COMMUNITY ENERGY
State of the Sector 2020
Infographics

Sandford Hydro
Community Energy
State of the Sector 2020

The Community Energy Sector in 2019
England, Wales and Northern Ireland

65,200 Tonnes of CO₂ emissions prevented
£34.8m Funding & investment raised in 2019
£4.6m Local economic benefits in 2019

193.9 MW Community-owned electricity generation
2.1 MW Community-owned heat generation
300 Community energy organisations
47 Community-led low carbon transport projects
234,000 Community members engaged in energy efficiency
39 Community-led energy storage projects
Community Energy in 2019

England, Wales and Northern Ireland

193.9 MW
Electricity Generation Capacity

155.4 MW Solar PV
33.6 MW Wind
4.9 MW Hydroelectric

188
Low Carbon Projects, including...

39
Energy Storage Projects

47
Low Carbon Transport Projects

102
Energy Efficiency Projects

£34.8m
Funding & Investment Raised

£3.7m
Project Funding

£31.1m
Finance Raised

including £4.9m Community Shares

101
Communities Innovating across...

Low Carbon Technologies
Business Models
Partnerships
Community Energy
State of the Sector 2020

Community Energy Organisations

England, Wales and Northern Ireland

93,000 Community Members Engaged

263 Full-Time Staff

300 Community Energy Organisations

Community Interest Company (CIC)
Unregistered / Unincorporated
Community Benefit Society
Cooperative
Charity
Other
Electricity Generation Timeline


- Solar PV
- Wind
- Hydro

Year


Electricity Generation Capacity (MW)
Community Energy
State of the Sector 2020

Electricity Generation in 2019
England, Wales and Northern Ireland

- Total Capacity: 193.9 MW
- Solar PV: 155.4 MW
- Wind: 33.6 MW
- Hydro: 4.9 MW

Installed in 2019
>5000 kW
250 kW
2,500 kW
<100 kW
Community Energy
State of the Sector 2020

Heat Generation in 2019
England, Wales and Northern Ireland

- Total Capacity: 2.1 MW
- Biomass: 0.8 MW
- Heat Pumps: 0.4 MW
- Other: 0.9 MW

Installed in 2019:
- >500 kW
- 250 kW
- <10 kW
In 2019, community energy organisations provided energy efficiency...

### Energy Efficiency in 2019

England, Wales and Northern Ireland

#### Engagement

<table>
<thead>
<tr>
<th>Activity</th>
<th>Number of organisations</th>
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<tbody>
<tr>
<td>Energy Cafés</td>
<td>32</td>
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<tr>
<td>Training</td>
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<tr>
<td>Workshops</td>
<td>28</td>
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<td>School Events</td>
<td>22</td>
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<td>Online Engagement</td>
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<td>Business Engagement</td>
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#### Services

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<td>Energy Audits</td>
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<tr>
<td>Energy Switching</td>
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<tr>
<td>EPCs &amp; Surveys</td>
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<tr>
<td>Funding Support</td>
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<td>Carbon Footprinting</td>
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<tr>
<td>Other</td>
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#### Improvements

<table>
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<th>Improvement</th>
<th>Number of organisations</th>
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<tr>
<td>Energy Efficient Lighting</td>
<td>41</td>
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<tr>
<td>Insulation</td>
<td>30</td>
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<tr>
<td>Draft Proofing</td>
<td>18</td>
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<tr>
<td>Fuel Poverty Reduction</td>
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<tr>
<td>Energy Monitoring</td>
<td>17</td>
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<tr>
<td>Other</td>
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</table>
Impacts of Energy Efficiency in 2019

England, Wales and Northern Ireland

- 9,155 Services Provided
- 3,649 Improvements Installed
- £1,500,000 Spent on Energy Efficiency

Funding worth £610,000 for...

