Produced by

Community Energy: State of the Sector

2024

Introduction

The Community Energy State of the Sector research has provided insight into the UK community energy sector since 2017. This infographic tells the story of what community energy is, what the sector does and the impacts and benefits it delivers. Keep scrolling and you will learn about the sector's progress, potential and challenges, and discover ways of supporting the sector to develop and grow.

State of the Sector is a collaboration between Community Energy England, Community Energy Scotland and Community Energy Wales, and is sponsored by SP Energy Networks. We are grateful to all community energy organisations who provided data for the 2024 research.

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What is community energy?

AGM
VOTING
TODAY

A

ENERGY INDEPENDENCE

Community energy promotes local energy independence, reducing reliance on imports from outside the UK by producing and managing energy within local communities.

B

DEMOCRATIC DECISION MAKING

Community energy organisations take concrete action to transform the energy system based on democratic decisions, participatory governance and co-operative principles.

C

PRIORITISING COMMUNITY BENEFIT OVER PROFIT

Community energy organisations are motivated by more than profit; they are social enterprises that return profits to communities and ensure local people benefit from the energy transition.

128 community energy organisations have a **community benefit fund**

D

COMMUNITY ORIGIN

Community energy organisations use asset locks and democratic or co-operative governance structures to empower people to deliver, own and benefit from energy infrastructure and services in their local area.

69% of community energy organisations are co-ops, community benefit societies, community interest companies or companies limited by guarantee

£4.6 million raised in community share offers

E

COMMUNITY RESILIENCE

Increasing community asset ownership, offering local control over new services, and engaging whole communities in the energy system increases community resilience and supports preservation of cultural identity and heritage, e.g. Welsh language.

13 non-English languages are used by community energy organisations in their work with communities

F

FOR ORDINARY PEOPLE

Local people working on locally-driven and decentralised solutions, building hubs of expertise and creating a people-centred energy system.

796 employees (full-time equivalent)

