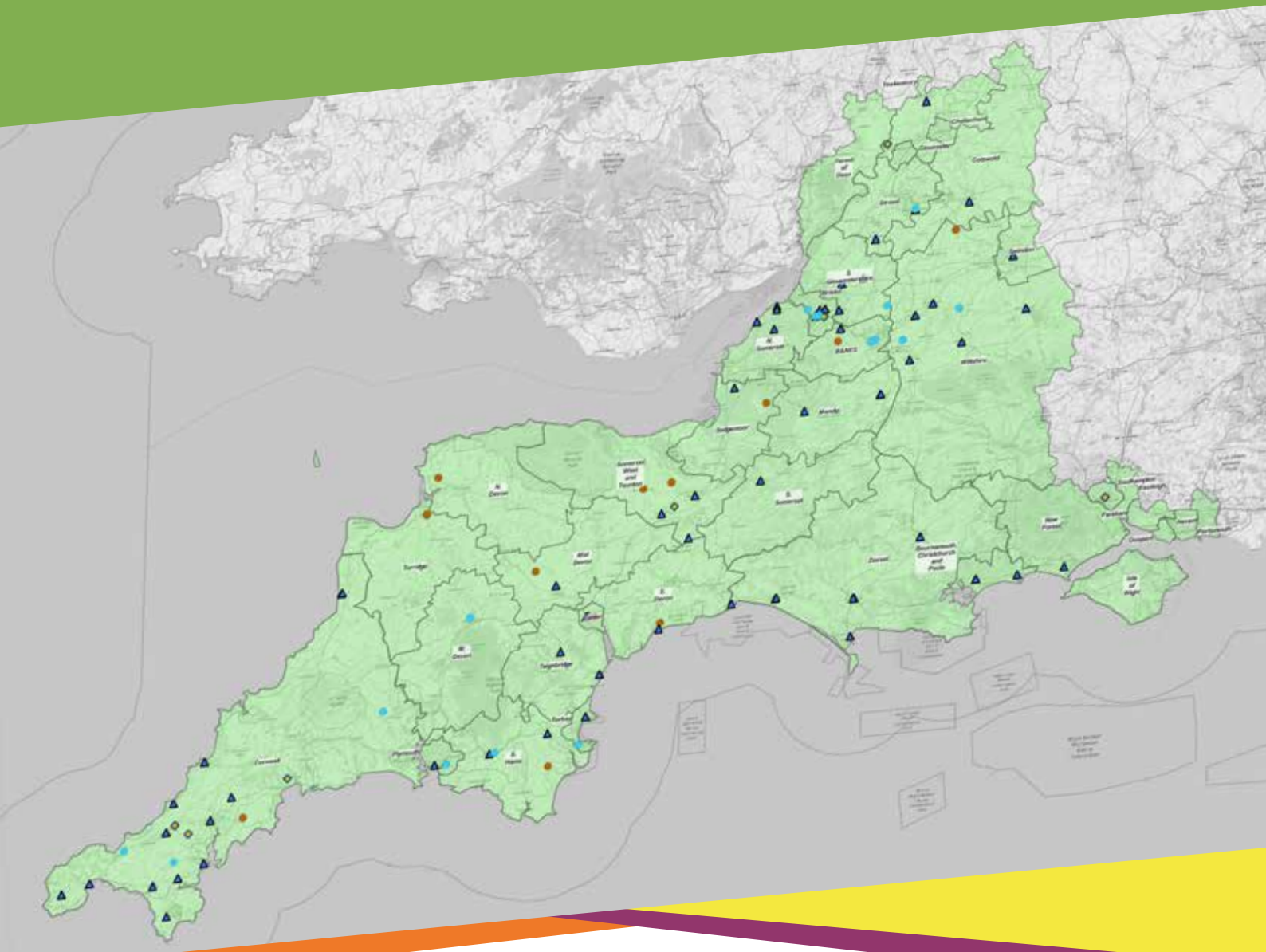


Community Energy in the South West Summary

February 2024



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Summary

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In consultation with the South West Net Zero Hub (SWNZH)

Executive Summary

The South West Net Zero Hub (SWNZH) appointed this consortium with Community Energy South as project lead supported by the Partner team comprised of the Directors of Communities for Renewables, Bath and West Community Energy and Plymouth Energy Community to carry out an assessment of the community energy sector in the south west. The work was to focus on identifying the needs of the community energy sector and defining the role of SWNZH in addressing these needs, and supporting the sector in the absence of grant funding. This was in the context of SWNZH holding no community energy funding at the time and the project scope was later adapted to reflect the creation of the Community Energy Fund.

