# BCE Case Study

Hampshire & Solent Community Energy Network

September 2026



# The village of Broughton is in the Test Valley equidistant from Salisbury, Winchester, Andover, and Romsey










- 450 households
- 1,100 residents

- No mains gas
- Dependent on oil and LPG for heating

# The journey so far...

**Mar 2024**
Conversation between two neighbours over a garden hedge

**Jul 2024**
BCE Steering Group established

**Oct 2024**
Prospus Group selected to support us

**Nov 2024**
Future Energy Landscapes Workshop

**Jul 2025**
SSEN's Feasibility Study confirms sufficient capacity to accept our generation from Wind + Solar PV at the Houghton substation

**Dec 2025**
Solar PV + Wind electricity generation proposal shared at village meeting

**Sep 2026**
Land Lease Heads of Terms signed for a Solar PV + Battery Storage facility on a new site.

2024 | 2025 | 2026

**May 2024**
Parish Council supports the formation of BCE at their AGM

**Sep 2024**
BCE's Vision & Objectives agreed

Confirmation of £40k grant from the Community Energy Fund (CEF)

**May 2025**
Broughton Community Energy incorporated as a Community Benefit Society

**Oct 2025**
Grant Funding Agreement signed, and Feasibility Stage formally starts

*12 months wait to receive funding*

**Jan 2026**
Community survey demonstrates overwhelming support for the proposal

**Feb 2026**
Decision taken to remove wind from the proposal, given the increasing consenting risks from the MoD and Chilbolton Observatory.

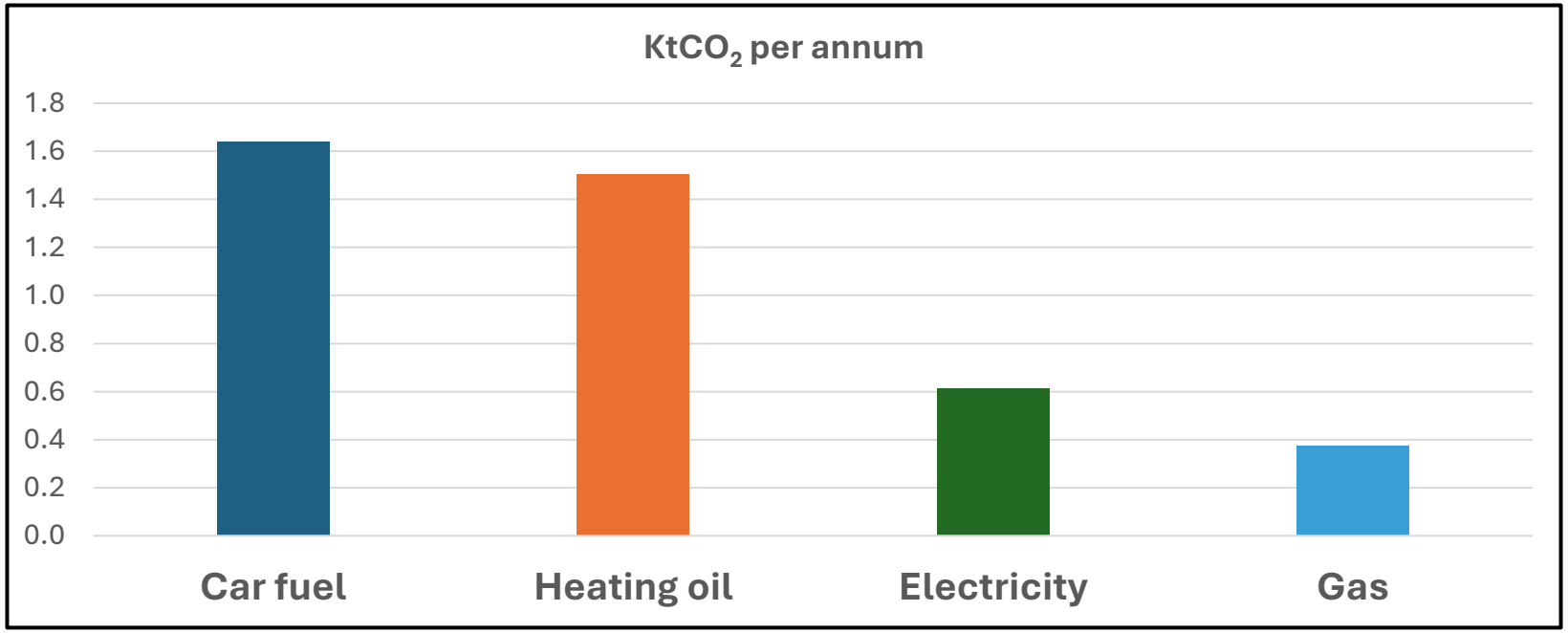
# We analysed the current $CO_2$ emissions of our village

**Car fuel - 7.2 GWh**
(1.6 $KtCO_2$)

**Electricity – 3.0 GWh**
(0.6 $KtCO_2$)

**Heating oil – 6.1 GWh**
(1.5 $KtCO_2$)

**Gas – 1.6 GWh**
(0.4 $KtCO_2$)




We emit **4.1 $ktCO_2$** each year, which would fill **140 million party balloons.**
We would need to plant **200,000 trees** to absorb it.