3,719 volunteers

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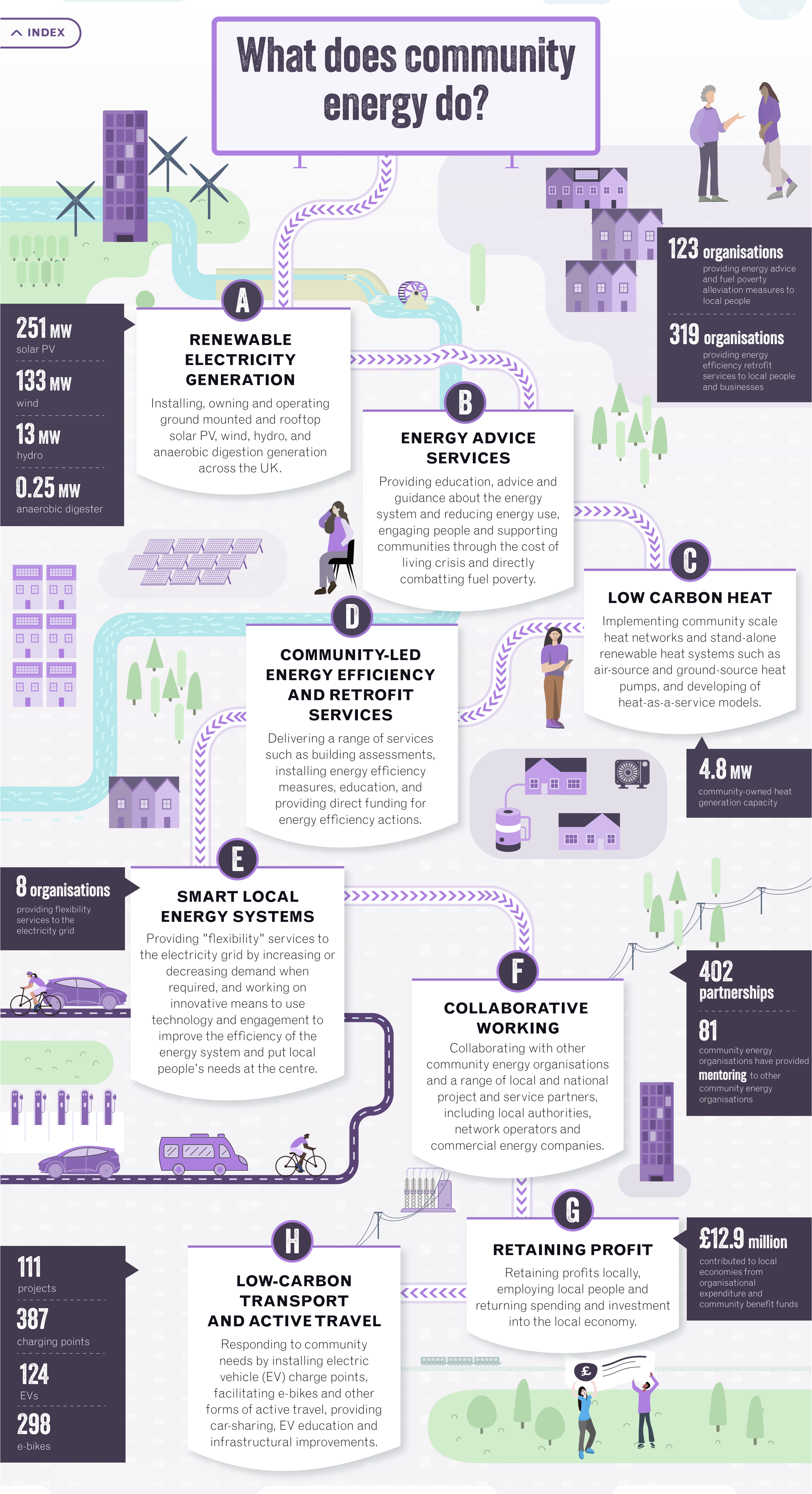
What does community energy do?



A

RENEWABLE ELECTRICITY GENERATION

Installing, owning and operating ground mounted and rooftop solar PV, wind, hydro, and anaerobic digestion generation across the UK.

251 MW solar PV

133 MW wind

13 MW hydro

0.25 MW anaerobic digester

123 organisations providing energy advice and fuel poverty alleviation measures to local people

319 organisations providing energy efficiency retrofit services to local people and businesses

B

ENERGY ADVICE SERVICES

Providing education, advice and guidance about the energy system and reducing energy use, engaging people and supporting communities through the cost of living crisis and directly combatting fuel poverty.

C

LOW CARBON HEAT

Implementing community scale heat networks and stand-alone renewable heat systems such as air-source and ground-source heat pumps, and developing of heat-as-a-service models.

4.8 MW community-owned heat generation capacity

D

COMMUNITY-LED ENERGY EFFICIENCY AND RETROFIT SERVICES

Delivering a range of services such as building assessments, installing energy efficiency measures, education, and providing direct funding for energy efficiency actions.

E

SMART LOCAL ENERGY SYSTEMS

Providing "flexibility" services to the electricity grid by increasing or decreasing demand when required, and working on innovative means to use technology and engagement to improve the efficiency of the energy system and put local people's needs at the centre.

8 organisations providing flexibility services to the electricity grid

F

COLLABORATIVE WORKING

Collaborating with other community energy organisations and a range of local and national project and service partners, including local authorities, network operators and commercial energy companies.

402 partnerships

81 community energy organisations have provided **mentoring** to other community energy organisations

G

RETAINING PROFIT

Retaining profits locally, employing local people and returning spending and investment into the local economy.

£12.9 million contributed to local economies from organisational expenditure and community benefit funds

H

LOW-CARBON TRANSPORT AND ACTIVE TRAVEL

Responding to community needs by installing electric vehicle (EV) charge points, facilitating e-bikes and other forms of active travel, providing car-sharing, EV education and infrastructural improvements.