The objectives of the work were as follows:

- To gain an in-depth understanding of the community energy sector in the south west, its makeup, level of expertise in the energy sector, current activity, and the strategic direction of key organisations in the community energy sector in the short to medium term.
- Building on the above, to understand the needs and wants of the community energy sector in the region, and practical means for SWNZH to help meet these needs, taking into account our own strengths and strategic priorities.
- To support collaboration between the community energy sector, local government and the private sector, and understand how the Hub can play a key role in enabling the delivery of local energy projects as partnerships between these sectors.
- To identify key stakeholders and support the creation of an ongoing forum that seeks to address the challenges faced by the community energy sector, and identify ways to support its continued growth in the region.

Our key finding is the desire to create healthy **local energy ecosystems** which are deemed essential in both supporting a thriving community energy sector and embedding it in wider net zero and just transition objectives.

Local energy ecosystems are made up of organisations that deliver public value out of the localisation of energy service delivery and management. Local authorities (LAs) are key actors in local energy ecosystems with regards to their shared desire to deliver public value through their remit over housing, transport, taxation and borrowing, and the estates they control, and their unique capability to orchestrate transformative change to deliver net zero at a local level.

Other key organisations are businesses who support the energy transition, many of which have a social purpose, such as the Centre for Sustainable Energy (CSE), Communities for Renewables (CfR), Community Energy Plus (CEP), Regen, and Severn and Wye Energy Agency (SWEA).

Given the interlinked nature of energy systems, especially the electricity supply system, national actors also play a role in facilitating and supporting **local energy ecosystems**, such as the Church of England (CoE), Community Energy England (CEE), National Grid Energy Distribution (NGED), Scottish and Southern Energy Networks (SSEN), UK Infrastructure Bank (UKIB), and Younity.

When their collaboration and interaction on local issues is lacking, or entirely absent, such ecosystems fail to materialise, and net zero is mainly delivered through national efforts to decarbonise, such as offshore wind decarbonising the electricity supply. When these actors collaborate [successfully](#), on the other hand, **local energy ecosystems** emerge, and net zero is also delivered locally with emphasis on a just transition which leaves nobody behind.

The sections below state how we addressed each of these objectives.

Objective i) Gain an in-depth understanding of the community energy sector in the south west, its makeup, level of expertise in the the community energy sector, current activity, and the strategic direction of key organisations in the community energy sector in the short to medium term

We categorised community energy organisations in the south west according to their capabilities using a 4 Tier grading system. Alongside this we created an inventory of both existing projects and the project pipeline which revealed that 8 of the 70 organisations analysed fall under Tier 3 and 4. These organisations have stand-alone business models: significant >10MW generation portfolios; the capacity to diversify into emergent growth areas such as energy advice, energy, efficiency, retrofitting, and flexibility provision; and potential to support the growth of the community energy sector more widely. The remainder, 62 of the 70 organisations, fall under Tier 1 and 2. These are characterised by highly variable degrees of capability, support, appetite, and geographical fortitude to expand or scale.

Objective ii) Understand the needs and wants of the community energy sector in the region

We assessed the needs and wants of the CE sector through several workshops and regular engagement with the Directors of Tier 4 CE organisations Bath and West Community Energy and Plymouth Energy Community, as well as the Director of Communities for Renewables who have worked with local energy enterprises in over 30 localities. We interviewed representatives of key energy sector businesses in the south west. Those businesses are:

- Centre for Sustainable Energy (CSE)
- Church of England (CoE)
- Community Energy England (CEE)
- Community Energy Plus (CEP)
- National Grid Energy Distribution (NGED)
- Regen
- Scottish and Southern Energy Networks (SSEN)
- Severn and Wye Energy Agency (SWEA)
- UK Infrastructure Bank (UKIB)
- Younity

We also interviewed energy and climate action representatives of several local authorities (unitary authorities Bath and North East Somerset (BANES), Plymouth City Council, and Wiltshire Council (WC), Two Tier authority Gloucestershire County Council and Forest of Dean District Council, and the West of England Combined Authority).

