

# BRIGHTON ENERGY COOPERATIVE



## BRIGHTON ENERGY CO-OP

### A) Three Year Strategy April 2024

1. **Vision** – to see a high level of community owned renewable energy, generated and used in the South East region with an aim of installing at least 1 megawatt (MW) of [PV](#) p.a.
2. **Our Mission** – to promote, develop and deliver large community owned renewable energy projects in the Greater Brighton area and wider region.
3. **Our current Unique Selling Point** - we install and operate solar energy [arrays](#) on commercial, public and third sector buildings.
4. **Possible future role** – develop large scale solar installations, expand into other technologies such as EV charging, wind energy, investigate battery storage, spread our area of operation to Southern counties, work with innovation projects & grid flexibility. We do not deliver heat, energy efficiency or hydrogen production projects.
5. **Opportunities** – there is an urgent need for renewables due to climate change, the economics of solar are attractive, flexible export arrangements are developing to improve return, working with other Energy Co-ops and Local Authorities including Sussex Energy, people continue to want to support us and invest. Equally the new Government is supportive of community energy through the Local Power Plan & Great British Energy.
6. **Innovation** – new technologies e.g., advanced batteries, new sources of support funding.
7. **Threats/Roadblocks** – political and economic uncertainty, commercial organisations develop local projects, increase in installation costs, ethics of Chinese solar panels.
8. **Selection criteria:** secure long term [Power Purchase Agreements](#), reliable sites to minimise [counterparty risk](#), technology already established, don't take risks unless grant funded, potential for solidity and continuity of income streams, technologies that allow scaling, high CO2 reduction potential, social/community benefit creation potential, aim for portfolio of 80% low + 20% medium risk.
9. **Barriers** – resources to manage increasing assets at the same time as developing new opportunities, need to improve internal systems upon which to grow. Main barriers are grid constraints, connecting with large sites, sites having very long decision-making cycles.

### B) Targets

#### By September 2025:

Have installed minimum 6MW of community owned PV (5MW in April 2024).

**By September 2030:** Have installed 12MWs of community owned PV in the South East, this is based on broadly 1 MW per year of projects.

## C) What we do

**Marketing and communication** – share & bond offers to existing and potential members, communicating with third parties and prospective property owners.

**Project Development** – finding and liaising with potential customers, getting permission from District Network Operators, structural surveys, negotiating and signing leases.

**Installing arrays** – employing contractors, purchasing the panels, installing, and registering arrays

**Operating the arrays** – inspection, maintenance and cleaning, meter readings, invoicing, repairs.

**Community fund** – using some of our surplus income to provide schools education and funding opportunities for other local environmental initiatives.

**Consultancy service** - Brighton Energy Net Zero Consultancy opportunity to be further developed.

## D) Specific Activities

### 1.1 New Technologies/ areas of operation

1. Flexibility trading and peer to peer trading when viable.
2. Batteries & storage where commercially viable. Supporting trial for reuse of car batteries.
3. Ground mounted solar – BEC will consider solar farm projects on a case-by-case basis depending on the environmental impact.
4. Shoreham Port – explore potential for a private electrical network to aggregate supply and demand.
5. Recycling solar panels – a potential area of research as they are 65% recyclable.
6. BEC Net Zero Consultancy as gateway to installing BEC PV.
7. Heat Pumps - possibly include Octopus Kensa (shoebox) heat exchanger in BEC Net Zero Consultancy.

### 1.2 Project Development

1. Aim for 1 MW per year of PV installed.
2. Shoreham Port – Berth Zero project, opportunity & Shed 9 & 9a arrays in phases.
4. [Knowledge Transfer Partnership](#) – explore second year students for 2 years.
5. Explore installing on secondary schools - Stringer, Varndean & Longhill.
6. Use social media, Google AdWords/Linked-In to generate leads.
7. Explore Peer to peer/private wire opportunities for high energy users.
8. Collaborate with community energy and Local Authorities to help deliver Sussex Energy ambitions.

### 1.3 Organisational change

1. Communications: Develop Linked-In content/articles based on the [Fugu PR](#) consultancy work.
2. Pipeline: Graduate preferable with technical sales experience to support Matt & David.
3. Non-executive Board: explore further members.
4. Refer to Noeleen Keane's report for process improvements.

### 1.4 Community Activities

1. 3% of revenue will be for Community Fund activities, 2% externally and 1% internally staff time.
2. BEC to lead renewable energy education in the city with the Solar Education Programme (SEP).
3. Continue development of BEC Energy & Carbon Footprint school workshop.
4. Target to reach thirty schools/clubs/museums/libraries over next 3 years, with schools first.
5. Film BEC school workshop for Brighton & Hove's [Our School Our World](#) programme.

### **1.5 Communications**

1. For sites, new & existing
  - Develop content along the 5 Content Pillars discussed with Fugu PR.
  - Engage with local organisations and networks.
2. For engaging with the community
  - A 3-to-5-year community engagement plan with budget.
3. For engaging with members
  - Update member engagement strategy.
  - Improve share/bond holder onboarding/statement process & communications.

### **1.6 Finance**

1. Community fund will be around £17K this financial year.
2. Shed 3A write off around £10K maximum likely.
3. Backup meters and cleaning may cost around £10K more than usual.
4. Explore rolling fund model for use of surplus.
5. Need clarity on how end of leases affect BEC financially.

### **1.7 Installation & Maintenance**

1. BEC looking for alternative installers with good reputation & experience.
2. Quality must be maintained as installers contracting out work can reduce quality.
3. Conduct random technical audits during installation to ensure compliance with BEC standards.
4. Use PV made for wetter climates - more expensive but may be more efficient in the long term.
5. Optimise revenue via [Smart Export Guarantee](#) / [REGO](#) income.
6. Potential £40-50k maintenance contract for correct diagnostics & repair.

### **1.8 Monitoring & Performance**

1. Shed 10 is a 'gold standard' install, use this as a reference for new arrays.
2. At any time 10-20% of optimisers are not working.
3. Optimise performance of existing panels/inverters rather than replacing may avoid future issues.
4. Research non-Solaredge to remove optimisers as too sensitive & have extra connectors.
5. Match the voltage and amperage of solar panels to inverters to ensure optimal generation.
6. Technical input needed to understand inverter process and solar panel optimisation.