111 projects

387 charging points

124 EVs

298 e-bikes

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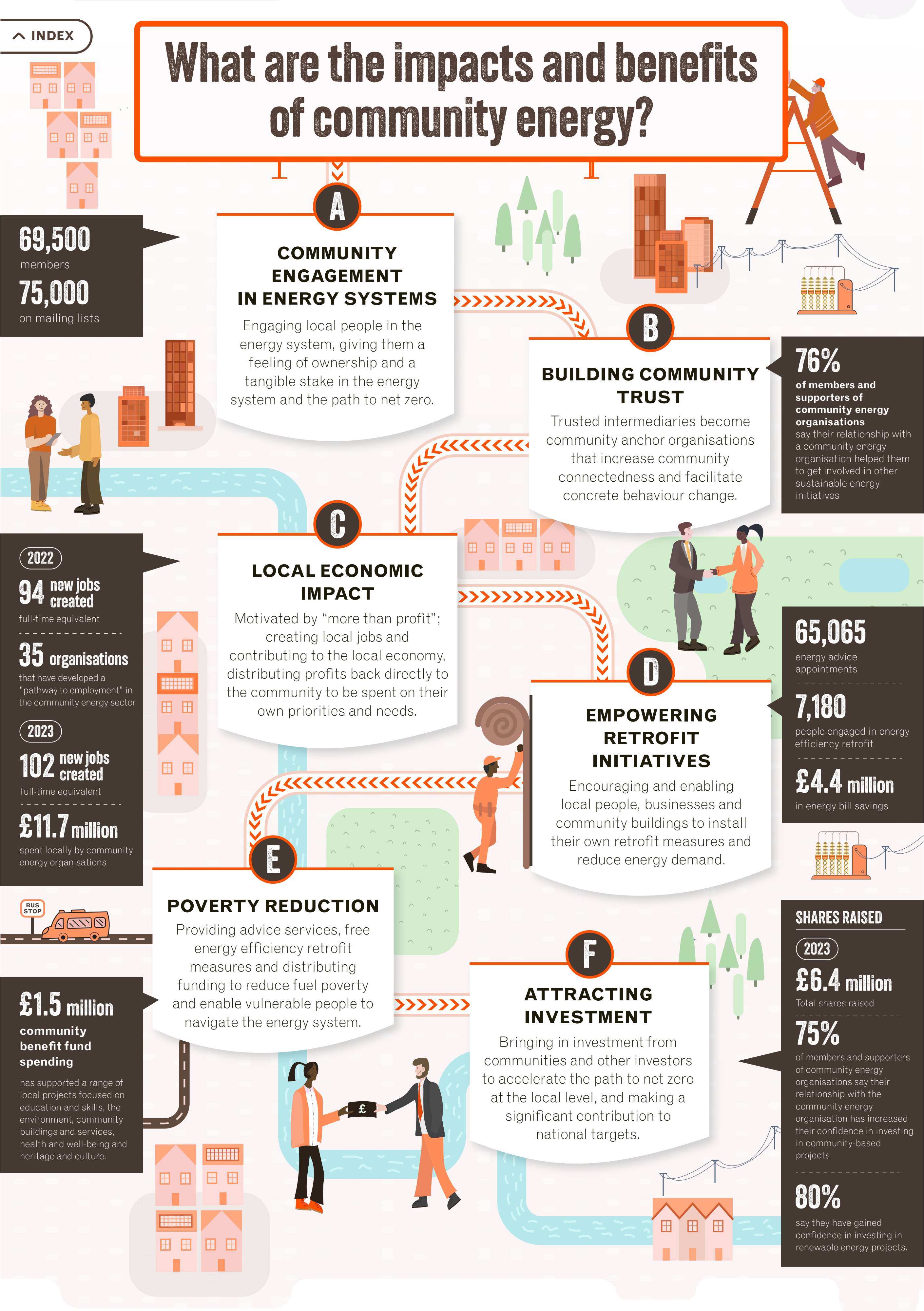
What are the impacts and benefits of community energy?