These are among the key organisations which constitute the **local energy ecosystem** in the area covered by SWNZH. Such ecosystems help deliver public benefit out of the localisation of energy service delivery and management. The combined insights of the south west **local energy ecosystem** constituents we interviewed about the needs and wants of the sector and the capabilities of supporting organisations helps establish the role of community energy in the emergence of smart local energy systems (SLES), and the value the sector can deliver as part of a thriving **local energy ecosystem**. The Local and Community Energy Strawman in section 3 developed by the Partner team outlines approaches to embed community energy organisations in a healthy **local energy ecosystem** which comprises a spectrum of actors and requires that a number of enabling conditions are in place to help CE organisations fulfil their role.

Objective iii) Practical means for the Hub to help meet these needs, taking into account the Hub’s own strengths and strategic priorities and Objective iv) To identify key stakeholders and support the creation of an ongoing forum that seeks to address the challenges faced by the community energy sector and identify ways to support its continued growth in the region: Our research found that Tier 3 and 4 groups succeed through their embeddedness in thriving **local energy ecosystems**. A key feature of **local energy ecosystems** is strong links between local authorities, the CE sector, and other organisations engaging in energy generation, supply, and advice at a local level. Emergent Tier 1 and 2 organisations, on the other hand, tend to benefit initially from strong links with local authorities to gain legitimacy. Supporting these different groups therefore requires the SWNZH to operate different strategies as outlined in our **Recommendations** section.

Recommendations

Recommendations for government

The main limitation of the community energy sector in the south west and the UK more widely is the lack of policy supporting the development of local energy systems and their integration into UK-wide net zero delivery. The establishment of Regional System Planners is a step in the right direction but local authorities in particular require stronger mandates and consistent funding to support local energy ecosystems. Net Zero Hubs are also a step in the right direction but it is unclear what role the Hubs and local authorities (and their LAEPs) play vis-à-vis Regional System Planners. Meanwhile competitive, short-notice, and short-term fundings represents a barrier to the long-term support the sector and region needs to develop its full potential. A further obstacle to the development of local energy ecosystems and their constituent community energy organisations is the invisibility of distributed power generation, storage, flexibility, and demand reduction in energy system planning and policymaking. To overcome these issues and support the CE sector as a core constituent of thriving local energy ecosystems, to work alongside regional delivery, we need:

- **Regulatory reform** to enable the sale, distribution, management of power locally
- **A vision or plan for net zero delivery** through energy system integration across all levels and the provision of a unified and cost-effective energy system modelling tool for net zero delivery
- **Greater policy emphasis on, and resourcing of, local energy systems** and a just transition to net zero.

Recommendations for SWNZH

These recommendations are derived from the evidence review above and the workshops we held with project partners with regards to **Objectives i-iv**.

Our central finding is that healthy local energy ecosystems are the crucial element of a thriving community energy sector.

The SWNZH's long-established role includes securing and distributing grant funding (e.g. Community Energy Fund), the direct provision of technical advice and a planning role both for LAEPs and for the grid. None of these are recommended to change in the context of community energy.

Our core recommendation is, however, that in order to support the community energy sector more effectively, the SWNZH's role should evolve beyond these core capabilities into a new role supporting the development of a healthy ecosystem.

The SWNZH's 'new' role should be to:

- Convene / facilitate / enable action to address gaps in the ecosystem, recognising that community enterprises of all types and sizes may need support.

- Understand and showcase what a healthy local energy ecosystem looks like, and support localities across the south west to develop and maintain them.
- Tackle barriers e.g. grid constraints where the SWNZH has a role in coordinating regional energy planning and constraints at a local level, finance, knowledge and capacity.
- Undertake special projects that will significantly accelerate the development of the sector e.g. expanding the work of the group that is examining virtual metering at a community level.
- Commission and share replicable advice e.g. legal advice on procurement, PPA models. and share best practice.
- Co-ordinate and administer local energy business support and finance.
- Targeted grants / loans / advice / capacity building to support growth of Community Energy organisations to fill identified gaps in the local energy ecosystem.
- Continue to offer best in class technical advice on renewables technologies such as solar.

