those seen in Wales and Scotland. Beyond these national targets and programmes, localised funding and initiatives are needed to support new projects, improve financial margins and encourage ongoing innovation throughout the sector. Importantly, and despite the many challenges faced by community organisations during 2017, the motivation and enthusiasm to develop community-led energy projects remains.







# Join Us

create the conditions within which community energy can flourish.

CEE and CEW advocate for supportive policies at regional and national levels, work to increase the and collaboration with public and private sector organisations.

You can help CEE and CEW to succeed in their shared mission to support and accelerate the transition to a fair, low carbon and community-led energy system by joining them. Membership of CEE and / or CEW is inclusive and is open to any organisation that is committed to the development



www.communityenergyengland.org

www.communityenergywales.org.uk





Comm1nrg

CommEnergyWales





+44 (0)114 312 2248

+44 (0)292 019 0260





info@communityenergyengland.org

info@communityenergywales.org.uk



# Community Energy Hub

CEE manages the Community Energy Hub, a free to use, single point of access for information on community energy. It is designed at its core to be a platform where community energy groups can share information and resources amongst themselves and with other organisations, including potential funders or project partners.

hub.communityenergyengland.org