A

COMMUNITY ENGAGEMENT IN ENERGY SYSTEMS

Engaging local people in the energy system, giving them a feeling of ownership and a tangible stake in the energy transition and the path to net zero.

69,500 members

75,000 on mailing lists

B

BUILDING COMMUNITY TRUST

Trusted intermediaries become community anchor organisations that increase community connectedness and facilitate concrete behaviour change.

76% of members and supporters of community energy organisations say their relationship with a community energy organisation helped them to get involved in other sustainable energy initiatives

C

LOCAL ECONOMIC IMPACT

Motivated by "more than profit", creating local jobs and contributing to the local economy, distributing profits back directly to the community to be spent on their own priorities and needs.

2022

94 new jobs created
full-time equivalent

35 organisations
that have developed a "pathway to employment" in the community energy sector

2023

102 new jobs created
full-time equivalent

£11.7 million
spent locally by community energy organisations

D

EMPOWERING RETROFIT INITIATIVES

Encouraging and enabling local people, businesses and community buildings to install their own retrofit measures and reduce energy demand.

65,065 energy advice appointments

7,180 people engaged in energy efficiency retrofit

£4.4 million in energy bill savings

E

POVERTY REDUCTION

Providing advice services, free energy efficiency retrofit measures and distributing funding to reduce fuel poverty and enable vulnerable people to navigate the energy system.

£1.5 million community benefit fund spending

has supported a number of local projects focused on education and skills, the environment, community buildings and services, health and well-being and heritage and culture.

F

ATTRACTING INVESTMENT

Bringing in investment from communities and other investors to accelerate the path to net zero at the local level, and making a significant contribution to national targets.

SHARES RAISED

2023

£6.4 million Total shares raised

75% of members and supporters of community energy organisations say their relationship with the community energy organisation has increased their confidence in community-based projects

80% say they have gained confidence in investing in renewable energy projects.

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What is holding community energy back?

A

KEY FACTORS IN STALLED PROJECTS

Numerous barriers make it difficult for community energy organisations to develop and deliver projects and services that respond to local needs and contribute to national targets.

KEY FACTORS:

- Lack of development and feasibility funding
- Lack of capacity and skills
- High grid connection costs
- Lack of access to suitable sites
- Planning permission challenges

STALLED PROJECTS

79 stalled projects, mostly electricity generation

270 MW total capacity

B

ENERGY ADVICE OBSTACLES

Providing energy advice services is a key pillar of community energy organisations' local impact but a range of factors are holding them back from creating or expanding these services.

35 organisations reported energy efficiency activity held back by lack of capacity

16 reported difficulty in securing funding

C

FUNDING INSECURITY ISSUES

It can be difficult for community energy organisations to obtain sufficient feasibility and development funding to enable them to grow and deliver new projects. Lack of secure, ongoing revenue can also hold back community energy organisations from diversifying their range of projects and services.

D

KEY BARRIERS TO THE GROWTH OF ORGANISATIONS

Community energy organisations have strong entrepreneurial drive, but face a range of challenges to growing in size and activity, employing staff and ensuring governance remains strong.

Key barriers to community energy organisations' growth:

- Identifying/implementing a viable business model
- Challenges with grid connections
- Funding paid staff
- Retaining volunteers
- Challenging market conditions
- Lack of access to the government's Contracts for Difference scheme or lack of floor pricing

E

COMMUNITY ENERGY SUPPLY RESTRICTIONS

Supplying electricity from a generation site directly to local homes and businesses (local supply) is a fundamental enabler of a democratic energy system, but government regulations regarding energy trading lack clarity and definition, hindering local energy supply and the ways it could alleviate distribution network bottlenecks and facilitate balancing.