How the different Tiers of Community Energy organisations should be supported by the SWNZH

A key feature of local energy ecosystems is strong links between local authorities, the CE sector, and other organisations engaging in energy generation, supply and advice at a local level. Emergent Tier 1 and 2 organisations, on the other hand, do not tend to require such embeddedness to start with.

Therefore, supporting these different tiers of community energy organisations requires the Hub to operate different strategies acting variously as a community energy Originator, Accelerator and Innovator.

The SWNZH acts as a **community energy originator**:

- The SWNZH helps to establish new organisations in local authorities where they are absent and to support dormant or stagnating organisations reach their potential by bringing in and facilitating the expertise and experience of Tiers 3 and 4 organisations. Examples would include the writing of Community Energy Fund (CEF) bids, negotiating Power Purchase Agreements (PPAs), mentoring/training to share best practice, or setting up community share offers.
- The SWNZH facilitates the sharing of the established supply and delivery chains and resources of Tier 3 and 4 organisations in areas such as legal advice documentation and cooperation agreements with local authorities.
- The SWNZH looks to create economies of scale through encouraging group purchasing arrangements and the aggregation of demand and supply at a regional level, and to support the showcasing of success stories.

The SWNZH acts as a **community energy accelerator**. The SWNZH enables the organisations in Tiers 1 and 2 to progress into viable, professional, scalable organisations in Tiers 3 and 4 requires SWNZH-facilitated collaboration fora among organisations which constitute local energy ecosystems to exchange knowledge, develop trust, share skills, and build capacity.

- **A regional forum** involving an advisory group of stakeholders convened by the SWNZH whose role is to develop the **local energy ecosystem** model further and to advise on what support is needed, in which areas and how to activate it. Chaired by a stakeholder (potentially revolving), it should meet quarterly either in person or online, with the SWNZH acting as secretariat.
- **A best practice forum** involving existing local fora initially convened by the SWNZH with the aim of sharing best practice and exchanging knowledge. This group would be self-run, meeting quarterly online, with one representative from each of the existing local fora attending, one of the forum members acting as chair and setting the agenda, and the SWNZH attending as an observer.
- **Annual networking event** for the entire community energy sector in the south west with emphasis very much on networking time and workshopping rather than presentations. Convened by the SWNZH as a hybrid in person/online event.
- **Governance** support by placing a community energy sector representative on the SWNZH Board so that the sector has a voice in defining priorities and programmes where they affect the community energy sector.

The SWNZH acts as a **community energy innovator** by enabling the community energy sectors, and Tiers 3 and 4 organisations in particular, to push the boundaries of socio-technical innovation which requires their embedding within local energy ecosystems as well as national innovation systems.

- **Scout** the sector for promising innovations which lend themselves to replication or upscaling in the context of Smart Local Energy Systems, such as business models which use more energy locally like Local Energy or Customer Relationship Management systems which are compatible with multiple funders, which could be done in the context of aggregation or the fora mentioned above.
- **Support grant writing** for seed corn funding such as Innovate UK.
- **Matchmake** with other community energy and likeminded organisations that have the potential to create routes to market such as the collaboration between Ferry Farm Community Solar and Meadow Blue Community Energy to support the Sussex Wildlife Trust Kelp Restoration Project. This could be linked to both the regional forum and the best practice forum
- **Project management support** for collaborative ventures with likeminded organisations that have the potential to create routes to market, potentially through in-kind and voluntary contributions when partnering with much larger organisations such as Network Rail.

Cross winds which can act as limitations to a healthy ecosystem

Policy support

However, no matter how much we foster local energy ecosystems through knowledge exchange, capacity building, and skill sharing, the main limitation of the community energy sector in the south west and the UK more widely is the lack of policy supporting the development of local energy systems and their integration into UK-wide net zero delivery. While community energy does not carry material weight in Local Plans, it can prescribe where renewable energy technologies can be deployed. Some local authorities also link Local Area Energy Plans (LAEPs) to Local Plans to create overlap and economies of scale which allows local authorities to think strategically about their role as a partner in delivering net zero in their area. In principle, LAEPs have the potential to support the integration of local net zero planning into UK-wide delivery but there is a lack of consistency in their development. This puts into question their role vis-à-vis forthcoming Regional Energy Strategic Planners as the latter will be centrally funded.