# Our Objectives

## Environmental

- Reduce our $CO_2$ emissions

## Economic

- Lower our energy costs
- Reduce energy poverty in our community

## Community

- Elevate community cohesion
- Provide a blueprint that inspires other communities to act




## Our Vision

Our village is fuelled and powered entirely by sustainable, secure, zero-carbon energy, ensuring affordability and fairness for all.

# Our strategy is to accelerate the electrification of our village, underpinned by the generation of clean, sustainable electricity, and encouraged by a low-cost community electricity tariff

## The building blocks of our strategy




We have projects delivering the objectives of each building block, but this briefing is focused on the project to **generate electricity** and provide a **low-cost community electricity tariff.**

**Broughton currently uses 3 GWh** of electricity each year. We estimate this **will increase to 8 GWh** once the transition is complete, despite electricity being much more efficient than fossil fuels.

# Community input shaped the proposal

**Workshop → proposal → village meeting → wider survey**

NOVEMBER 2024

## Future Energy Landscapes Workshop

Facilitated by Energise South Downs, residents explored how renewable generation could fit the landscape and help meet local energy needs.

ENERGISE
SOUTH DOWNS

DECEMBER 2025–JANUARY 2026

## Community Survey: 192 responses

| 90% | 79% | ~40% |
| --- | --- | --- |
| Supported solar | Supported wind | Wanted to get involved |

High-level message: strong backing, alongside concerns about farmland and environmental impacts—and requests for clearer financial and electricity tariff explanations.

**The survey created permission to proceed, but also a list of risks and questions to address.**

# We have pivoted from ‘Wind + Solar PV’ to ‘Solar PV + Battery Storage’ and changed the location of the proposed site

**Solar PV: 7.2 MWp DC**



**Battery storage: 1-2 MWh**




- Will generate approximately **7 GWh of electricity per year**, compared to **Broughton’s current consumption of 3 GWh** and estimated consumption of **8 GWh by 2050.**
- **Battery storage** enables us to better balance supply and demand, using more of the electricity locally rather than exporting it to the grid.
- We will limit the **instantaneous AC power output to < 5 MW** to avoid the need for NESO to conduct a national impact assessment, which can delay projects by many years.
- Detailed modelling (including realistic grid connection costs, financing costs and PPA rates) shows that **the scheme is financially viable**.

# Community benefits



**Inclusive access:** An opportunity for everyone to benefit from clean, low-cost renewable energy, including those with properties that aren't suitable for installing solar PV, or who can't afford the up-front investment.



**Affordable electrification:** Lower-cost electricity, thereby increasing the viability of electrifying heating systems and migrating to electric vehicles.



**Improved energy security:** Battery storage provides a more resilient local electricity network.

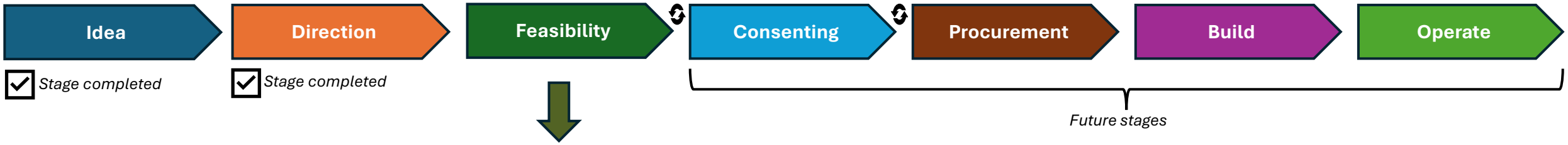


**Community ownership:** Increased agency and a stake in our own electricity generation company, thereby increasing community engagement, awareness, and cohesion.



**A model for others:** Pride in providing a blueprint for other communities to act.

# We are nearing the end of the project's Feasibility Stage




## Feasibility Stage Outputs

- ☑ **Proposed Design** for the generation site
- ☑ Confirmation that the scheme is **financially viable**
- ☑ A thorough understanding of the **planning consent risks**
- ☑ Confirmed **grid connection capacity**
- A good understanding of **how our community feels** about the proposed scheme
- **Pre-Planning Application** submitted to TVBC
- **Application** submitted for the **Stage 2 GBECF grant**

The next step is to re-engage village residents to understand how they feel about the proposed solar PV site.

# Some lessons learnt to date

## Stakeholder engagement

- Secure the support of the Parish Council.
- Engage the community in shaping the project.
- Maintain support through frequent, transparent communications.

## Governance

- Implement a formal Steering Group to ensure robust decision-making.
- Apply good project management techniques and be clear about responsibilities.

## Grid connection capacity

- Commission your DNO to undertake a formal Grid Connection Feasibility Study to confirm capacity.

## Land lease

- Agree the Land Lease HoT early,  and don't underestimate the challenge of agreeing on the commercial terms.

## Be prepared to pivot

- Identify risks early and be prepared to pivot if they become issues that can't be resolved.

## Planning consent

- Establish a relationship with the local planning department well in advance of submitting any planning applications.
- Engage national stakeholder organisations early: Natural England, Environment Agency, MoD, Met Office.

# Thank you!

If you’d like to learn more, please get in touch.



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www.broughtoncommunityenergy.org