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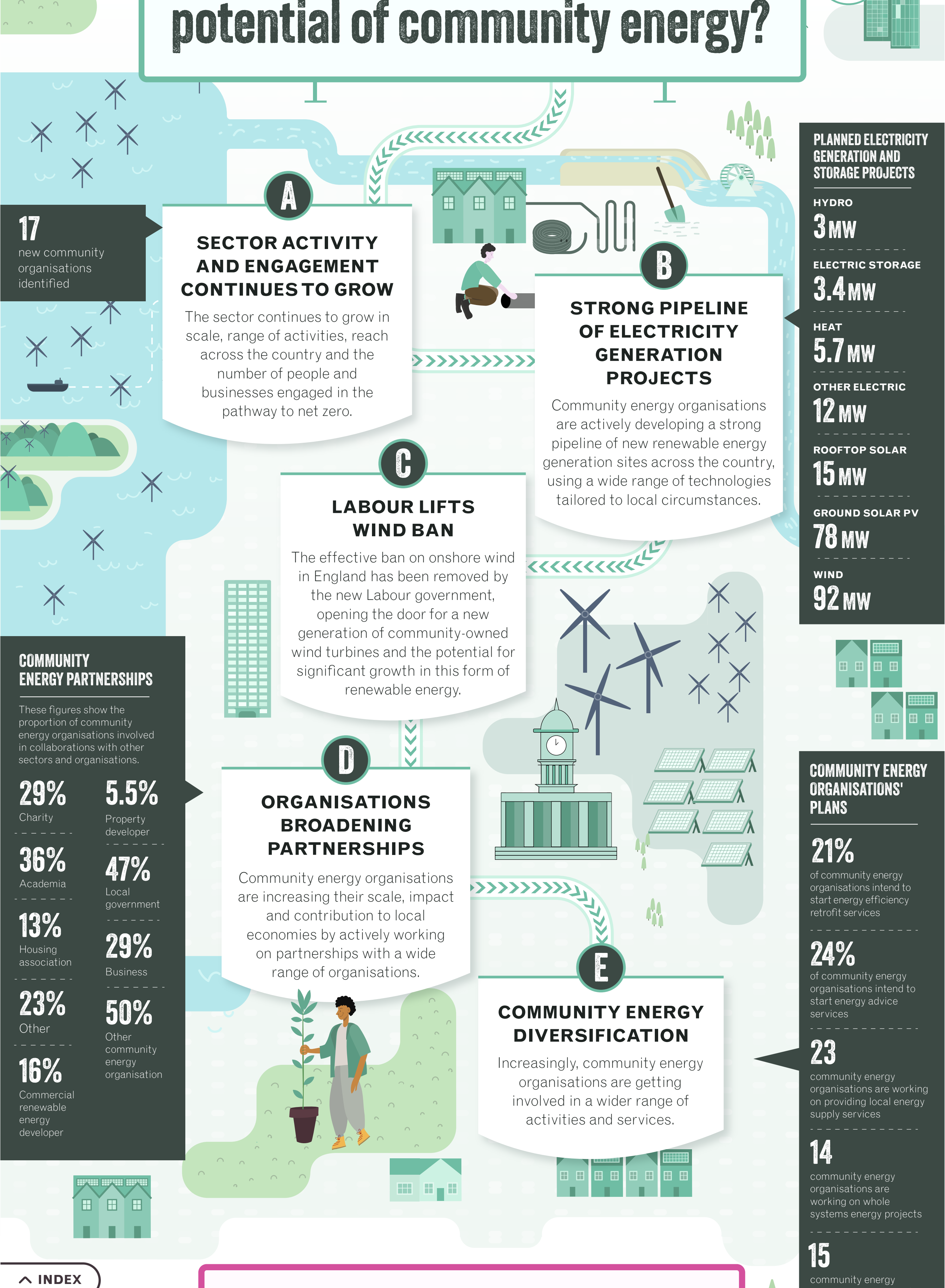
What is the trajectory and potential of community energy?