- Community Organisations: 16
- Charities: 9
- Individuals: 8
- Businesses: 6
- Other: 4
Low Carbon Transport in 2019

England, Wales and Northern Ireland

- 5 communities involved in innovative vehicle-to-grid (V2G) projects
- 47 communities developing low carbon transport in their local area
- £131,000 raised for low carbon transport projects
- 22 communities involved in installing EV charging in their area.
- 30 communities planning low carbon transport projects in 2020
Energy Storage in 2019

England, Wales and Northern Ireland

- 39 Communities involved in battery storage projects
- 547 kWh Community-owned storage capacity
- £1.0m Raised for energy storage projects in 2019
- 14 Communities involved in innovative grid flexibility projects
Funding & Finance in 2019

England, Wales and Northern Ireland

£3.7m
Development Funding

£31.1m
Project Investment

Other
BEIS
Power to Change
INTERREG
Lottery

European Regional Development Fund (ERDF)
Low Carbon Across the South East (LoCASE)
London Community Energy Fund (LCEF)
Rural Community Energy Fund (RCEF)
Welsh Government Energy Service (WGES)

Loans
Share Raise
Bonds
Other
Grants
Self-funding
**Community Energy**

**State of the Sector 2020**

Valuing Community Energy

England, Wales and Northern Ireland

- **263** Full-time Jobs
- **£720,000** Community Benefit Spending

**Economic Benefits**

- **£1.9m** Cost Savings
- **£2.0m** Grants & Loans Distributed

**Social Benefits**

- Community Facilities
- Education Initiatives
- Resilience & Capacity Building

**Environmental Benefits**

- Preventing 65,200 tonnes CO₂ Emissions
- Supporting Community Services
- Conservation & Habitat Improvement
- Recycling & Waste Reduction
- Low Carbon Training and Workshops
- Fuel Poverty Reduction
- Recycling & Waste Reduction
- Local Environmental Programmes

- Valuing Community Energy
- Community Facilities
- Education Initiatives
- Resilience & Capacity Building
- Supporting Community Services
- Conservation & Habitat Improvement
- Recycling & Waste Reduction
- Low Carbon Training and Workshops
- Fuel Poverty Reduction
- Recycling & Waste Reduction
- Local Environmental Programmes
Barriers & Support for Community Energy

Barriers to Community Energy Projects Include...

- Limited Access to Finance
- Lack of Support for Innovation
- Lack of Export Tariff
- Lack of Expertise
- Lack of Development Sites
- Lack of Development Funding
- Limited Time
- Lack of Organisational Capacity
- Overly complex Planning System
- High Grid Costs
- Subsidy Change
- Feed-in Tariff Closure

Community Energy Organisations Require...

- Improved Subsidy Support
- Early Stage Funding
- Expert Support
- Knowledge Sharing
- Reduced Planning Complexity
- Lower Grid Costs
- Reduced Business Rates
- Training
- Investment Support
- Lack of Support for Innovation
- High Grid Costs
- Limited Access to Finance
- Subsidy Change
- Feed-in Tariff Closure
The Feed-in Tariff (FiT) has seen significant unscheduled reductions since launch, reducing viability for small to medium scale electricity generation. The scheme closed to new applicants in April 2019.

Rates refer to:
- Solar PV 50-150 kW
- Hydro 100 - 150 kW
- Wind 100 - 500 kW
In 2019, community energy organisations were found to be developing innovative new technologies, business models and partnership approaches, including:

### Technology
- Flexibility Services
- Peer-to-Peer Trading (P2P)
- Direct supply of energy
- Heat from Sewage
- Demand Side Response (DSR)
- Vehicle-to-Grid Services (V2G)
- Battery Storage

### Business Models
- Solar Schools
- Renewable Asset Purchase
- Local Energy Markets
- Grid Services
- Generation Aggregation
- Grassroots Retrofit
- Joint venture projects

### Partnerships
- Local Authorities
- Educational Institutions
- Cross-community Collaboration
- Industry & Commercial
- Network Operators (DNO)
- Faith Organisations
- SMEs
Community Energy in 2020

England, Wales and Northern Ireland

Including...

- **FiT Supported** Electricity Generation: 86
- Energy Efficiency: 53
- Low Carbon Transport: 30
- Energy Storage: 19
- Heat Generation: 17

89 Communities planning low carbon projects in 2020