Procurement practice

The increasing emphasis on social value and net zero in public procurement can support local supply chain contribution and job and skill development within the local energy ecosystem. Although such criteria are difficult to evidence, they are accepted as a strong factor to help achieve multiple benefits, and established community energy organisations who are recognised as delivery partners can benefit from such procurement priorities if they can evidence social value creation and net zero delivery in their undertakings. When community energy organisations partner with local authorities in the delivery of renewable energy projects, they have the potential to deliver with much greater speed and traction than the local authority due to public procurement regulations and processes limiting the scope for local authority action, especially where tight deadlines are involved.

Local Area Energy Planning

Local Area Energy Plans (LAEPs) and a greater emphasis on social value and net zero in procurement are steps in the right direction but local authorities in particular require stronger mandates and consistent funding to support local energy ecosystems. Net Zero Hubs are also a step in the right direction but it is unclear what role the Hubs and local authorities (and their LAEPs) play vis-à-vis Regional Energy Strategic Planners.

Meanwhile, competitive, short notice, and short term fundings represent a barrier to the long term support the sector needs to develop its full potential. A further obstacle to the development of local energy ecosystems and their constituent community energy organisations is the invisibility of distributed power generation, storage, flexibility, and demand reduction in energy system planning and policymaking. To overcome these issues and support the community energy sector as a core constituent of thriving local energy ecosystems, regulatory reform is necessary alongside a holistic vision or plan for net zero delivery through energy system integration across multiple scales. This needs to be accompanied by greater policy emphasis on, and resourcing of, local energy systems and a just transition to net zero.

Local & Community Energy – Strawman

In assessing the current state of community energy across the South West, the Partner team feel it is helpful to explore what our shared ambition for the sector should be, and through that bring better definition around the breadth of the role the community energy organisations will play in the roll out of smart local energy systems.

A healthy ecosystem – a vision

Community energy is positioned to play a key role in achieving net zero. To fulfil their role, community energy enterprises need to be embedded in a healthy local energy ecosystem which comprises a spectrum of actors and requires that a number of enabling conditions are in place.

The role of community energy organisations in smart local energy systems

The net zero transition provides an unprecedented opportunity to put local communities and stakeholders at the heart of restructuring our energy economy; to ensure that the energy transition works actively to reduce poverty and inequality; to reduce and stabilise energy bills; and to localise energy spend and to improve health.

Community led local energy solutions are focusing on energy savings and societal benefit through not for profit / social enterprise models that favour local ownership, local governance and democratic control of energy assets and energy services. We see these community energy approaches as highly complementary to the roll out of Smart Local Energy Systems but being distinct from the status quo because they:

- embed the concepts of local social and economic benefit into the foundations of projects and investments needed for net zero.
- provide a channel for local action and empower local communities to lead their net zero transition.
- increase local accountability and control and so build trust, consent and active participation in the energy transition; enable greater capacity to match local demand with local power generation in ways that centralised models cannot achieve.
- can unlock generation and retrofit projects that the private sector won't touch; local energy approaches can access different finance models, operate at lower margins, and leverage the power of local partnerships.
- are not just generating power but also seeking to reduce demand and improve energy efficiency and other measures that will support a healthy system.
- can provide for an efficient use of capital, recycling surpluses from profitable investments into harder to do less profitable projects.

To grasp these opportunities will require new thinking about the breadth of the role for community energy organisations and the enabling conditions needed to help them prosper. It will also require taking a holistic long-term view on the system changes required and working collaboratively with multiple local actors in new and innovative ways to put these enabling frameworks in place.

Every area in the South West will need a professionalised community energy organisation(s) at a similar level of maturity to Plymouth Energy Community, Bath and West Community Energy and /or Burnham and Weston Energy if our ambitions around scaling net zero action are to be realised. But this will need their potential to be better recognised as part of a **healthy local ecosystem** of organisations working to create a local net zero energy economy.