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SECTOR ACTIVITY AND ENGAGEMENT CONTINUES TO GROW

The sector continues to grow in scale, range of activities, reach across the country and the number of people and businesses engaged in the pathway to net zero.

17 new community organisations identified

B

STRONG PIPELINE OF ELECTRICITY GENERATION PROJECTS

Community energy organisations are actively developing a strong pipeline of new renewable energy generation sites across the country, using a wide range of technologies tailored to local circumstances.

PLANNED ELECTRICITY GENERATION AND STORAGE PROJECTS

HYDRO	3 MW
ELECTRIC STORAGE	3.4 MW
HEAT	5.7 MW
OTHER ELECTRIC	12 MW
ROOFTOP SOLAR	15 MW
GROUND SOLAR PV	78 MW
WIND	92 MW

C

LABOUR LIFTS WIND BAN

The effective ban on onshore wind in England has been removed by the new Labour government opening the door for a new generation of community-owned wind turbines and the potential significant growth in this form of renewable energy.

COMMUNITY ENERGY PARTNERSHIPS

These figures show the proportion of community energy organisations involved in collaborations with other sectors and organisations.

29% Charity	5.5% Property developer
36% Academia	47% Local government
13% Housing association	29% Business
23% Other	50% Other community energy organisation
16% Commercial renewable energy developer	

D

ORGANISATIONS BROADENING PARTNERSHIPS

Community energy organisations are increasing their scale, impact and contribution to local economies by actively working on partnerships with a wide range of organisations.

E

COMMUNITY ENERGY DIVERSIFICATION

Increasingly, community energy organisations are getting involved in a wider range of activities and services.

COMMUNITY ENERGY ORGANISATIONS' PLANS

21% of community energy organisations intend to start energy efficiency retrofit services

24% of community energy organisations intend to start energy advice supply services

23 community energy organisations are working on providing local energy supply

14 community energy organisations are working on whole systems energy projects

15 community energy organisations are working on flexibility services for the electricity grid

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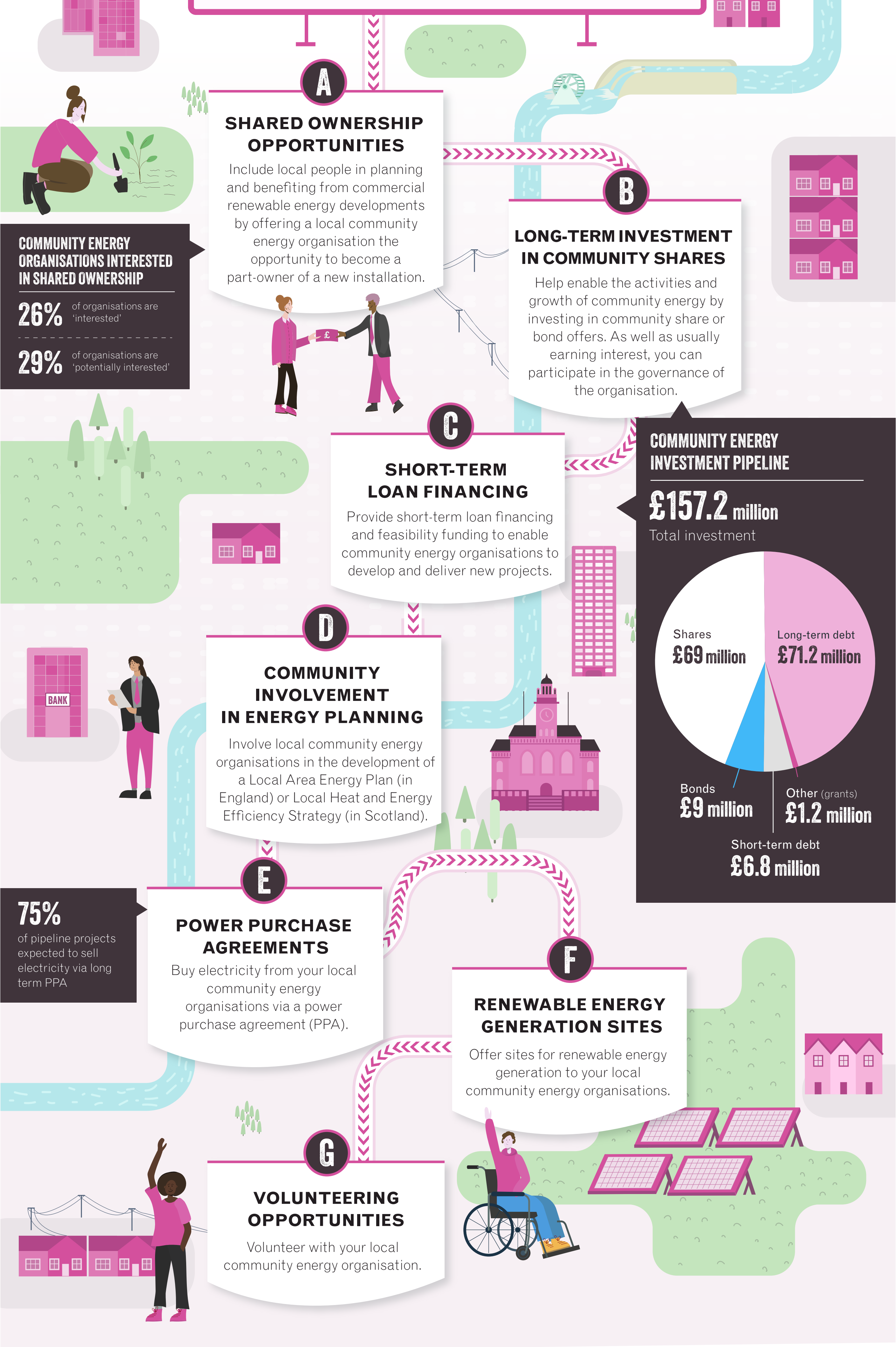
How can you help community energy to grow?



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SHARED OWNERSHIP OPPORTUNITIES

Include local people in planning and benefiting from commercial renewable energy developments by offering a local community energy organisation the opportunity to become a part-owner of a new installation.

COMMUNITY ENERGY ORGANISATIONS INTERESTED IN SHARED OWNERSHIP

26% of organisations are 'interested'

29% of organisations are 'potentially interested'

B

LONG-TERM INVESTMENT IN COMMUNITY SHARES

Help enable the activities and growth of community energy by investing in community share or bond offers. As well as usually earning interest, you can participate in the governance of the organisation.

C

SHORT-TERM LOAN FINANCING

Provide short-term loan financing and feasibility funding to enable community energy organisations to develop and deliver new projects.

COMMUNITY ENERGY INVESTMENT PIPELINE

£157.2 million
Total investment

Shares	£69 million
Long-term debt	£71.2 million
Bonds	£9 million
Other (grants)	£1.2 million
Short-term debt	£6.8 million

D

COMMUNITY INVOLVEMENT IN ENERGY PLANNING

Involve local community energy organisations in the development of a Local Area Energy Plan (in England) or Local Heat and Energy Efficiency Strategy (in Scotland).

E

POWER PURCHASE AGREEMENTS

Buy electricity from your local community energy organisations via a power purchase agreement (PPA).

75% of pipeline projects expected to sell electricity via long term PPA

F

RENEWABLE ENERGY GENERATION SITES

Offer sites for renewable energy generation to your local community energy organisations.

G

VOLUNTEERING OPPORTUNITIES

Volunteer with your local community energy organisation.