The South West Net Zero Hub (SWNZH) and the local authorities' leadership and support will be key to nurturing that healthy **local ecosystem and this paper seeks to explore those roles alongside other important local actors.**

A healthy ecosystem – key actors and their roles

Here we identify the spectrum of **key actors** who are needed to create a supportive, healthy ecosystem for local energy, and we set out the principal ways in which these actors can and should contribute.

Key actors include:

Local authorities

- Procurement role – recognise local social and economic benefit of community energy in procurement policies and processes e.g. PPAs, energy advice services, retrofit support. Work with the public and private sector (e.g. Federation of Small Business/SME's) to promote the procurement of community energy.
- Asset providers – work with local community energy enterprises to develop renewable energy generation projects on Council properties, including as joint ventures, where they are not able to develop them themselves.
- Policymakers – develop supportive local policy.
- Convenors – lead public engagement on the local net zero transition.
- Economic developers – encourage and foster the supply chain in their areas, e.g. a short-term need is for more solar installers.

County, District, Town and Parish Councillors

Local politicians who know their areas and the lives of their constituents so well, and can

- Act in a powerful convening role at a local level.
- Promote collaboration with officers at their local authority.
- Encourage joint ventures and other collaborations with community energy organisations.
- Promote the inclusion of community energy in local plans and neighbourhood planning.

Community energy organisations

*Professionally managed not for profit local energy enterprises with multi layered business model supporting the following activities:

- Developing, financing and owning renewable energy assets to supply energy to local consumers and generate surplus income to re-invest in their mission.
- Helping local households struggling to pay their bills to access advice, welfare support and energy efficiency grants.
- Retrofit role providing expert handholding and advice.
- Ensuring local community interests are represented.
- Ensuring communities can take advantage of new technological, policy and market developments as they arise.
- Boosting the local economy by providing a marketplace for local skills, products and services.

**This is not to diminish the value of any community energy project but simply a recognition that without professionally managed enterprises, the sector will simply not be capable of achieving critical mass.*

Existing community energy networks

Networks of community energy organisations exist across the South West. They should ensure that they are linked together to share best practice and learnings.

Supply chains

Local Retrofit Installer and Suppliers – ensuring consumers and local residents have access to and knowledge of the supply chain both for energy efficiency measures and community renewables.

Informed and engaged public

Once members of the public understand the environmental and economic benefits of local energy, they can become powerful advocates.

The public can support the sector through:

- Other local not for profit/social enterprise organisations with capacity to support energy transition – networks of non-energy specialist support acting as a bridge to wider community and stakeholders.
- Identification, training and mentoring of local energy champions.
- Participating in engagement programmes and responding to information campaigns that allow local people to make informed choices.

Distribution Network Operators

The DNOs play a vital strategic role at the grid edge enabling connections for community energy enterprises, and should:

- Consider prioritising connections for community renewables and making the quote process even more accessible.
- Look to providing funding for community energy organisations to tackle retrofitting and energy efficiency measures.
- Collaborate fully with and participate in LAEP and local area planning.
- Consider how the transition to DSO can support the future roll out of community energy.

Energy advice organisations and capacity builders

Organisations such as Severn Wye, Community Energy Plus, Citizens Advice, Centre for Sustainable Energy and Regen already play a role in providing advice on energy efficiency, coordinating networks and developing practical programmes to combat the climate emergency. They should partner with community energy organisations by providing advice and practical support across the South West.

Capacity builders

Organisations such as Share Communities for Renewables, E4All and Energy Local help to build capacity into the ecosystem.

Local asset holders

Large scale organisations (e.g. CofE, NHS, Network Rail, RSLs) can provide assets for community energy organisations, and should consider:

- Procuring a % of their energy from community energy sources
- Making a % of assets available to community energy organisations
- In the case of RSLs, linking social housing tenants with energy advice providers

Commercial renewables developers

Large scale solar developers should consider creating coalitions with communities, especially around those schemes with challenging planning issues.

Regional Area Energy Planners

This new function – as recently announced by Ofgem – will play an important role in improving local energy planning, working with local and regional organisations to increase understanding of the infrastructure needed in different parts of the country to reach net zero and attract investment for projects.

Regional Net Zero Hub

The South West Net Zero Hub itself is a core actor and should play a vital role in drawing the other actors together to create a healthy ecosystem. This evolved role is set out in our **Recommendations** section.

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